



SUMANDEEP

VIDYAPEETH

An institution Deemed to be University Under Section 3 of UGC Act, 1956

Accredited by NAAC 'A' grade with CGPA score 3.53 on 4 point scale

Category I deemed to be university under UGC regulation 2018

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REGULATIONS AND CURRICULUM
FOR
BACHELOR OF AYURVED MEDICINE & SURGERY
Course 2023

Our Vision:

SUMANDEEP VIDYAPEETH should be a world class centre of excellence for learning and innovation driven by social sensitivity and state-of-the-art technology. The University is amongst the top-rated Educational Institute offering contemporary education, high quality research, and training and consultancy services in Health sciences to suit the ever changing needs of society.

Our Philosophy:

- To train the students through Evidence Based Education System
- To encourage Research in all the disciplines of health sciences.

- To set the Benchmark in Educational Standards, Policies and Practice.
- To function with spirit of humanity, liberty, integrity, responsibility and togetherness.
- To encourage new ideas and inculcate spirit of Entrepreneurship.
- To create and maintain National as well as Global identity.
- To create a rewarding sense of belonging for mutual growth.
- To develop a sense of partnership amongst all.
- To strive hard towards creating human centered development and building knowledge-centered society and nation.

Our Strength:

First Largest and Recognized Deemed Health University of Gujarat State.

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Section I

Goals of Education and Training in Ayurveda Science

Section II

AIM AND OBJECTIVES OF BAMS COURSE

Aim

- To provide basic Ayurvedic education leading to the degree of B.A.M.S. It aims to prepare graduates of profound scholarship in the science of Ayurveda with basic and fundamental knowledge in various Ayurvedic subjects, supported by extensive practical training.

Objectives

- To excel in Ayurveda education by utilising trained and experienced faculty as well as teaching aids such as a projector, models, and study materials.
- To excel in Clinical Services by utilising trained and experienced clinicians, diagnostic technology, and high-quality medicines.
- To encourage and support Ayurvedic research.
- To support and promote herb cultivation, medicine manufacturing, diagnosis, and treatment based on Ayurvedic principles.
- To evaluate, teach, promote, and implement best practises in the manufacture and standardisation of pharmaceutical preparations.
- Raise awareness of Ayurvedic diet and regimen among students, faculty, and the general public.

Program Outcome

Demonstrate comprehensive knowledge and application of the Trisutra concept to explore root causes, identify clinical manifestations of disease to treat ailments and maintain healthy status.

Demonstrate knowledge and skills in Ayurveda, acquired through integration of multidisciplinary perspectives and keen observation of clinical and practical experiences.

Demonstrate proficiency in holistic, unique assessment of an individual for rational approach and decision-making in management of disease and maintenance of health.

Perform procedures and therapeutic maneuvers with skill and dexterity in a variety of situations.

Demonstrate knowledge, skills and attitudes to provide holistic quality care and preparedness to practice.

Demonstrate agility, virtuous and ethical behavior and compassion to improve the well-being of individuals and society.

Demonstrate self-directedness in pursuit of knowledge and skills, which is required for advancing health care and wellbeing of society.

Demonstrate the ability to effectively communicate with patients, families, community and peers.

Demonstrate an understanding of qualities and required skills as a practitioner, researcher and academician and an aspirations to become one.

SECTION-III

REGULATIONS

Eligibility Criteria for admission:

1. The eligibility to seek admission in Bachelor of Ayurveda education shall be as under

- a. The candidate shall have passed 10+2 or its equivalent examination from any recognised Board with Physics, Chemistry, Biology and have obtained minimum of fifty per

cent. marks taken together in Physics, Chemistry and Biology in the case of general category and forty per cent. marks in the case of the Scheduled Castes, Scheduled Tribes and Other Backward Classes: Provided that in respect of persons with disability candidate specified under the Rights of Persons with Disabilities Act, 2016 (49 of 2016), the minimum qualifying marks in the said examinations shall be forty-five per cent. in the case of General category and forty per cent. in the case of the Scheduled Castes, Scheduled Tribes and Other Backward Classes.

b. No candidate shall be admitted to B.A.M.S Degree programme unless the candidate attained the age of seventeen years on or before the 31st December of the year of admission in the first year of the programme and not more than twenty-five years on the 31st December of the year of admission in the first year of the programme: Provided that, the upper age-limit may be relaxed by five years in the case of Scheduled Castes, Scheduled Tribes, Other Backward Classes and disabled candidates.

2. National Eligibility-cum-Entrance Test.-

(i) There shall be a uniform entrance examination for all medical institutions at the under-graduate level, namely the National Eligibility-cum- Entrance Test (NEET) for admission to under-graduate programme in each academic year and shall be conducted by an authority designated by the National Commission for Indian System of Medicine.

(ii) In order to consider for admission to under-graduate programme for an academic year, it shall be necessary for a candidate to obtain minimum of marks at 50th percentile in the National Eligibility-cum- Entrance Test for under-graduate programme held for the said academic year:

Provided that in respect of,-

- (i) candidates belonging to the Scheduled Castes, Scheduled Tribes and Other Backward Classes, the minimum marks shall at 40th percentile.
- (ii) candidates with specified disabilities under the Rights of Persons with Disabilities Act, 2016 (49 of 2016) the minimum marks shall be at 45th percentile in the case of general category and 40th percentile in the case of the Scheduled Castes, Scheduled Tribes and Other Backward Classes:

Provided further that where sufficient number of candidates in the respective category fail to secure minimum marks in the National Eligibility - cum - Entrance Test held for any academic year for admission to undergraduate programme, the National Commission for Indian System of Medicine in consultation with the Central Government may at its discretion lower the

minimum marks required for admission to undergraduate programme for candidates belonging to respective category and marks so lowered by the Central Government shall be applicable for that academic year only.

(3) An All-India common merit list as well as State-wise merit list of the eligible candidates shall be prepared on the basis of the marks obtained in the National Eligibility-cum-Entrance Test and the candidates, within the respective category shall be considered for admission to under-graduate programme from the said merit lists only.

(4) The seat matrix for admission in the Government, Government-aided Institution and Private Institution shall be fifteen per cent. for All-India Quota and eighty-five per cent. for the State and Union territory quota:

Provided that,

- (i) the All-India Quota for the purpose of admission in all the deemed university both Government and private shall be hundred per cent.
- (ii) the university and institute which are already having more than fifteen per cent. All-India Quota seats shall continue to maintain that quota;
- (iii) five per cent. of the annual sanctioned intake capacity in Government and Government-aided Institution shall be filled up by candidate with specified disability in accordance with the provisions of the Rights of Persons with Disabilities Act, 2016 (49 of 2016) and based on the merit list of National Eligibility -cum-Entrance Test.

Explanation.- For the purpose of this clause, the specified disability contained in the Schedule to the Rights of Persons with Disabilities Act, 2016 (49 of 2016) specified in Appendix “A” and the eligibility of candidate to pursue a programme in Indian Systems of Medicine with specified disability shall be in accordance with the guidelines specified in Appendix “B” and if the seats reserved for the persons with disabilities in a particular category remain unfilled on account of unavailability of candidates, the seats shall be included in the annual sanctioned seats for the respective category.

(5)(i) The designated authority for counseling of State and Union territory quota for admissions to undergraduate programme in all Ayurveda Educational Institutions in the States and Union territories including institutions established by the State Government, University, Trust, Society, Minority Institution, Corporation or Company shall be the respective State or Union Territory in accordance with the relevant rules and regulations of the concerned State or Union territory, as the case may be.

(ii) The counseling for all admission to Bachelor of Ayurvedic Medicine and Surgery Programme for hundred percent seats of all Deemed Universities both Government and Private shall be conducted by the authority designated by the Central Government in this behalf.

(6) The counselling for admission to Bachelor of Ayurvedic Medicine and Surgery Programme for seat under All-India Quota as well as for all Ayurveda Educational Institutions established by the Central Government shall be conducted by the authority designated by the Central Government in this behalf.

(7) (i) All seats irrespective of category (Central quota, State Quota or management etc.) except foreign nationals are to be admitted through counselling (Central, State or UT) only. Direct admission by any means other than above specified shall not be approved.

(ii) The institutions shall have to submit the list of students admitted in the format specified by NCISM on or before 6 pm on the cut off date for admissions specified by NCISM time to time for verification.

(iii) Universities shall approve the admission of those candidates (except foreign nationals) who have been allotted through counselling (Central, State or UT as the case may be)

(8) No candidate who has failed to obtain the minimum eligibility marks under this regulation shall be admitted to under-graduate programme in the said academic year.

(9) No authority or institution shall admit any candidate to the under-graduate programme in contravention of the criteria or procedure laid down in these regulations in respect of admission and any admission made in contravention of the said criteria or procedure shall be cancelled by the National Commission for Indian System of Medicine forthwith

(10) The authority or institution which grants admission to any student in contravention of the criteria or procedure laid down in these regulations shall be liable accordingly, under the relevant provisions of the Act.

3. Duration of the courses

Duration of B.A.M.S. programme.- The duration of the B.A.M.S. Programme shall be five years and six months as per the following table, namely:-

Sr. no.	Course of the B.A.M.S.	Programme Duration
1	First Professional B.A.M.S.	Eighteen Months
2	Second Professional B.A.M.S.	Eighteen Months
3	Third (Final) Professional B.A.M.S.	Eighteen Months
4	Compulsory Rotatory Internship	Twelve Months

4. Titles and Year Wise Distribution of the Subjects for Study:

First professional B.A.M.S.

1. Samskritam evam Ayurved Ithihas

2. PadarthaVigyan
3. Kriya Sharira
4. Rachana Sharira
5. Samhita Adhyayan-1

Second professional B.A.M.S.

1. Dravyaguna Vigyan
2. Rasashastra evam Bhaishajyakalpana
3. Roga Nidan evam Vikriti Vigyan
4. Agad Tantra evam Vidhi
5. Samhita Adhyayan-2
6. Swasthavritta evam Yoga

5. Examination

(a)(i) The First Professional examination shall ordinarily be held and completed by the end of First professional session;

(ii) the student who failed in one or two subjects of First Professional shall be allowed to keep terms of the Second Professional session and to appear in Second Professional examination;

(iii) the student who failed in more than two subjects shall not be allowed to keep term in Second Professional session and the subsequent supplementary examination of First Professional shall be held at every six months.

(b)(i) The Second Professional examination shall ordinarily be held and completed by the end of Second Professional session;

(ii) the student who failed in one or two subjects of Second Professional shall be allowed to keep the term of the Third (Final) Professional session;

(iii) the student who failed in more than two subjects shall not be allowed to keep term in Third (Final) Professional session and the subsequent supplementary examinations of Second Professional shall be held every six months.

(iv) To become eligible for joining the Compulsory Rotatory Internship programme, all three professional examinations shall be passed and qualified in nine electives within a period of maximum ten years from the date of admission. (f) The theory examination shall have twenty per cent. marks for Multiple Choice Questions (MCQ), forty per cent. marks for Short Answer Questions (SAQ) and forty

per cent. marks for Long Explanatory Answer Questions (LAQ) and these questions shall cover the entire syllabus of the subject.

(v) The minimum marks required for passing the examination shall be fifty per cent. in theory component and fifty percent in practical component (that include practical, clinical, viva-voce, internal assessment and electives wherever applicable) separately in each subject.

(vi) Evaluation of Electives.- Electives shall be evaluated in terms of attendance and assessment and on the basis of evaluation, the student shall be awarded credits as well as grades as under-

- (i) one credit shall be awarded for attending minimum five hours of a modular programme and a student can earn maximum five credits for each elective;
- (ii) Assessment shall be conducted at the end of each module and average of five modular assessments shall be considered for grading i.e., up to 25 per cent. Bronze; 26-50 per cent. Silver; 51-75 per cent. Gold; 76 per cent. and above Platinum.
- (iii) The structure of elective shall be as per the following table, namely:-

Each Elective: Five Modules of Nine Hours Each (5*9=45)					
Sl.No.	Component	Duration (Hours)		Credits	Grades
		Module	Elective		
1	Teaching	5	25	One Credit for attending minimum of five hours of each modular programme.	Grade is awarded on the basis of average of all five modular assessments.
2	Guided Learning	2	10		
3	Expert Interaction/ Reflection	1	5		
4	Assessment	1	5	Maximum five credits	Bronze:

(vii) (a) Student shall have to qualify (obtaining any grade) minimum of three elective subjects for each professional session.

(b) List of elective subjects shall be made available under three sets (A, B and C) for each professional session i.e., sets FA, FB and FC for first professional B.A.M.S.; sets SA, SB and SC for second professional B.A.M.S.; sets TA, TB and TC for third professional B.A.M.S.

(c) Student may opt any one elective as per their choice from each set specified for respective professional B.A.M.S.

(d) Weightage of two marks for each credit and maximum of ten marks shall be awarded for each elective.

(e) These elective marks shall be added to the viva-voce marks of respective subjects as specified in these regulations.

(f) Apart from three mandatory electives for each profession, students have freedom to choose and qualify as many numbers of additional electives as per their interest.

(g) Marks weightage shall be only for three electives per professional session i.e., one elective subject from each set of respective professional session.

(h) A separate online certificate shall be generated for each elective mentioning credits earned and grades obtained.

(v) The examination branch of the institution shall compile the marks of electives obtained by students as specified above and submit to university through the Head of the Institution so that the university shall add the same in viva-voce of respective subjects

(i) (i) A candidate obtaining sixty-five per cent. and above marks shall be awarded first class in the subject and seventy-five percent and above marks shall be awarded distinction in the subject.

(ii) The award of class and distinction shall not be applicable for supplementary examinations.

(j) (i) Each student shall be required to maintain minimum seventy-five percent attendance in each subject in theory (i.e., lecture hours) practical and clinicals (i.e., non-lecture hours) separately for appearing in examination.

(ii) Where the institute maintains physical attendance register, it shall be recorded in cumulative numbering method as per Annexure-iv and at end of the course/term/ part of the course, after obtaining each student signature the same is to be certified by respective Head of the Department and approved by Head of the Institute.

(iii) The approved attendance shall be forwarded to university.

(k) If a student fails to appear in regular examination for cognitive reasons, he may appear in supplementary examination as regular student and his non-appearance in regular examination shall not be treated as an attempt.

(l) Notwithstanding anything contained in these regulations,-

(i) Clause 11(e) shall be applicable to the student who admitted under Indian Medicine Central Council (Minimum Standards of Education in Indian Medicine) Regulations, 1986, except electives and as per section 3 of SCHEDULE I (as amended vide notification no. 24-14/2016 (U.G. Regulation) Regulations, 2016) with 4 professionals.

(ii) Student who got admitted under Indian Medicine Central Council (Minimum Standards of Education in Indian Medicine) Regulations, 1986, the maximum number of chances and maximum period of years to pass respective professional examination as laid down under the clauses 6(1)(c),

2(c), 3(c), 4(d), and 4(e) of SCHEDULE I (as amended vide notification no. 24-14/2016 (U.G. Regulation) Regulations, 2016) shall not be applicable.

6.Total teaching/learning hours for b.a.m.s. program

The Profession wise Subjects, Number of Papers, Teaching Hours and Marks Distribution shall be as per the following tables, namely:-

7. Assessment

Assessment of students shall be in the form of Formative and Summative Assessments as under-

(a) Formative Assessment Students shall be assessed periodically to assess their performance in the class, determine the understanding of programme material and their learning outcome in the following manner, namely:-

(i) Periodical Assessment shall be carried out at the end of teaching of a topic or module or a particular portion of syllabus and the evaluation methods as per the following table may be adopted as suits to the content.

(ii) (a) internal evaluation shall be conducted by the College and Institute at the end of six months (First Term Test) for thirty per cent. of the syllabus and at twelve months (Second Term Test) for forty per cent. new part of the syllabus. (b) The remaining thirty per cent. of syllabus shall be completed in the last six months (Third Term) before university examination.

(iii) there shall be minimum three periodical assessments for each subject before First Term Test (ordinarily at 6th month of respective professional B.A.M.S.) minimum of three periodical assessment before Second Term Test (ordinarily at 12th month of respective professional B.A.M.S.) and minimum of three periodical assessments before final university examinations (Summative Assessment) of respective professional B.A.M.S.

(B) Summative Assessment

(i) Final university examinations conducted at the end of each professional B.A.M.S. shall be the Summative Assessment.

(ii) There shall be double valuation system and shall be no provision for revaluation.

(iii) There shall be two examiner (one internal and one external) for university practical/clinical/viva voca examinations.

8. The Profession wise Subjects, Number of Papers, Teaching Hours and Marks Distribution shall be as per the following tables, namely:-

(Teaching Hours for First Professional B.A.M.S. Subjects)

First Professional B.A.M.S.

Working days=320, Teaching hours=1920

Induction Programme=15 Working days (90 hours)			
Remaining days/Hours=320-15=305 Days/1830 Hours			
Subject	Number of teaching hours		
	Lecture	Non-lecture	Total
Sanskritam evam Ayurved Ithihas	100	200	300
Padartha Vijnanam	90	140	230
Kriya Sharira	150	250	400
Rachana Sharira	180	320	500
Samhita Adhyayan-1	140	260	400
Total	660	1170	1830

(Number of Papers and Marks Distribution for First Professional B.A.M.S. Subjects)

Sr. no	Subject Code	Papers	Theory	Practical or Clinical Assessment					
				Practical/Clinical	Viva	Electives	IA	Sub Total	Grand Total
1	Sanskritam evam Ayurved Ithihas	2	200	-	75*	10 (Set-FA)	15	100	300
2	Padartha Vijnanam	2	200	100	60	10 (Set-FB)	30	200	400
3	Kriya Sharira	2	200	100	70	-	30	200	400
4	Rachana Sharira	2	200	100	70	-	30	200	400
5	Samhita Adhyayan-1	1	100	-	75	10 (Set-FC)	15	100	200

(Teaching Hours for Second Professional B.A.M.S. Subjects)

Sr. No.	Subject Code	Number of teaching hours		
		lectures	Non-lectures	Total
1	Dravyaguna Vigyan Yoga	150	250	400
2	Rasashastra evam Bhaishajyakalpana	150	300	450
3	Roga Nidana evam Vikriti Vigyan	150	300	450
4	Agad Tantra evam Vidhi Vaidhakya	100	200	300
5	Samhita Adhyayan-2	100	140	240
6	Swasthvritta evam	150	250	400
Total		800	1440	2240

(Number of Papers and Marks Distribution for Second Professional B.A.M.S. Subjects)

Sr. no	Subject Code	Papers	Theory	Practical or Clinical Assessment					
				Practical/Clinical	Viva	Electives	IA	Sub Total	Grand Total
1	Dravyaguna Vigyan Yoga	2	200	100	70	-	30	200	400
2	Rasashastra evam Bhaishajyakalpana	2	200	100	70	-	30	200	400
3	Roga Nidana evam Vikriti Vigyan	2	200	100	70	-	30	200	400
4	Agad Tantra evam Vidhi Vaidhakya	1	100	100	60	10 (Set-FA)	30	200	300
5	Samhita Adhyayan-2	1	100	-	75	10 (Set-FB)	15	100	200
6	Swasthvritta evam	2	200	100	60	10 (Set-	30	200	400

						FC)			
Grand total									2100

Section-IV
B.A.M.S. Course curriculum

First professional B.A.M.S.

Sanskritam evam Ayurved Ithihas

Table 1 : Contents of Course

Sr N o	A2 List of Topics AyUG-SN & AI Paper I	B2 Term	C2 Marks	D2 Lecture hours	E2 Non- Lecture hours
Paper I Sanskrit					
1	संस्कृतवर्णानाम्परिचयः – माहेश्वरसूत्राणि, उच्चारणस्थानानि, बाह्यप्रयत्नानि, अभ्यन्तरप्रयत्नानि	I	05	3	10
2	संज्ञा- 2.1 - संयोगः, संहिता, ह्रस्वदीर्घप्लुतः, अनुनासिकः, पदम्, धातुः, उपसर्गः, गुणः, वृद्धिः [विस्तरेणपाठनम् - Detailed teaching] 2.2 -इत्, लोपः, प्रत्याहारः, उदात्तः, अनुदात्तः, स्वरितः, सवर्णः, निपातः, प्रगृह्यम्, [सङ्क्षिप्यपाठनम् – Brief teaching]	2.1 – I 2.2 – II	05	05	-
3.	उपसर्गाः-उपसर्गाः क्रियायोगे प्र,परा,अप,सम्,अनु,अव,निस्,निर्,दुस्,दुर्,वि,आङ्,नि,अपि,अधि,अति,सु,उत्,अभि,प्रति,परि,उप।	II	05	02	03
4.	अव्ययानि 4.1 -चअपिखलुहितुकिलननुवाचएव 4.2-पुनःविनाउच्चैःऋतेएवम्सहसार्धम्युगपत्यथा-तथायावत्- तावत्इतियदा-तदायदि-तर्हि साकम्नकुत्रकतिकुतःकिमर्थम्, कियत्इहअत्रतत्रसर्वत्रअन्यत्रकुत्रएकत्रसदाअन्यथाएकथा [विस्तरेणपाठनम् - detailed teaching] A) Identify अव्ययानि B) Explain the meaning with reference to the context C) Construct the sentences using अव्ययानि	I A II B III C	5	I -01 II-01	I-0 II-0 III-03
5.	कारकप्रकरणम्– कर्तृकारकम्, कर्मकारकम्, करणकारकम्, सम्प्रदानकारकम्, अपादानकारकम्, अधिकरणकारकम्, सम्बन्धः, उपपदविभक्तिः सूत्रसहितपाठनंपरंपरीक्षायांसूत्रव्याख्यानादिप्रश्नानिनिर्णयव्यानि । A) Discriminate the विभक्तिand their meaning.	I A II B III C, D	15	I- 05	II-05 III-05

	B) Identify the karakas from Ayurveda texts like करणम्कारणम् C) Construct sentences D) Translate sentences from English to Sanskrit & from Sanskrit to English.				
6.	सन्धिः 6.1 -अच्सन्धिः/स्वरसन्धिः - यणसन्धि -इकोयणचि, गुणसन्धिः=आद्गुणः वृद्धिसन्धिः- वृद्धिरेचि,अयवायावसन्धिः-एचोऽयवायवः/वान्तोयि प्रत्यये,लोपसन्धिः-लोपः शाकल्यस्य, पररूपसन्धिः- एङिपररूपम्, पूर्वरूपसन्धि-एङःपदान्तादति, प्रकृतीभाव- सर्वत्रविभाषागोः,प्लुतप्रगृह्यअचिनित्यम्। सूत्रसहितपाठनंपरंपरीक्षायांसूत्रव्याख्यानादिप्रश्नानिनप्रष्टव्यानि। 6.2 -हल्सन्धिः/व्यञ्जनसन्धिः - श्रुत्वसन्धिः- स्तोः श्रुनाश्रुः,ष्टुत्वसन्धिः- ष्टुनाष्टुः, जश्त्वसन्धिः-झलांजशो/न्ते, अनुनासिकसन्धिः- यरोऽनुनासिकेऽनुनासिकोवा/प्रत्ययेभाषायांनित्यम्, परसवर्णसन्धिः-तोलिः/वापदान्तस्य, चर्त्वसन्धिः खरिच, पूर्वसवर्णसन्धिः-झयोऽहोऽन्यतरस्याम्, छुत्वसन्धिः शश्छोऽटि/ छत्वममीतिवाच्यम्, अनुस्वारसन्धिः- मोऽनुस्वारः, तुगागमसन्धिः- शितुक्/छेच/पदान्ताद्वा, रुत्वआदेशसन्धिः-नश्छव्यप्रशान् सूत्रसहितपाठनंपरंपरीक्षायांसूत्रव्याख्यानादिप्रश्नानिनप्रष्टव्यानि। 6.3 -विसर्गसन्धिः - रुत्वसन्धिः-ससजुषोरुः, उत्त्वसन्धिः- अतोरोरप्लुदादप्लुते/हशिच,रोरि, भोभागोअघोअपूर्वस्ययोऽशि, रोऽसुपि, एतत्तदोःसुलोपोऽकोरनञ्समासेहलि, सोऽचिलोपेचेत्पादपूरणम्। सूत्रसहितपाठनंपरंपरीक्षायांसूत्रव्याख्यानादिप्रश्नानिनप्रष्टव्यानि। 6.4.-रुत्वप्रकरणसन्धिः- [सङ्क्षिप्यपाठनम् – Brief teaching] समः सुटि,कानाम्नेडितेच, अत्रानुनासिकोपूर्वस्यतुवा,अनुनासिकात्परोऽनुस्वारः, खरवसानयोर्विसर्जनीयः, विसर्जनीयस्यसः,सम्पुङ्कानांसोवक्तव्यः।	II	15	10	10
7.	समास 7.1 -अव्ययीभावसमासः - 7.1.1 - अव्ययम्विभक्तिसमीपसमृद्धिव्यर्थार्थाभावात्ययसम्प्रतिशब्दप्रादुर्भाभावपश्चाद्यथानुपूर्व्ययौगपद्यसादृश्यसम्पत्तिसाकल्यान्तवचनेषु। 7.1.2. - प्रथमानिर्दिष्टमुपसर्जनम्,/उपसर्जनपूर्वम्/नाव्ययीभावादतो/म्वपञ्चम्याः/तृतीयासप्तम्योर्बहुलम्/अव्ययीभावेचाकाले। 7.2. -तत्पुरुषसमासः - द्वितीयाश्रितातीतपतितगतात्यस्तप्राप्तापन्नैः,	II	15	09	10

	तृतीयातत्कृतार्थेनगुणवचनेन, कर्तृकरणकृताबहुलम्, चतुर्थीतदर्थार्थबलिहितसुखरक्षितैः, पञ्चमीभयेन, षष्ठी, सप्तमीशौण्डैः, विशेषणविशेष्येणबहुलम्, उपमानानिसामान्यवचनैः, नञ्, कर्मधारय, द्विगुः, उपपदतत्पुरुष 7.3 -बहुव्रीहिसमासः - अनेकमन्यपदार्थे 7.4 -द्वन्त्वसमासः - चार्थेद्वन्द्वः सूत्रसहितपाठनंपरंपरीक्षायांसूत्रव्याख्यानादिप्रश्नानिनप्रष्टव्यानि ।				
8.	शब्दरूपाणि 8.1 -पुल्लिङ्गःशब्दरूपाणि अकारान्तः - वात, वैद्य, रुग्ण, रामआदि इकारान्तः - अग्नि, मुनिआदि उकारान्तः - ऋतु, भानुगुरुआदि ऋकारान्तः - नृ, धातृ, पितृआदि ओकारान्तः - गोआदि नकारान्त- श्लेश्मन्, रोगिन्, ज्ञानिन्आदि सकारान्त - चन्द्रमस्आदि तकारान्त - मरुत्आदि दकारान्त - सुहृद्आदि जकारान्त- भिषज्, आदि शकारान्तः - कीदृश्, एतादृश्आदि 8.2 -स्त्रीलिङ्गःशब्दरूपाणि अकारान्तः - बला, कला, स्थिरा, मालाआदि इकारान्तः - सम्प्राप्ति, प्रकृति, मतिआदि ईकारान्तः - धमनी, नदीआदि उकारान्तः - रज्जु, धेनुआदि ऊकारान्तः - वर्षाभू, वधूआदि ऋकारान्तः - मातृआदि चकारान्तः - वाच्आदि तकारान्तः - योषित्, सरित्आदि दकारान्तः - परिषद्आदि जकारान्तः - स्रज्आदि सकारान्तः - जलौकस्, सुमनस्आदि षकारान्तः - प्रावृष्आदि 8.3 -नपुंसकलिङ्गशब्दरूपाणि अकारान्तः - पित्त, वनआदि उकारान्तः - अश्रु, मधुआदि इकारान्तः - अक्षि, अस्थि, वारि, दधिआदि ऋकारान्तः - ज्ञातृ, धातृआदि नकारान्तः- वर्त्मन्, दण्डिन्आदि सकारान्तः- स्रोतस्, मनस्आदि षकारान्तः - सर्पिष्, आयुष्आदि तकारान्तः- शकृत्, जगत्आदि	I	10	02	14

	अष्टाङ्गहृदयसंहितायाम्विद्यमानानामन्यानामपिसमानानामरूपाणां परिचयकरणम् अभिलषणीयम्। प्रश्नपत्रेन प्रष्टव्यम्। 8.4 -सर्वनामपदानि – अस्मद्, युष्मद्, तद्, एतद्, यद्, किम्, इदम् आदि				
9.	धातुरूपाणि – [विस्तरेण पाठनम्-detailed teaching] 9.1 -परस्मैपदि - लट्/लृट्/लङ्/विधिलिङ्/लोट् भ्वादिगण - भूसत्तायाम्, शिक्षये, गमू(गम्) गतौ, पापाने, जीव्, पच्, त्यज्, दृश् (पश्य) अदादिगण -अद्भक्षणे, हन्तिह्मागत्योः, वागतिगन्धनयोः पारक्षणे, अस्, श्वस्, स्वप्, ब्रू जुहोत्यादिगण-धाधारणपोषणयोः, पृ - पलनपूरणयोः, हात्यागे, दा (दाञ्) दिवादिगण-दिवुक्रीडादौ, त्रसीउद्वेगे, पुष्पुष्टौ, कुप्, नश्, तुष्, स्निह्, जृ स्वादिगण-चिञ्चयने, शक्, श्रु तुदादिगण-तुद्ग्रथने, कृष्विलेखने, लिखलेखने, दिश्, कृन्त्, क्षिप्, स्पृश् रुधादिगण-रुधिर्आवरणे, भिदिर्विदारणे, भुज् तनादिगण-तनुविस्तारे, कृञ्करणे क्र्यादिगण-प्रीज् -तर्पणेकान्तेच, ग्रहउपादाने, ज्ञा चुरादिगण-गणसंस्थाने, साध्, ताड्, धृ, कथ्वाक्यप्रबन्धे आत्मनेपदि- भ्वादिगण - वृत्तुवर्त्तने, वृध्(वर्ध्), लभ्, सेव्, रुच् अदादिगण -शीङ्स्वप्ने, ब्रू जुहोत्यादिगण-धाधारणपोषणयोः, दा (दाञ्), दिवादिगण-जनीप्रादुर्भाव, मन्, बुध्, पद्, विद् स्वादिगण-चिञ्चयने, तुदादिगण-तुद्ग्रथने, कृष्विलेखने, म्रि, विद्, मुच्, सिञ्च्, रुधादिगण-रुधिर्आवरणे, भिदिर्विदारणे, भुज् तनादिगण-तनुविस्तारे, कृञ्करणे क्र्यादिगण-प्रीज् -तर्पणेकान्तेच, ग्रहउपादाने, ज्ञा चुरादिगण-चुर्, क्षाल्, कथ्, घोष्, भक्ष् आयुर्वेदसंहितासु विद्यमानानां धातुरूपाणां परिचयीकरणम् अभिकाम्यम् 9.2 - लृङ्ग, आशीर्लिङ्ग, लिट्, लुङ्ग, लुङ् [सङ्क्षिप्य पाठनम्-Brief teaching] भ्वादिगण, अदादिगण, जुहोत्यादिगण, दिवादिगण, स्वादिगण, तुदादिगण, रुधादिगण, तनादिगण, क्र्यादिगण, चुरादिगण पूर्वोक्तधातुष्वेकस्य पञ्चलकारेषु रूपाणि दर्शयेत्। परंपरीक्षायां पृष्टव्यानि।	I	10	05	05
10	प्रत्ययाः 10.1 – क्त - क्तवत्, तव्यत् – अनीयर्, शतृ – शानच्, ल्युट् - ण्वुल्, क्त्वा - ल्यप्, णिनिः, क्तिन्, तुमुन्	II	10	05	6

	प्रत्ययाणाम्प्रयोगाः एवपृष्ठव्याः 10.2 -भावेघञ्, करणेघञ्, भावेष्वाञ्, कर्मणिण्यत्, कर्त्तरिअच्अप् आयुर्वेदसंहितायांविद्यमानानांभावे/करणे/कर्त्तरि/ताच्छ्रील्ये/आदि प्रत्ययानांपरिचयः करणीयः परंपरीक्षायांमृष्टव्याः परीक्षायांस्वाच्यप्रयोगः स्वरूपेपृष्ठव्यः				
11	विशेषणविशेष्य	II	05	02	03

Paper II – Part A Sanskrit					
	A2 List of Topics (Maximum Marks – 80 (SAQ & LAQ only))	B2 Term	C2 Marks	D2 Lecture hours	E2 Non- Lecture hours
1	निरुक्तितथापर्यायपदानि– A) आयुः,शरीर,मनः,अग्निः,जलम्, वातः, पित्तम्, कफः B) रस, रक्त, मांस, मेद, अस्थि, मज्जा, शुक्र, इन्द्रियम्, चक्षुः, श्रोत्र, रसना, घ्राण C) धी, धृति, स्मृति, मति, बुद्धि, प्रज्ञा, मूत्र, पुरीषः, स्वेद, आत्मा, रोगः, निदानम्, रोगिः, भेषजचिकित्सा, आदि	A- I B – II C- III	15	7 (A-1, B-3, C-3)	13 (A- 4, B-4, C-5)
2	परिभाषापदानि – A) आयुर्वेदः, पञ्चमहाभूतानि, त्रिगुणम्, दोषाः, मलाः, दूष्यम्, सम्सर्गः, सन्निपातः B) द्रव्य, गुण, कर्म, सामान्य, विशेष, गुरु, लघु, प्रकृतिः, विकृतिः, चयः, प्रकोपः, प्रसरः, स्थानसम्प्रयः, दोषगतिः भेदः, रसः, वीर्यम्, विपाकः, कार्यकारणभावः C) स्रोतस्, कोष्ठः, आमम्, विरुद्धाह्नम्, विरुद्धाहारः, विदाहि, विष्टम्भि, सात्म्यम्, ओकसात्म्यम्, देशसात्म्यम्, अत्यशनम्, अध्यशनम्, स्थानी, योगवाही, पथ्यम्, अपथ्यम्, कृतान्नवर्गः, अवस्थापाकः, वेगः, शोधन, शमन, लघन, बृहण, अनुपान आदि	A -I B– II C- III	20	10 (A-2, B-4, C- 4)	15 (A- 5, B-5, C-5)
3.	अन्वयलेखनम् - A) अष्टाङ्गहृदयस्मृत्यस्थानम् – अध्यायतः सर्वाणिसूत्राणि १. आयुष्कामीयम् २. दिनचर्या ३. रोगानुत्पादनीयम् B) अष्टाङ्गहृदयस्मृत्यस्थानम् – अध्यायतः सर्वाणिसूत्राणि दोषादिविज्ञानीयम् दोषभेदीयम् दोषोपक्रमणीयम् द्विविधोपक्रमणीयम् C) वैद्यकीयसुभाषितसाहित्यम् – shloka numbers – (भास्करगोविन्दघाणेकरलिखित, चौखम्बाप्रकाशन) प्रथमः 1, 2	A -I B - II C - III	30	20 (A- 4, B- 8, C-8)	14 (A- 4, B- 5, C-5)

	द्वितीयः 1, 7 तृतीयः 9 चतुर्थः 2, 3 पञ्चमः 2, 3 षष्ठः 1, 4, 7 सप्तमः 2, 5, 17 अष्टमः 13, 12 नवमः 12, 13 दशमः 1, 19 एकादशः 1, 2 द्वादशः 1, 6 त्रयोदशः 1, 7, 8, 9 चतुर्दशः 2, 3, 4 पञ्चदशः 7, 10 षोडशः 5, 6 सप्तदशः 1, 4 अष्टादशः 1, 2, 3 एकोनविंशतिः 2, 3, 4 विंशतिः, 12, 3, 4 श्लोकपूरणनप्रष्टव्यम्परीक्षायाम् पदच्छेदंविग्रहवाक्यम्अन्वयः वाक्यार्थभावार्थइत्यादयः एवप्रष्टव्याः				
4.	पञ्चतन्त्र-अपरीक्षितकारकम् ^५ अध्याय कथा -१ नापितक्षपणककथा कथा-२ नकुलीब्राह्मणीकथा कथा-३ चक्रधरकथा कथा-४ सिंहकारकमूर्खपण्डितकथा कथा-५ मूर्खपण्डितकथा श्लोकपूरणतथाअन्वयलेखननप्रष्टव्ये	III	15	03	04

Paper II – Part B – Ayurved Itihas –					
	A2 List of Topics (Maximum Marks – 20 (MCQ only))	B2 Term	C2 Marks	D2 Lecture hours	E2 Non- Lecture hours
1	Derivation (Vyutpatti and Niruktti) and definition of Itihasa. Necessity, Significance and Utility of knowledge of Ayurveda itihasa. Means and method of study of Ayurveda itihasa. Different Time periods relevant for the Study of Ayurveda itihasa (viz, Prevedic, Vedic, Samhita kala, Sangraha kala etc.)	I	5	1	2
2	Origin and lineage of Ayurveda (Ayurvedavatarana) and Introduction of references of Ayurveda in Veda, Upanishat and Puarana.	I		1	2

3	Structure, Specialities, Time period of Ayurveda Samhitas and their commentaries (including Special contributions of authors and commentators): Charaka Samhita, Sushruta Samhita, Ashtanga Sangraha, Ashtanga Hridaya, Bhela Samhita, Hareeta Samhita, Kashyapa Samhita.	I	5	2	2
4	Structure, Contributions and importance of Laghutrayee and Commentaries: Madhava Nidana, Sharngadhara Samhita, Bhavaprakasha.	II		1	3
5	Origin and period of different systems of medicine in the world.	II	5	1	2
6	Introduction to Vrukshayurveda, Hastayurveda and Ashwayurveda. (Included in Transitional Curriculum)	II		-	1
7	Status of Ayurveda during the period of Ashoka, Mughal and British rule.	II		1	2
8	Contribution of Scholars of modern era: Acharya Gana Nath Sen, Vaidya Yamini Bhushan Rai, Vaidya Shankar Dajishastri Pade, Acharya Swami Lakshmiram, Acharya Yadavji Tikramji, Dr. PM. Mehta, Vaidya B G Ghanekar, Vaidya Damodar Sharma Gaur, Acharya Priyavrat Sharma, Vaidya C Dwarakanath, Vaidya K R Shrikantamurthy, Vaidya VJ Thakkar, Vaidyaratnam PS Varier, Vaidya B V Gokhale.	III	5	1	2
9	Globalization of Ayurveda	III		1	2
10	1)Developmental activities in Ayurveda in the post-independence period: • Introduction to various committees and their recommendations • Introduction of activities of the following Organizations : Department of AYUSH, CCIM/ NCISM, CCRAS, 2) National institutions Viz- All India Institute of Ayurved (AIIA), National Institute of Ayurveda, Jaipur. ITRA, Jamnagar. Faculty of Ayurveda, BHU, Varanasi. Rashtriya Ayurveda Vidyapeetha, New Delhi.	III		1	2

Table 2: Learning objectives (Theory) of Course

Paper I – Sanskrit									
A3 Course outcome	B3 Learning Objective (At the end of the session the Students should be able to)	C3 Domain	D3 Must to know/de sire to know/Ni ce to know	E3 Level Does/ Shows how/Shows/ Knows how/ Know	F3 T-L method	G3 Assessment	H3 Format ive /summ ative	I3 Te rm	J3 Integra tion
Topic 1- संस्कृतवर्णानाम्परिचयः(5 marks)Time: 13 hrs (Lecture:- 3 hours Non lecture10 hrs)									
CO 1, CO 6	Read & write Sanskrit words	Cognitive domain - Knowledge	Must know	Khows how	Practical classes Demonstrations Classroom reading	Oral Written	F&S	I	
CO 1, CO 6	Pronounce Sanskrit as per their appropriate articulations	Cognitive domain – Comprehension	Must know	Khows how/ Shows	1) Practical classes 2) presentation of videos 3) Graphical Representation of Vocal system Class room reading / speaking	Oral / Written Assignment on Identifying the Places of articulation of the words in Ayurveda texts.	F&S	I	
Topic 2- संज्ञा (10 marks)- Time: 05 Hrs (Lecture:- 5 hours Non lecture 00 hrs)									
CO 2, CO 4, CO	2.1 Explain the terms related to संज्ञा in Sanskrit grammar	Cognitive domain- Comprehension	Desirable to know	Knows	Lecture with Power point presentation	Oral,Conduct ion of quiz	F&S	II	
CO 2, CO 4, CO 5	2.2 Identify the संज्ञा Explain the meaning of the संज्ञा	Cognitive domain- Comprehension	Must know	Khows how	Lecture with Power point presentation	Oral / written Very short answer Differentiate, identify,	F&S	I	

						fill in the blanks etc Preparation of MSQ (MCQ) Question-answer sessions			
Topic 3 उपसर्गः - उपसर्गः क्रियायोगे (05 marks) Time: 05 Hrs (Lecture:- 02 hours Non lecture 03 hrs)									
CO 2, CO 4, CO 6	Identify the उपसर्गः: Explain the meaning of the words with उपसर्गः: Identify the difference in meaning according to the उपसर्गः:	Cognitive domain - Comprehension problem solving	Must know	Knows how	Lectures with Power point presentation. Problem Based Learning (PBL) Group Discussions	Oral & Written objective type very short answer compare differentiate etc, Assignments open book test	F&S	II	
Topic 3- अव्ययानि (05 marks) Time: 05 Hrs (Lecture:- 02 hours Non lecture 03 hrs)									
CO 2, CO 4, CO 6	4.1 Identify अव्ययानि	Cognitive domain - Comprehension	Must know	Knows	Lectures with Power point presentation. Group Discussions	Oral & Written. objective type very short answer - compare, differentiate Assignments on sentence construction, presentation by the	F&S	I	

						students			
CO 2, CO 4, CO 6	4.2 Explain the meaning with reference to the context	Cognitive domain – Application	Must Know	Knows how	Lectures with Power point presentation. Group Discussions	Oral & Written objective type very short answer / compare differentiate Assignments open book test	F&S	II	
CO 2, CO 4, CO 6	Construct the sentences using अव्ययानि	Cognitive domain - Synthesis	Must Know	Shows how	Lectures with Power point presentation. Group Discussions Conversation Sessions	Oral & Written Construct sentences with proper use of Avyayas. Use appropriate Avyayas. Very short answer Assignments on finding out the अव्ययानि used in the texts and explain their meaning with reference to the context.	F&S	III	

						Open book test.			
Topic 5- कारकप्रकरणम् (15 marks) Time: 15 Hrs (Lecture:- 5 hours Non lecture 10 hrs)									
CO 3, CO 6	A) Discriminate the विभक्ति and their meaning. B) Identify the karakas from Ayurveda texts like करणम्कारणम् C) Construct sentences. D) Translate sentences from English to Sanskrit & from Sanskrit to English.	Cognitive domain - Synthesis problem solving	Must know	Shows how	Lectures with Power point presentation. Group Discussions	Oral & Written objective type very short answer / compare differentiate / meaning with reference to the context etc Assignments on identification of the karakas used in the Ayurveda basic principle terms like करणम्कारणम् .	F&S	A)– I B) –II C) – III D) - III	
Topic 6- सन्धि: (15 marks) Time: 20 Hrs (Lecture:- 10 hours Non lecture 10 hrs)									
CO 2, CO 6	6.1 Identify सन्धि: Explain the meaning of the context by splitting. Formulate the joined words while writing the	Cognitive domain - Application and problem solving	Must know	Knows how	Lectures with Power point presentation. Group Discussions Classes by the	Oral & Written Objective type, very short answer – compare, differentiate	F&S	II	

	sentences				students Ashtang hrudaya with the सन्धि:	etc.Assignments to find the सन्धि:in Ashtangahrudaya Quiz on सन्धि:			
CO 2, CO 6	6.2 Identify सन्धि: Explain the meaning of the context by splitting. Formulate the joined words while writing the sentences	Cognitive domain - Application and problem solving	Must know	Knows how	Lectures with Power point presentation. Group Discussions Classes by the students Ashtang hrudaya with the सन्धि:	Oral & Written objective type very short answer compare and differentiate Assignments to find the सन्धि:in Ashtangahrudaya Quiz on सन्धि: Preparation of charts, mindmaps etc.	F&S	II	
CO 2, CO 6	6.3 Identify सन्धि: Explain the meaning of the context by splitting. Formulate the joined	Cognitive domain - Application and problem solving	Must know	Knows how	Lectures with Power point presentation. Group Discussions Classes by the	Oral & Written objective type very short answerAssignig	F&S	II	

	words while writing the sentences				students Ashtang hrudaya with the सन्धि:	nments to find the सन्धि:in Ashtang hrudaya Quiz on सन्धि: Preparation of charts, mindmaps etc.			
CO 2, CO 6	6.4 Identify सन्धि: Explain the meaning of the context by splitting.	Cognitive domain – Comprehen sion Application	Desirable to know	Knows	Lectures with Power point presentation.	Oral Preparation of charts, mindmaps etc.	F&S	II	
Topic 7- समास (15 marks) Time: 19 Hrs. (Lecture:- 09 hours Non lecture 10 hrs)									
CO 2	Identify समास: Discriminate between the सन्धि:and समास:	Cognitive domain - Comprehen sion	Must know	Knows	Lectures with Power point presentation. Group Discussions Problem Based Learning(PBL) Flipped classroom Peer learning Classes by the students on the sutras in Ashtang hrudaya with the विग्रहवाक्यम्	Oral & Written objective type very short answer-compare differentiate Assignments to find the समास: in Ashtanga hrudaya Quiz on समास: Puzzles Word cloud	F&S	II	

						Cross words etc.			
CO 2, CO 6	7.1 Identify समासः Explain the meaning of the context by writing the विग्रहवाक्यम् Construct the समस्तपदम् while writing the sentences	Cognitive domain - Application and problem solving	Must know	Shows how	Lectures with Power point presentation. Group Discussions Problem Based Learning(PBL) Flipped classroom Peer learning Classes by the students on the sutras in Ashtang hrudaya with the विग्रहवाक्यम्	Oral & Written objective type very short answer Assignments to find the समासः in Ashtangahrda ya Quiz on समासः Puzzles Word cloud Cross words etc. Preparation of charts, mindmaps etc.	F&S	II	
CO 2, CO 6	7.2 Identify समासः Explaining the meaning of the context by writing the विग्रहवाक्यम् Construct the समस्तपदम् while writing the sentences	Cognitive domain - Application and problem solving	Must know	Shows how	Lectures with Power point presentation. Group Discussions Problem Based Learning(PBL) Flipped classroom Peer learning Classes by the students on the sutras in Ashtang	Oral & Written objective type very short answer Assignments to find the समासः in Ashtangahrda ya Quiz on	F&S	II	

					hrudaya with the विग्रहवाक्यम्	समास: Puzzles Word cloud Cross words etc. Preparation of charts, mindmaps etc.			
CO 2, CO 6	7.3 Identify समास: Explaining the meaning of the context by writing the विग्रहवाक्यम् Construct the समस्तपदम् while writing the sentences	Cognitive domain - Application and problem solving	Must know	Shows how	Lectures with Power point presentation. Group Discussions Problem Based Learning(PBL) Flipped classroom Peer learning Classes by the students on the sutras in Ashtang hrudaya with the विग्रहवाक्यम्	Oral & Written objective type very short answer meaning with reference to the context etc. Assignme nts to find the समास: in Ashtangahrda ya Quiz on समास: Puzzles Word cloud Cross words etc. Preparation of charts, mindmaps etc.	F&S	II	
CO 2, CO 6	7.4 Identify समास: Explaining the meaning of the context by	Cognitive domain - Application and	Must know	Shows how	Lectures with Power point presentation.	Oral & Written objective	F&S	II	

	writing the विग्रहवाक्यम् Construct the समस्तपदम् while writing the sentences	problem solving			Group Discussions Flipped classroom Peer learning Classes by the students on the sutras in Ashtang hrudaya with the विग्रहवाक्यम् Problem Based Learning(PBL)	type very short answer Assignments to find the समास: in Ashtangahrda ya Quiz on समास: Puzzles Word cloud Cross words etc. Preparation of charts, mindmaps etc.			

Topic 8- शब्दरूपाणि (10 marks) Time: 16 Hrs (Lecture:- 2 hours Non lecture 14 hrs)

CO 2, CO 3, CO 6	Identify & write the अन्तलिङ्गविभक्तिवचनानि of a noun. Construct sentences	Cognitive domain – Synthesis problem solving	Must know	Shows how	Lectures with Power point presentation. Recitation Peer learning Group Discussions	Oral & Written objective type very short answer Assignments to find out the अन्तलिङ्गविभक्तिवचनानि of nouns used in various text books and writing all forms of all विभक्ति.	F&S	I	

						Quizzes Puzzles Word cloud Cross words etc.			
Topic 9-धातुरूपाणि (10 marks) Time: 10Hrs. (Lecture:- 5 hours Non lecture 05 hrs)									
CO 2, CO 6	9.1 Identify & write लकारपदपुरुषवचनानि of the roots. Interpret the meaning according to the लकार: Use for constructing sentences.	Cognitive domain - Synthesis and problem solving	Must know	Shows how	Lectures with Power point presentation. Recitation Group Discussions Peer learning	Oral & Written objective type very short answerAssign- ments to find out the verbs used in various text book in the syllabus and completing all the forms. Quizzes Word cloud etc.	F&S	I	
CO 2, CO 6	9.2 Identify & write लकारपदपुरुषवचनानि of the roots. Interpret the meaning according to the लकार:	Cognitive domain- Comprehen- sion problem solving	Nice to know	Knows	Lectures with Power point presentation. Group Discussions	Oral Assignments Quizzes Word cloud etc.	F&S	I	
Topic -10 प्रत्ययाः (10 Marks) Time: 11 Hrs (Lecture:- 5 hours Non lecture 06 hrs)									
CO 2, CO 6	10.1 Identify the प्रत्ययाः Interpret the meaning with reference to the	Cognitive domain - Comprehen- sion	Must know	Shows how	Lectures with Power point presentation.	Oral & Written objective	F&S	II	

	context with the support of the प्रत्ययाः	and problem solving			Group Discussions	type very short answer Assignments Quizzes			
CO 2, CO 6	10.2 Identify the प्रत्ययाः Interpret the meaning with reference to the context with the support of the प्रत्ययाः (परीक्षायाम्वाच्यप्रयोगः स्वरूपेपृष्टव्यः)	Cognitive domain- Application and problem solving	Must to Know	Shows how	Lectures with Power point presentation. Group Discussions	Oral Assignments Quizzes	F&S	II	

Topic 11- विशेषणविशेष्य (05 Marks) Time: 05 Hrs (Lecture:-02 hours Non lecture 03 hrs)

CO 2, CO 6	Identify and discriminate different types of Visheshanas. Effectively use visheshanas in sentences.	Cognitive domain - Application and problem solving	Must know	Knows how / Shows how	Lectures with Power point presentation. Flipped classroom	Oral & Written Quizzes Word cloud etc.	F&S	II	

Paper II Part A - Sanskrit Learning Objective

A3 Course outcome	B3 Learning Objective (At the end of the session the Students should be able to)	C3 Domain	D3 Must to know/ desire to know/ Nice to know	E3 Level Does/ Shows how/S hows/ Knows how/	F3 T-L method	G3 Assessment	H3 Formative /summative	I3 Term	J3 Integration

				Know s					
Topic 1- निरुक्ति/ Paryaya padani (15 marks) Time:18 Hrs. Lecture:- 7 hours (A-2, B-5)Non lecture 13 (A- 4, B-4, C-5 hrs)									
CO 2, CO 5	Explain the meaning of the words and their synonyms with the help of their nirukti (निरुक्तिः) A) आयुः,शरीर,मनः,अग्निः, जलम्,वातः,पित्तम्, कफः B) रस,रक्त,मांस,मेद,अस्थि ,मज्जा,शुक्र ,इन्द्रियम् , ,रसना ,चक्षु ,श्रोत्र, घ्राण C) धी,धृति,स्मृति , ,मति ,बुद्धीप्रज्ञा ,मूत्र , पुरीषः,स्वेद,आत्मा,रोगः ,निदानम्,रोगि ,ःभेषज , चिकित्साआदि	Cognitive domain - comprehension	Must know	Know s how	Lectures with Power point presentation. Flipped classroom Peer learning Ayurveda Samhita Group Discussions	Oral & Written objective type very short answer compare differentiate meanings meaning with reference to the context etc Assignments Open book test	F & S	A- I B – II C- III	Sam hit a, Kr iy a Sh ari r, Ra ch an a Sh ari r.
Topic 2- परिभाषापदानि (20 marks) Time 25 Hrs (Lecture:-10 (A-2, B-4, C- 4 hours) Non lecture 15 (A- 5, B-5, C-5 hrs)									
CO 2, CO 5	Explain the meaning of the words and their synonyms with the help of their nirukti (निरुक्तिः) Describe the Paribhasapadas (परिभाषापदः) परिभाषापदानि –	Cognitive domain – Comprehension Application	Must know	Know s how	Lectures with Power point presentation. Flipped classroom Peer learning Group Discussions	Oral & Written objective type very short answer write short notes Assignments from Ayurveda Samhita Open book test	F&S	A- I B – II C- III	Sam hit a, Kr iy a Sh ari r, Ra

	A) आयुर्वेदः, पञ्चमहाभूतानि, त्रिगुणम्, दोषाः, मलाः, दूष्यम्, सम्सर्गः, सन्निपातः B) द्रव्य, गुण, कर्म, सामान्य, विशेष, गुरु, लघु, प्रकृतिः, विकृतिः, चयः, प्रकोपः, प्रसरः, स्थानसम्श्रयः, दोषगतिः भेदः, रसः, वीर्यम्, विपाकः, कार्यकारणभावः C) स्रोतस्, कोष्ठः, आमम्, विरुद्धाह्नम्, विरुद्धाहारः, विदाहि, विष्टम्भि, सात्म्यम्, ओकसात्म्यम्, देशसात्म्यम्, अत्यशनम्, अध्यशनम्, स्थानी, योगवाही, पथ्यम्, अपथ्यम्, कृतान्नवर्गः, अवस्थापाकः, वेगः, शोधन, शमन, लंघन, बृहण, अनुपानादि								ch an a Sh ari r.

Topic 3 - अन्वयलेखनम् (30 marks) Time 34 Hrs (Lecture:- 20 (A- 4, B- 8, C-8 hours) Non lecture 14 (A-4, B-5, C-5 hrs)

CO 4, CO 6	Identify the subject object Adjective noun verb in a sentence. Write the पदच्छेदं विग्रहवाक्यम् अन्वयः वाच्यार्थम् and भावार्थम् Of shlokas	Cognitive domain – Comprehension Application	Must know	Show s how	Self-directed learning Flipped classroom Classes by the students Group Discussions	Oral & Written Objective type Very short answer Anvaya writing Short answer Assignments on writing पदच्छेदं विग्रहवाक्यम् अन्वयः वाच्यार्थम् भावार्थम्	F&S	A -I B - II C- III	Sam hit a

[illegible]

	त्रयोदश: 1, 7, 8, 9 चतुर्दश: 2, 3, 4 पञ्चदश: 7, 10 षोडश: 5, 6 सप्तदश: 1, 4 अष्टादश: 1, 2, 3 एकोनविंशति: 2, 3, 4 विंशति: , 12, 3, 4								

Topic 4 - पञ्चतन्त्र-अपरीक्षितकारकम् ५ अध्याय (15 marks) Time 07 Hrs (Lecture:- 03 hours Non lecture 04 hrs)

CO 4, CO 6	Construct Sanskrit sentences and comprehend a passage. Convert active and passive voice sentences. १. क्षपणककथा २. नकुलब्राह्मणीकथा ३. चक्रधरकथा ४. सिंहकारकब्राह्मणपुत्रकथा ५. मूर्खपण्डितकथा	Cognitive Domain- Synthesis Problem Solving	Must know	Show s how	Activity based learning Self-directed learning Flipped classroom Group Discussions	Oral & Written objective type very short answer write summeryAssignments on finding out प्रत्यय: and क्रियापदानि Assignments of changing the voice. Assignments on translation	F&S	III	

PAPER II Part B Ayurved Itihas

A3 Course outco me	B3 Learning Objective (At the end of the session the Students should be able to)	C3 Domai n	D3 Must to know/desire to know/Nice to know	E3 Level Does/ Shows how/Shows/ Knows how/ Know	F3 T-L method	G3 Assessment	H3 Formati ve /summa tive	I3 Te rm	J3 Integration

Topic 1- Time (Lecture:- 1 hour, Non lecture 2 hours)

CO 8	Describe Etymological derivation (Vyutpatti),	Cogniti ve/Kno	Must know	Knows	Lecture & Group Discussion,	Written MCQ	F & S	I	

	syntactical derivation (Niruktti) and definition of the word Itihasa.	wledge (K)							
CO 8	Describe of knowledge of history, its significance and utility, means and method of Ayurveda history	Cognitive/ comprehension	Must know	Knows	Lecture & Group Discussion, Tutorial, Video clips	Written MCQ Discussions or debate	F	I	
CO 8 CO 9	Explain Different Time periods relevant for the Study of Ayurveda itihasa (viz, Prevedic, Vedic, Samhita kala, Sangraha kala etc.)	Cognitive/K	Must know	Knows	Lecture & Group Discussion, Tutorial, Charts, Edutainment.	Written MCQ	F & S	I	
Topic 2- Time (Lecture:- 1 hour, Non lecture 2 hours)									
CO 8 CO 9	Explain different opinions of origin and lineage of Ayurveda available in Samhitas and Samudra manthana and origin of Dhanvantari.	Cognitive/K	Must know	Knows	Lecture, video & Group Discussion	Written MCQ	F & S	I	
CO 8 CO 9	Outline 2-3 references of Ayurveda in Veda, Upanishat and Puarana	Cognitive/K	Desirable to know	Knows	Lecture, charts & Group Discussion, SDL	Written MCQ, Online search of Archiologic al sites for Ayurved. Presentation by Students,	F	I	
CO 8	Describe Ayurveda as Upaveda of Atharvaveda	Cognitive/comprehension	Desirable to know	Knows	Lecture & Group Discussion	Written MCQ	F & S	I	

Topic 3- Time (Lecture:- 2 hour, Non lecture 2 hours)									
CO 8 CO 9	Describe the Structure, Specialities, Time period of Charaka Samhita	Cognitive/K	Must know	Knows	Lecture, charts & Group Discussion Online Visit of Charakaranya, elared places.	Written MCQ Chart prepration	F & S	I	
CO 8 CO 9	Briefly explain contribution of Punarvasu Athreya, Agnivesha, Charaka, Drudhabala	Cognitive/K	Must know	Knows	Lecture & Group Discussion	Written MCQ	F & S	I	
CO 8 CO 9	Enumerate the important Commentaries on Charaka Samhita and identify their authors.	Cognitive/K	Must know	Knows	Lecture & Group Discussion, Activity on commentary, Compilation.	Written MCQ Online samhitas, Commento ry search	F & S	I	
CO 8 CO 9	Explain the importance of Ayurveda Deepika, Jalpakaipataru.	Cognitive/K	Must know	Knows	Lecture & Group Discussion.	Written MCQ	F & S	I	
CO 8 CO 9	Justify Charakastu Chikitsite in view of Global medical history.	Cognitive/K	Must know	Knows	Lecture & Group Discussion,	Written MCQ Debate Creativs writing	F	I	Roganidan a, Kayachikit sa
CO 8 CO 9	Describe the Structure, Specialities, Time period of Sushruta Samhita	Cognitive/K	Must know	Knows	Lecture & Group Discussion	Written MCQ Poster making	F & S	I	
CO 8 CO 9	Briefly explain contribution of Dhanvantari, Sushruta, Nagarjuna, Chandrata	Cognitive/k	Must know	Knows	Lecture & Group Discussion	Written MCQ	F & S	I	Salya tantra
CO 8	Enumerate the important	Cognitive	Must know	Knows	Lecture & Group	Written	F & S	I	

CO 9	commentaries on Sushruta Samhita and identify their authors.	ve/K			Discussion	MCQ Chart or collage			
CO 8 CO 9	Explain the importance of Nibandha sangraha, Nyaya chandrika,	Cognitive/K	Must know	Knows	Lecture & Group Discussion	Written MCQ	F & S	I	
CO 8 CO 9	Justify Shaareere Sushruta	Cognitive/comprehension	Must know	Knows	Lecture & Group Discussion	Written MCQ Debate/Discussions	F	I	Rachana Sharira, Kriya sharira
CO 8 CO 9	Describe the Contributions of Sushruta Samhita to the field of surgery.	Cognitive/Comprehension	Must know	Knows	Lecture & Group Discussion	Written MCQ	F & S	I	Shalya Tantra
CO 8 CO 9	Identify the acharyas of Atreya and Dhanvantari Sampradaya	Cognitive/K	Must know	Knows	Lecture & Group Discussion Quiz	Written MCQ	F & S	I	
CO 8 CO 9	Describe the Structure, Specialities, Time period of Ahtanga sangraha and Ashtang hridaya.	Cognitive/K	Must know	Knows	Lecture & Group Discussion Video Clips	Written MCQ Chart or collage of events	F & S	I	
CO 8 CO 9	Briefly explain contributions of Vriddha and Laghuvagbhata	Cognitive/K	Must know	Knows	Lecture & Group Discussion	Written MCQ	F & S	I	
CO 8 CO 9	Enumerate commentaries on Ahtanga sangraha and Ashtang hridaya and explain importance of Indu, Hemadri and Arunadatta commentary.	Cognitive/K	Must know	Knows	Lecture & Group Discussion	Written MCQ Quiz	F & S	I	
CO 8 CO 9	Justify Sutrasthane tu vagbhata	Cognitive/K	Must know	Knows	Lecture & Group Discussion	Written MCQ	F & S	I	
CO 8 CO 9	Enumerate the salient features of Bhela Samhita	Cognitive/k	Desirable to know	Knows	Lecture & Group Discussion, SDL	Written MCQ	F	I	

CO 8 CO 9	Enumerate the salient features of Hareeta Samhita	Cognitive/k	Desirable to know	Knows	Lecture & Group Discussion, SDL	Written MCQ	F & S	I	
CO 8 CO 9	Describe the Structure, Specialties, Time period of Kashyapa Samhita	Cognitive/k	Must know	Knows	Lecture & Group Discussion	Written MCQ Chart or collage of Events	F & S	I	
CO 8 CO 9	Briefly explain contribution of Kashyapa, Jeevaka, Vatsya.	Cognitive/k	Must know	Knows	Lecture & Group Discussion	Written MCQ	F & S	I	
CO 8 CO 9	Identify contribution of Kashyapa Samhita to the field of Pediatrics.	Cognitive/k	Must know	Knows	Lecture & Group Discussion	Written MCQ	F & S	I	
Topic 4- Time (Lecture:- 1 hour, Non lecture 3 hours)									
CO 8 CO 9	Describe Structure, Contributions and importance of Madhava Nidana.	Cognitive/k	Must know	Knows	Lecture & Group Discussion, Library Session for handing of books.	Written MCQ Library Searching online available Samhitas. Samhita mobile applications	F & S	II	
CO 8 CO 9	Outline the importance of Madhavakara, Vijayarakshita, Shrikanthadatta and Justify nidane madhava shreshtha.	Cognitive/k	Must know	Knows	Lecture & Group Discussion	Written MCQ	F & S	II	Roganidana
CO 8 CO 9	Describe Structure, Contributions and importance of Sharngadhara Samhita.	Cognitive/k	Must know	Knows	Lecture & Group Discussion	Written MCQ	F & S	II	

CO 8 CO 9	Briefly explain contribution of Sharngadhara, Adhamalla, Kashiram.	Cognitive/k	Must know	Knows	Lecture & Group Discussion	Written MCQ	F & S	II	
CO 8 CO 9	Explain about Bhavamishra and Enumerate the salient features of Bhavaprakasha.	Cognitive/k	Must know	Knows	Lecture & Group Discussion,	Written MCQ	F & S	II	
Topic 5- Time (Lecture:- 1 hour, Non lecture 2 hours)									
CO 8 CO 9	Enlist origin and period of different systems of medicine in the world.	Cognitive/k	Must know	Knows	Lecture & Group Discussion	Written MCQ Assignments	F & S	II	
Topic 6- Time (Lecture:- 0 hour, Non lecture 1 hours)									
CO 8 CO 9	Explain in brief about Ashwayurveda, Gajayurveda, Gavayurveda and Vrukshayurveda.	Cognitive/k	Must know	Knows	Lecture (Included in Transitional Curriculum)& Group Discussion	Written MCQ Serach of Use of Ayurved plats in different cattle food. Poster making	F & S	II	
Topic 7- Time (Lecture:- 1 hour, Non lecture 2 hours)									
CO 8 CO 9	Describe the Status of Ayurveda during the period of Ashoka, Mughal and British rule.	Cognitive/K	Desirable to know	Knows	Lecture & Group Discussion, SDL	Written MCQ Collect the photos online and make a documentor y in your voice.	F & S	II	
Topic 8- Time (Lecture:- 1 hour, Non lecture 2 hours)									

CO 8 CO 9	Name the Contributions of Acharya Gana Nath Sen, Vaidya Yamini Bhushan Rai, Vaidya Shankar Dajishastri Pade, Acharya Swami Lakshmiram, Acharya Yadavji Tikramji, Dr. PM. Mehta, Vaidya B G Ghanekar, Vaidya Damodar Sharma Gaur, Acharya Priyavrat Sharma, Vaidya C Dwarakanath, Vaidya K R Shrikantamurthy, Vaidya VJ Thakkar, Vaidyaratnam PS Varier, Vaidya B V Gokhale.	Cognitive/K	Desirable to know	Knows	Lecture & Group Discussion, Tutorial, Self directed learning (SDL)	Written MCQ, Quiz, Match the pair Edutainment Poster making, Video clip making, Compilation ,	F & S	III	

Topic 9- Time (Lecture:- 1 hour, Non lecture 2 hours)

CO 8 CO 9	Discuss Globalization of Ayurveda – Expansion of Ayurveda in Misra (Egypt), Sri Lanka, Nepal other nations.	Cognitive/K	Desirable to know	Knows	Lecture & Tutorial, Video Edutainment	Written MCQ Collect data and make video clip with your own narration.	F & S	III	

Topic 10- Time (Lecture:- 1 hour, Non lecture 2 hours)

CO 8 CO 9	Enumerate the various Committees and 2-3 recommendations	Cognitive	Must know	Knows	Lecture	Written MCQ	F & S	III	
CO 8 CO 9	Explain activities of Department of AYUSH, CCIM/ NCISM, CCRAS	Cognitive/K	Must know	Knows	Lecture & Group Discussion, Tutorial	Written MCQ Visit to Website of the	F & S	III	

						Department s and discussion			
CO 8 CO 9	Identify the institutes All India Institute of Ayurved, New Delhi, (AIIA), National Institute of Ayurveda, Jaipur. ITRA, Jamnagar. Faculty of Ayurveda, BHU, Varanasi. Rashtriya Ayurveda Vidyapeetha, New Delhi.	Cognitive/K	Desirable to know	Knows	Lecture & Group Discussion, Video	Written MCQ, Visit to web sites of colleges and Discussions .	F & S	III	

List of Practicals

Hours: 180 Hrs

SN	Name of Practical Sanskrit	Term	Hours
P1	Use of Dictionaries and Shabdakoshas अमरकोशः, वनौषधिवर्गः, शब्दकल्पद्रुमः, वाचस्पत्यम्	I	15
P2	Translation from Sanskrit to desirable language.	II	15
P3	Translation from desirable language to Sanskrit.	II	15
P4	सम्भाषणभाषापठनम् Spoken Sanskrit and Communication Skills	III	15
P5	All activity based practicals from above table are enlisted. (In table 2 and Table 3) They are as follows: 1. Presentation of videos about Maheshwar Sutra, Prayatna, Uccharana Sthanani etc. 2. Graphical Representation of Vocal system 3. Reading / Pronunciation 4. Preparing different Shabdarupani and recitation 5. Preparing different Kriyapadani.	I I I I/II I I/II	120 hours

6. Practicals on Karakani.	II	
7. Practicals on Pratyayas	II	
8. Practicals on Sandhis	II	
9. Practicals on Samasa	II	
10. Practicals on Upasargas.	II	
11. Practicals on Avyayas	II	
12. Practicals on Visheshan – Visheshya	I/II/III	
13. Practicals on Anvay lekhanā	II/III	
14. Practicals on Nirukti	I/II/II	
15. Practicals on Paribhasha	III	
16. Practicals on Panchatantra		

*Note: one practical should not be less than 01 hrs.

Table : Learning objectives (Practical)

Sanskrit Practical									
A4 Course outcome	B4 Learning Objective (At the end of the session the Students should be able to)	C4 Domain	D4 Must to know/de sire to know/Ni ce to know	E4 Level Does/ Shows how/Sho ws/ Knows how/ Know	F4 T-L method	G4 Assessment	H4 Formative /summative	I4 Term	J4 Integration
Practical 1- अमरकोशः -वनौषधिवर्गः, शब्दकल्पद्रुमः, वाचस्पत्यम्, Dictionaries Time: 15 Hrs (Practical/ Clinical 15 hours)									
CO 5	Refer the dictionaries.	Cognitive domain -	Must to know	knows	Demonstration for identifying the meaning	Oral	F & S	I	

	Refer the Books on synonyms	comprehension			of the words with the support of the shabdakoshas like Amarkosha, Shabda kalpadruma, vachaspathyam etc. Record writing				
CO 5, 6	Improve the vocabulary. Use in reading and writing.	Cognitive domain - comprehension	Desirable know	knows	Group Discussions Record writing	Oral Recitation Competitions Aksharashloka competitions etc.	F & S	II	
Practical 2 -Translation from Sanskrit to desirable language. Time: 15 Hrs. (Practical/ Clinical 15 hrs)									
CO 3, 4, 5, 6	Translate from Sanskrit to desirable language.	Cognitive domain - comprehension, synthesis.	Must to know	Shows how	Demonstration Group Activity Record writing	Oral Written	F & S	II	
Practical 3 -Translation from desirable language to Sanskrit. Time: 15 Hrs. (Practical/ Clinical 15 hrs)									
CO 3, 4, 5, 6	Translate from desirable language to Sanskrit.	Cognitive domain - comprehension, synthesis.	Must to know	Shows how	Demonstration Group Activity Record writing	Oral Written	F & S	II	
Practical 4 -संभाषणभाषापठनम् Spoken Sanskrit Time:15 Hrs (Practical/ Clinical 15 hrs)									
CO 6, 7	Apply Sanskrit grammar. Write a small paragraph or Script. Speak atleast 5 to	Cognitive domain - comprehension. Psychomotor	Must to know	Shows how	Staging small skits. Script writing, elocution competitions. Games Conversation Peer learning Creating conversations	Oral	F & S	III	

	10 lines in Sanskrit fluently. Stage a skit.	domain – articulation Psychomotor domain – articulation			Conversations in different situations by the students.				

P5 All activity based practicals from above table are enlisted. **(In table 2 and Table 3)** They are as follows: (NLH 120)

1. Presentation of videos about Maheshwar Sutra, Prayatna, Uccharana Sthanani etc.
2. Graphical Representation of Vocal system
3. Reading / Pronunciation
4. Preparing different Shabdarupani and recitation
5. Preparing different Kriyapadani.
6. Practical on Karakani.
7. Practical on Pratyayas
8. Practical on Sandhis
9. Practical on Samasa
10. Practical on Upasargas.
11. Practical on Avyayas
12. Practical on Visheshan - Visheshya
13. Practical on Anvay lekhan
14. Practical on Nirukti
15. Practical on Paribhasha
16. Practical on Panchatantra

Table: Non Lecture Activities

List non lecture Teaching-Learning methods	No of Activities	Total
Sanskrit		
Presentation of videos	2	120
Graphical Representation of Vocal system	1	
Guided Reading,	5	
Peer learning	4	
PBL	36	
Quizes, puzzles, cross word, word cloud	13	
Group activities	37	
SDL	17	
Recitation	5	
Practical (Refer Table 4	60	60
Ayurved Itihas	20	20
		200

Topic wise details –

List non lecture Teaching-Learning methods	No of Activities
Presentation of videos about Maheshwar Sutra, Prayatna, Uccharana Sthanani etc.	2
Graphical Representation of Vocal system	1
Reading / Pronunciation (Guided Reading, Peer learning)	7
Preparing different Shabdarupani and recitation (PBL, Peer learning, Quizes, word cloud, crosswords, recitation etc.)	14
Preparing different Kriyapadani. (PBL, Group activities)	5
Practicals on Karakani. (PBL, Group Discussions)	10
Practicals on Pratyayas. (PBL, Group Discussions)	6
Practicals on Sandhis (PBL, Quizes, puzzles, Group activities)	10
Practicals on Samasa (PBL, Quizes, puzzles,)	10
Practicals on Upasargas. (PBL, group activities)	3
Practicals on Avyayas (PBL, group activities)	3
Practicals on Visheshan – Visheshya (PBL)	3
Practicals on Anvay lekhana (PBL, SDL, Group Discussions)	14
Practicals on Nirukti (PBL, SDL, Group Discussions)	13
Practicals on Panchatantra - Vachya of sentences, Writing sentences using appropriate Shabdarupani and Kriyapadani etc. (SDL, PBL, group activities)	4
Practicals on Paribhasha (PBL, SDL, Group Discussions)	15
	120

Ayurved Itihas-

List non lecture Teaching-Learning methods	No of Activities
Group Discussion,	10
Video clips	5
Online Search, Pproject	
Tutorial	
Quiz, Collage, Puzzle	5
	20

Table: Assessment Summary

A-Number of Papers and Marks Distribution

S.No.	Subject Code	Papers	Theory	Practical/Clinical Assessment					Grand Total
				Practical/Clinical	Viva	Electives	IA	Sub Total	
1.	AyUG-SN & AI	2	200	-	75*	10 (Set-FA)	15	100	300
*Viva voce examination shall be for Sanskrit and not for Ayurved Itihasa									

B - Scheme of Assessment (formative and Summative)

SR.NO.		PROFESSIONAL COURSE	DURATION OF PROFESSIONAL COURSE		
			First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)
1	AyUG- SN & AI	First	3 PA & First TT	3 PA & Second TT	3 PA & UE
		PA: Periodical Assessment; TT: Term Test; UE: University Examinations			

C - Calculation Method for Internal assessment Marks (15 Marks)

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/3)	Converted to 15 Marks (D/15*15)	Term Test (Marks converted to 15) (15 Marks)	Sub Total _/30 Marks	Term Assessment (.../15)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Methods which is appropriate for the objectives of Topics from the Table 6 D for Peroadic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks)(MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert to 15 marks.							

D- Evaluation Methods for Periodical Assessment

S. No.	Evaluation Methods
1.	Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3.
2.	Practical / Clinical Performance
3.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
4.	Open Book Test (Problem Based)
5.	Summary Writing (Research Papers/ Samhitas)
6.	Class Presentations; Work Book Maintenance
7.	Problem Based Assignment
8.	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
9.	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
10.	Small Project
11.	Specific Periodic Assessment AyUG- SN & AI Sanskrit (3 PA / term) Quiz, Puzzles, Word cloud, Cross words, Preparation of charts, mindmaps, Assignments, Open book test, Recitation. Sanskrit Topics 8 and 9 शब्दरूपाणि and धातुरूपाणि from paper 1 can be asked for recitation, word cloud, crossword etc. in all Terms Test and viva or any from above table. Ayurved Itihas (3 PA/term) Quiz, Puzzles, Word cloud, Cross words, Preparation of charts, mindmaps, Assignments, Open book test, Video Clips making. Any of Evaluation Methods for Periodical Assessment

E- Paper Layout

I PROFESSIONAL BAMS EXAMINATIONS

Sanskritam evam Ayurveda itihasa

PAPER-I

Time: 3 Hours Maximum Marks: 100

INSTRUCTIONS: All questions compulsory

TOTAL MARKS 100 Sanskrit

		Number of Questions	Marks per question	Total Marks
Q 1	Multiple Choice Questions (MCQ) All Sanskrit	20	1	20
Q 2	Short answer questions (SAQ) All Sanskrit	8	5	40
Q 3	Long answer questions (LAQ) All Sanskrit	4	10	40
				100

I PROFESSIONAL BAMS EXAMINATIONS

Sanskritam evam Ayurveda itihasa

PAPER-II

Time: 3 Hours

INSTRUCTIONS: All questions compulsory

TOTAL MARKS 100 = [Sanskrit, (LAQ and SAQ) 80 marks + Ayurved Itihas, (MCQ) 20 marks]

		Number of Questions	Marks per question	Total Marks
Q 1	Multiple Choice Questions (MCQ) Ayurved Itihas, (all 20)	20	1	20
Q 2	Short answer questions (SAQ) All Sanskrit	8	5	40
Q 3	Long answer questions (LAQ) All SaAnskrit	4	10	40
				100

F- Distribution of Theory Exam

	Paper I: Sanskrit			D Type of Questions “Yes” can be asked. “No” should not be asked.		
				MCQ (1 Mark)	SAQ (5 Marks)	LAQ (10 Marks)
	A List of Topics	B Term	C Marks			
1	संस्कृतवर्णानाम्परिचयः – माहेश्वरसूत्राणि, उच्चारणस्थानानि, बाह्यप्रयत्नानि, अभ्यन्तरप्रयत्नानि	I	05	5	No	No
2	संज्ञा- 2.1 - संयोगः, संहिता, ह्रस्वदीर्घप्लुतः, अनुनासिकः, पदम्, धातुः, उपसर्गः, गुणः, वृद्धि 2.2 -इत्, लोपः, प्रत्याहारः, उदात्तः, अनुदात्तः, स्वरितः, सवर्णः, निपातः, प्रगृह्यम्,	2.1 – I 2.2 – II	05	5	No	No
3.	उपसर्गः-उपसर्गः :क्रियायोगे प्र, परा, अप, सम्, अनु, अव, निस्, निर्, दुस्, दुर, वि, आङ्, नि, अपि, अधि, अति, सु, उत्, अभि, प्रति, परि, उप।	II	05	No	Yes (1 que of 5 marks)	No
4.	अव्ययानि 4.1 -चअपिखलुहितुकिलननुवाचएव 4.2- पुनःविनाउच्चैःऋतेएवमसहसार्धम्युगपत्यथा- तथायावत्-तावत्इतियदा-तदायदि- तर्हि साकम्नकुत्रकतिकुतःकिमर्थम्, कियत्इहअत्रतत्रसर्वत्रअन्यत्रकुत्रएकत्रसदाअ न्यथाएकथा A) Identify अव्ययानि B) Explain the meaning with reference to the context C) Construct the sentences using अव्ययानि	I A II B III C	5	No	Yes (1 que of 5 marks)	No
5.	कारकप्रकरणस्तथावाच्यप्रयोगः- कर्तृकारकम्, कर्मकारकम्, करणकारकम्, सम्प्रदानकारकम्, अपादानकारकम्, अधिकरणकारकम्, सम्बन्धः, उपपदविभक्तिः A) Discriminate the विभक्तिand their meaning. B) Identify the karakas from Ayurveda texts likeकरणम्कारणम् C) Construct sentences D) Translate sentences from English to	I A II B III C, D	15	5	Yes (1 que of 5 marks)	Yes (1 que of 5 marks)

	Sanskrit & from Sanskrit to English.					
6.	सन्धिः 6.1 -अच्सन्धिः/स्वरसन्धिः - यणसन्धि- इकोयणचि, गुणसन्धिः=आद्गुणः वृद्धिसन्धिः वृद्धिरेचि,अयवायावसन्धिः एचोऽयवायवः/वान्तोयि प्रत्यये,लोपसन्धिः-लोपः शाकल्यस्य, पररूपसन्धिः-एङिपररूपम्, पूर्वरूपसन्धि-एङःपदान्तादति, प्रकृतीभाव- सर्वत्रविभाषागोः,प्लुतप्रगृह्यअचिनित्यम्। 6.2 -हल्सन्धिः/व्यञ्जनसन्धिः - श्रुत्वसन्धि -: स्तोःश्रुनाश्रुः,ष्टुत्वसन्धि -ःष्टुनाष्टुः, जश्त्वसन्धिः-झलांजशो/न्ते, अनुनासिकसन्धिः- यरोऽनुनासिकेऽनुनासिकोवा/प्रत्ययेभाषायांनि त्यम्, परसवर्णसन्धिः-तोर्लिः/वापदान्तस्य, चर्त्वसन्धिः खरिच, पूर्वसवर्णसन्धिः-झयोऽहोऽन्यतरस्याम्, छुत्वसन्धिः शश्छोऽटि /छत्वममीतिवाच्यम्, अनुस्वारसन्धि -ःमोऽनुस्वारः, तुगागमसन्धिः- शितुक्/छेच/पदान्ताद्वा, रुत्वआदेशसन्धिः- नश्छव्यप्रशान् 6.3 -विसर्गसन्धिः - रुत्वसन्धिः-ससजुषोरुः, उत्वसन्धिः-अतोरोरप्लुदादप्लुते/हशिच,रोरि, भोभागोअघोअपूर्वस्ययोऽशि, रोऽसुपि, एतत्तदोःसुलोपोऽकोरनञ्समासेहलि, सोऽच्चिलोपेचेत्पादपूरणम् 6.4.-रुत्वप्रकरणसन्धिः- [सङ्क्षिप्यपाठनम् – feirB teaching] समःसुटि,कानाम्नेडितेच, अत्रानुनासिकोपूर्वस्यतुवा,अनुनासिकात्परोऽनु स्वारः, खरवसानयोर्विसर्जनीयः, विसर्जनीयस्यसः,सम्पुङ्कानांसोवक्तव्यः	II	15 (6.1- 5marks 6.2/6.4- 5marks 6.3 – 5marks)	No	Yes (1 que of 5 marks)	Yes 10 (1 Que. of 10 marks)
7.	समास 7.1 -अव्ययीभावसमासः - 7.1.1 - अव्ययम्विभक्तिसमीपसमृद्धिव्यर्थार्थाभावात्य यसम्प्रतिशब्दप्रादुर्भावापश्चाद्यथानुपूर्व्ययौग पद्यसादृश्यसम्पत्तिसाकल्यान्तवचनेषु 7.1.2. - प्रथमानिर्दिष्टम्उपसर्जनम्,उपसर्जनपूर्वम्/ता व्ययीभावादतो/स्त्वपञ्चम्याः/तृतीयासप्तम्योर्ब हुलम्/अव्ययीभावेचाकाले	II	15 (7.1.1 &7.1.2 -- 5marks 7.1.3 – 5marks	No	Yes (1 que of 5 marks)	Yes 10 (1 Que. of 10 marks)

	7.2. -तत्पुरुषसमासः - द्वितीयाश्रितातीतपतितगतात्यस्तप्राप्तापन्नैः, तृतीयातत्कृतार्थेनगुणवचनेन, कर्तृकरणेकृताबहुलम्, चतुर्थीतदर्थार्थबलिहितसुखरक्षितैः, पञ्चमीभये न, षष्ठी, सप्तमीशौण्डै ,: विशेषणंविशेष्येणबहुलम् , उपमानानिसामान्यवचनैः, नञ् , कर्मधारय ,द्विगुः उपपदतत्पुरुष 7.3 -बहुव्रीहिसमास - :अनेकमन्यपदार्थे 7.4 -द्वन्त्वसमास - :चार्थेद्वन्द्वः		7.14 & 7.15 – 5marks)			
8.	शब्दरूपाणि 8.1 –पुल्लिङ्गशब्दरूपाणि अकारान्तः - वात, वैद्य, रुग्ण, रामआदि इकारान्तः - अग्नि, मुनिआदि उकारान्तः - ऋतु, भानुगुरुआदि ऋकारान्त :- नृ, धातृ, पितृआदि ओकारान्तः - गोआदि नकारान्त- श्वेश्मन्, रोगिन्, ज्ञानिन्आदि सकारान्त – चन्द्रमस्आदि तकारान्त – मरुत्आदि दकारान्त – सुहृद्आदि जकारान्त- भिषज्, आदि शकारान्तः - कीदृश्, एतादृश्आदि 8.2 –स्त्रीलिङ्गशब्दरूपाणि आकारान्त :- बला, कला, स्थिरा, मालाआदि इकारान्तः - सम्प्राप्ति, प्रकृति, मतिआदि ईकारान्तः - धमनी, नदीआदि उकारान्तः - रज्जु, धेनुआदि ऊकारान्तः - वर्षाभू, वधूआदि ऋकारान्त :- मातृआदि चकारान्तः - वाच्आदि तकारान्तः - योषित्, सरित्आदि दकारान्तः – परिषद्आदि जकारान्तः - स्रज्आदि सकारान्तः - जलौकस्, सुमनस्आदि षकारान्तः – प्रावृष्आदि 8.3 –नपुंसकलिङ्गशब्दरूपाणि अकारान्तः - पित्त, वनआदि	I	10	No	Yes (1 que of 5 marks)	Yes (1 que of 5 marks)

	उकारान्तः - अश्रु, मधुआदि इकारान्तः - अक्षि, अस्थि, वारि, दधिआदि ऋकारान्तः - ज्ञातृ, धातृआदि नकारान्तः- वर्त्मन्, दण्डिन्आदि सकारान्तः- स्रोतस्, मनस्आदि षकारान्तः - सर्पिष्, आयुष्आदि तकारान्तः- शकृत्, जगत्आदि 8.4- सर्वनामपदानि – अस्मद्, युष्मद्, तद्, एतद्, यद्, किम्, इदम्आदि					
9.	धातुरुपाणि- 9.1 -परस्मैपदि - लट्/लृट्/लङ्/विधिलिङ्/लोट् भ्वादिगण - भूसत्तायाम्, क्षिक्षये, गमू)गम् (गतौ, पापाने, जीव्, पच्, त्यज्, दृश्(पश्य) अदादिगण -अद्भक्षणे, हन्हिम्सागत्योः, वागतिगन्धनयोःपारक्षणे ,अस्,श्वस्स्वप ,र्ब्रू , जुहोत्यादिगण-धाधारणपोषणयोः, पृ - पलनपूरणयोः, हात्यागे ,दा (दाज्) दिवादिगण-दिवुक्रीडादौ, त्रसीउद्वेगे, पुष्पुष्टौ,कुप्, नश्, तुष्, स्निह्,जृ स्वादिगण-चिञ्चयने,शक्श्चु , तुदादिगण-तुद्वयथने,कृष्विलेखने ,लिखलेखने , दिश्, कृन्त्, क्षिप्,स्पृश् रुधादिगण-रुधिर्आवरणे, भिदिर्विदारणे , भुज् तनादिगण-तनुविस्तारे, कृञ्करणे क्र्यादिगण-प्रीज्- तर्पणेकान्तेच, ग्रहउपादानेज्ञा चुरादिगण-गणसंस्थाने,साध्, ताड्, धृ, कथ्वाक्यप्रबन्धे आत्मनेपदि - भ्वादिगण - वृतुवर्त्तने ,वृध्(वर्ध्), लभ्, सेव्,रुच् अदादिगण -शीङ्स्वप्रेब्रू , जुहोत्यादिगण-धाधारणपोषणयो ,:दा(दाज्), दिवादिगण-जनीप्रादुर्भाव ,मन्, बुध्, पद्,विद् स्वादिगण-चिञ्चयने, तुदादिगण-तुद्वयथने,कृष्विलेखने ,मि, विद्, मुच्, सिञ्च्, रुधादिगण-रुधिर्आवरणे, भिदिर्विदारणे , भुज् तनादिगण-तनुविस्तारे, कृञ्करणे क्र्यादिगण-प्रीज्- तर्पणेकान्तेच, ग्रहउपादाने ,	I	10	No	Yes (1 que of 5 marks)	Yes (1 que of 5 marks)

	ज्ञा चुरादिगण-चुर्, क्षाल्, कथ्, घोष्, भक्ष् आयुर्वेदसंहितासुविद्यमानानांधतुरूपाणांपरिचयीकरणम् अभिकाम्यम् 9.2 - लृङ्ग, आशीर्लिङ्ग, लिट्, लुङ्ग, लुङ् [सङ्क्षिप्यपाठनम्-feirB teaching] भ्वादिगण, अदादिगण, जुहोत्यादिगण, दिवादिगण, स्वादिगण, तुदादिगण, रुधादिगण, तनादिगण, क्र्यादिगण, चुरादिगण पूर्वोक्तधातुष्वेकस्यपञ्चलकारेषुरूपाणिदर्शयेत् परंपरीक्षायाम्प्रपृष्टव्यानि					
10	प्रत्ययाः 10.1 - क्त - क्तवत्, तव्यत् - अनीयर्, शतृ - शानच्, ल्युट् - ण्वुल्, क्त्वा - ल्यप्, णिनि, : क्तिन्, तुमुन् प्रत्ययाणाम्प्रयोगाः एवपृष्टव्याः 10.2 - भावेघञ्, करणेघञ्, भावेष्मञ्, कर्मणिष्मञ्, कर्त्तरिअच्, अच् आयुर्वेदसंहितायांविद्यमानानांभावे/करणे/कर्त्तरि/ताच्छ्रील्ये/आदिप्रत्ययानांपरिचयः करणीयः परंपरीक्षायाम्प्रपृष्टव्याः परीक्षायाम्वाच्यप्रयोगः स्वरूपेपृष्टव्यः	I	10	3	Yes (2 Que of 1 mark)	Yes (1 que of 5 marks)
11	विशेषणविशेष्य	II	05	2	Yes (3 Que of 1 mark)	No

	Paper II Sanskrit and Ayurved Itihas			D Type of Questions “Yes” can be asked. “No” should not be asked.		
	Part A Sanskrit List of Topics	B Term	C Mar ks	MC Q (1 Mar k)	SAQ (5 Marks)	LAQ (10 Marks)
1	निरुक्तितथापर्यायपदानि- A) आयुः, शरीर, मनः, अग्निः, जलम्, वातः, पित्तम्, कफः B) रस, रक्त, मांस, मेद, अस्थि, मज्जा, शुक्र, इन्द्रियम्, रसना, चक्षुः, श्रोत्र, घ्राण (C) धी, धृति, स्मृति, मति, बुद्धी, प्रज्ञा, मूत्र, पुरीषः, स्वेद, आत्मा, रोगः, निदानम्,	A - I B - II C - III	15	No	Yes (2 que of 5 marks)	Yes (1 que of 5 marks)

	रोगि ,:भेषजचिकित्सा ,आदि					
2	परिभाषापदानि – A) आयुर्वेदः, पञ्चमहाभूतानि, त्रिगुणम्,दोषा,;मला:,दूष्यम्, सम्सर्गः, सन्निपातः B) द्रव्य,गुण ,कर्म ,सामान्य, विशेष, गुरु, लघु,प्रकृतिः, विकृतिः,चयः,प्रकोपः, प्रसरः,स्थानसम्श्रयः,दोषगतिःभेदः, रसः,वीर्यम्, विपाकः,कार्यकारणभावः C)स्रोतस्, कोष्ठः, आमम्,विरुद्धाह्नम्, विरुद्धाहारः,विदाहि,विष्टम्भि, सात्म्यम्, ओकसात्म्यम्,देशसात्म्यम्, अत्यशनम्,अध्यशनम्, स्थानी, योगवाही, पथ्यम्,अपथ्यम्,कृतान्नवर्गः,अवस्थापाकः,वेग : ,शोधन,शमन ,लंघन ,बृहण,अनुपानआदि	A -I B– II C- III	20	No	Yes (2 que of 5 marks)	Yes (1 Que. of 10 marks)
3.	अन्वयलेखनम् - A) अष्टाङ्गहृदयम्सूत्रस्थानम् –अध्यायत : सर्वाणिसूत्राणि १.आयुष्कामीयम् २.दिनचर्या ३.रोगानुत्पादनीयम् B) अष्टाङ्गहृदयम्सूत्रस्थानम् –अध्यायत : सर्वाणिसूत्राणि दोषादिविज्ञानीयम् दोषभेदीयम् दोषोपक्रमणीयम् द्विविधोपक्रमणीयम् C) वैद्यकीयसुभाषितसाहित्यम्– shloka numbers - प्रथमः 1, 2 द्वितीयः 1, 7 तृतीयः 9 चतुर्थः 2, 3 पञ्चमः 2, 3 षष्ठः 1, 4, 7 सप्तमः 2, 5, 17 अष्टमः 13, 12 नवमः 12, 13 दशमः 1, 19 एकादशः 1, 2 द्वादशः 1, 6 त्रयोदशः 1, 7, 8, 9 चतुर्दशः 2, 3, 4	A- I B - II C - III	30 (A B C 10 mar ks each)	No	Yes (3 que of 5 marks)	Yes (1 Que. of 10 marks and 1 Que of 5 marks as part A of Que. 3)

	पञ्चदश: 7, 10 षोडश: 5, 6 सप्तदश: 1, 4 अष्टादश: 1, 2, 3 एकोनविंशति: 2, 3, 4 विंशति: , 12, 3, 4					
4.	पञ्चतन्त्र-अपरीक्षितकारकम् ५ अध्याय	III	15	No	Yes (1 que of 5 marks)	Yes (1 que of 10 marks)
	Part B Ayurved Itihas					
	All Topics			Yes	No	No

6 G- Question paper blue print
Paper I – Sanskrit

A Question Sr. No	B Type of Question	C Question Paper Format
Q1	Multiple choice Questions (MCQ) 20 Questions 1 mark each All compulsory Must know part 15 MCQ, Desirable to know 3 MCQ. Nice to Know 2 MCQ	1. Topic number 1 2. Topic number 1 3. Topic number 1 4. Topic number 1 5. Topic number 1 6. Topic number 2 7. Topic number 2 8. Topic number 2 9. Topic number 2 10. Topic number 2 11. Topic number 5 12. Topic number 5 13. Topic number 5 14. Topic number 5 15. Topic number 5 16. Topic number 10 17. Topic number 10 18. Topic number 10 19. Topic number 11 20. Topic number 11
Q2	Short answer Questions (SAQ) 8 questions 5 marks for each que. All compulsory	Q1 Topic 6 अधोदत्तानांपदानांसन्धिच्छित्वावायोजयित्वालिखत (5 Quex 1 marks each) Q2 Topic 7 अधोदत्तानांपदानांविग्रहवाक्यंसमस्तपदंवालिखत5 Quex 1 mark each

	Must know part 7 questions, 1 question on Desirable to know. No Questions on Nice to know.	Q3 Topic 4 - अधोदत्तैः अव्ययपदैः रिक्तस्थानम् पूरयत 5 Quex 1 mark each Q4 Topic 8 - शब्दरूपाणि लिखत (5 Quex 1 mark each) Q5 Topic 3-उपसर्गाः (स्व)वाक्येषु योजयत 5 Quex 1 mark each Q6 Topic 10 and 11- (स्व)वाक्येषु योजयत – 5 Quex 1 mark each Q7 Topic 9 - धातुरूपाणि लिखत 5 Quex 1 mark each Q8 Topic 5, 6 – अधोदत्तेः श्लोके रेखाङ्गितानां पदानां कारकसंबन्धं विशदीकृत्वा/ निश्चयीकृत्वा तदनुसृत्य पदानां अर्थं लिखतु (shlokas should be taken from the syllabus.) 5 Que x 1 mark each
Q3	Long answer Questions (LAQ) All compulsory 4 questions 10 marks for each que. All questions on must know. No Questions on Nice to know and Desirable to know.	Q1 Topic 8, 5 – उचितं शब्दरूपं विलिख्य वाक्ये योजयत 5 Que. X 2 mark Q2 Topic 7 - अधोदत्तेषु श्लोके रेखाङ्गितानां समस्तपदानां विग्रहवाक्यं समस्तपदम् वासमासनाम्ना सह लिखत (Underline 5 Samast padas or give 5 Vighraha vakyas from a 5 to 7 line passage or 2 to 3 shlokas from the syllabus.) 5 Que. X 2 marks Q3 Topic 6 - अधोदत्तेः परिच्छेदे रेखाङ्गितानां सन्धिद्वित्वावायोजयित्वा सन्धि सूत्रम् च लिखत (Underline 5 Sandhi padas or Sandhi Vighrahas from a 5 to 7 line passage or 2 to 3 shlokas from the syllabus.) 5 Que. X 2 marks Q4 Topic 5, 9, 10 – अ) अधोदत्तस्य धातोः त्वय्युत्तुमुत्त्युक्तवत् शतृ/शानच् प्रत्ययरूपाणि लिखत 5 Que. X 1 marks आ) वाच्यप्रयोगः 5 Que. X 1 marks (Sentences should be taken from syllabus Panchatantra.)

Paper II – Sanskritam evam Ayurveda itihasa		
A Question Sr. No	B Type of Question	C Question Paper Format
Q1	Multiple choice Questions	All Questions From Ayurved Itihas . Paper II Part B 1. Topic number 1/2 2. Topic number 3/4

	(MCQ) Ayurved Itihas 20 Questions 1 mark each All compulsory Must know part 15 MCQ, Desirable to know 3 MCQ, Nice to Know 2 MCQ	3. Topic number 5/6 /7 /8 4. Topic number 9/ 10 5. Topic number 1/2 6. Topic number 3/4 7. Topic number 5/6 /7 /8 8. Topic number 9/ 10 9. Topic number 1/2 10. Topic number 3/4 11. Topic number 5/6 /7 /8 12. Topic number 9/ 10 13. Topic number 1/2 14. Topic number 3/4 15. Topic number 5/6 /7 /8 16. Topic number 9/ 10 17. Topic number 1/2 18. Topic number 3/4 19. Topic number 5/6 /7 /8 20. Topic number 9/ 10
Q2	Short answer Questions (SAQ) Sanskrit All compulsory 8 questions 5 marks for each que. Must know part 7 questions, 1 question on Desirable to know. No Questions on Nice to know.	1. Topic number 3 अधोदत्तस्यश्लोकस्यपदच्छेदंलिखित्वारेखाङ्गितानांपदानांशब्दरूपाणिधातुरुपाणिवालिखत 2. Topic number 3 अधोदत्तस्यश्लोकस्यअन्वयम्अर्थम्चलिखत 3. Topic number 2/3 अधोदत्तस्यश्लोकस्यअन्वयम्अर्थम्चलिखत 4. Topic number 3/ 4 प्रयोगविपरिणमयत 5 Quex 1 mark each 5. Topic number 2 अधोदत्तानाम्तिप्पणिलिखत 6. Topic number 1 शब्दस्यनिरुक्तिं तथापर्यायवचनानिचलिखत 7. Topic number 3/4 संस्कृतभाषायांअनुवदत 8. Topic number 3/4 मातृभाषायांअनुवदत
Q3	Long answer Questions (LAQ) Sanskrit All compulsory 4 questions 10 marks for	1. Topic 4 अधोदत्तकथायाः साराम्शंसंस्कृतभाषायाम्लिखत or Comprehension. 2. Topic 2 अधोदत्तानाम्तिप्पणिलिखत 2x5 (5 marks for each) 3. Topic 1, 3 A) प्रश्नानाम्पूर्णवाक्येनउत्तराणिलिखत 5 Que.X 1 Mark for each B) निरुक्तिं तथापर्यायवचनानिचलिखत 5 Que. X 1 mark for each 4. Topic 3 अधोदत्तस्यश्लोकस्यपदच्छेदंविग्रहवाक्यम्अन्वयः वाक्यार्थशास्त्रार्थंचलिखत

	each que. All questions on must know. No Questions on Nice to know and Desirable to know.	5 Que. X 2 marks

H - Distribution of Practical Exam

Practical 100 Marks – (Viva 75 + Elective 10 + IA 15) Marks

SN		Heads	Marks
A	VIVA (75)		
	1	Reading (structured approach)	10
	2	Shabdarupani and Karakani	10
	3	Sandhi and Padachcheda, Dhaturupani	10
	4	Samas	5
	5	Paribhasha, Nirukti	5
	6	Anvay	10
	7	Constructing sentences and conversation	10
	8	Compilation/ Record writing [Compilation/ Record writing book should contain 1. Anvay 2. Padachcheda 3. Samas 4. Shabdarupani 5. Dhaturupani 6. Bhavarth Of the 40 shlokas from Sanskrit Paper 2 topic numbers 3 A and B Ashtanga Hridayam and ten verses from Charak Samhita Sutrasthan 5 and 6 from Samhita Adhyayan - 1 subject.]	10
	9	Communication Skill	5
B	Internal Assessment (15)		15
C	Electives (10)		10
		Total Marks	100

7. References/ Resources

Sanskrit

Books

1. संस्कृतपाठ्यपुस्तकम्प्रथमः तथाद्वितीयभागः- Sanskrit for Ayurveda part- I and Part –II Published by CCIM New Delhi
2. आयुर्वेदस्यभाषा-पञ्चभागाः- Ayurvedasya bhaSha part I to part –V samskrita samvardhana prathisthan mumbai
3. लघुसिद्धान्तकौमुदिः - वरदराज - Laghusiddhantakaumudi of bhattojidikshita
4. सिद्धान्तकौमुदि – भट्टोजिदीक्षितः siddhantakaumudi
5. वैद्यकीयसुभाषितसाहित्यम् - Vaidyakiyasubhashitasahityam, भास्करगोविन्दघाणेकर, चौखम्बाप्रकाशन
6. पन्तन्त्रम्अपरीक्षितकारकम् - Pancatantra aparikshitakararakam 1 to 5 stories
7. शब्दकल्पद्रुमः - Sabdakalpadruma:
8. वाचस्पत्यम्- Vachaspatyam
9. अमरकोशः- Amarakosha
10. सिद्धारूपम् - Siddharupam
11. धातुपाठः- Dhatupatha
12. Sanskrit to English and English to Sanskrit Dictionary – Monier Williams
13. Sanskrit to Hindi and Hindi to Sanskrit Dictionary – Va. Shi. Apte
14. Sanskrit to Regional/ Desirable language dictionaries.
15. Ayurvediya Shabdakosha
16. Encyclopedic dictionary of Ayurveda – Dr. Kanjiv Lochan, Dr. P.S. Byadgi (Chaukhambha Publications)

Online Recourses:-

- Crossword Online
<https://crosswordlabs.com/>
- Readymade Sanskrit Puzzles
<http://webapps.samskrutam.com/tools/CrosswordPuzzle.aspx>
- Learning Sanskrit - Pronunciation 1
<https://www.sanskrit-trikashaivism.com/en/learning-sanskrit-pronunciation-1-1/456>
- Pronunciation of all Sanskrit letters.....
sanskritdocuments.org
http://sanskritdocuments.org/learning_tools/sarvanisutrani/allsutrani.htm
[sanskrit.jnu.ac.in](http://www.taralabalu.org/panini/greetings.htm)
<http://www.taralabalu.org/panini/greetings.htm>
- Vyakarana –
<https://sites.google.com/site/sanskritavyakaranam/>
- कोशाः / Dictionaries -
- Cologne Digital Sanskrit Lexicon:
<https://www.sanskritlibrary.org/cologne.html>
<https://www.sanskritdictionary.com/>
www.monierwilliams.com
- Sanskrit Computational tools Samsadhani-
<https://sanskrit.uohyd.ac.in/scl/>
- Learning
<https://www.learn Sanskrit.cc/>
- The Sanskrit Heritage Site
<https://sanskrit.inria.fr/>
- Sanskrit Dictionary for Spoken Sanskrit
www.learn Sanskrit.cc
https://spokensanskrit.org/index.php?mode=3&direct=es&script=hk&tran_input=name

संस्कृत ई-पाठशाला

- <http://ggss-lessons.org>
- बङ्गलूरुस्थाश्रीमतीसौम्याकृष्णपुरसिद्धान्तकौमुदीपाठयति।व्यतीतपाठानाम्अध्यापनानिअपिध्वनिमुद्रणरूपेणप्राप्तुंशक्यन्ते।
- <http://www.vyomalabs.in>

Ayurved Itihas

Reference book

1. Upodghata of Kashyapasamhita (Paragraph of acceptance of Indian medicine) Rajguru Hem Raj Sharma
2. Upodghata of Rasa Yogasagar Vaidya Hariprapanna Sharma
3. Ayurveda Ka Itihas KaviraSuram Chand
4. Ayurveda Sutra Rajvaidya Ram Prasad Sharma
5. History of Indian Medicine (1-3 part) Dr. GirindrNath Mukhopadhyaya
6. A Short history of Aryan Medical Science Bhagwat Singh
7. History of Indian Medicine J. Jolly
8. Hindu Medicine Zimer
9. Classical Doctrine of Indian Medicine Filiyosa
10. Indian Medicine in the classical age AcharyaPriyavrata Sharma
11. Indian Medicine (Osteology) Dr. Harnley
12. Ancient Indian Medicine Dr. P. Kutumbia
13. Madhava Nidana and its Chief Commentaries (Chapters highlighting history) Dr. G.J. Mulenbelt
14. Ayurveda Ka BrihatItihasa Vaidya Atridev Vidyalkara
15. Ayurveda Ka VaigyanikaItihasa Acharya Priyavrata Sharma
16. Ayurveda Ka PramanikaItihasa Prof. Bhagwat Ram Gupta
17. History of Medicine in India Acharya Priyavrata Sharma
18. Vedome Ayurveda Vaidya Ram GopalS hatri
19. Vedomein Ayurveda Dr. Kapil Dev Dwivedi
20. Science and Philosophy of Indian Medicine Dr. K.N. Udupa
21. History of Indian Medicine from Pre-Mauryan to Kushana Period Dr. Jyotirmitra
22. An Appraisal of Ayurvedic Material in Buddhist literature Dr. Jyotirmitra
23. Mahayana Granthon mein nihita Ayurvediya Samagri Dr. RavindraNathTripathi
24. Jain Ayurveda Sahitya Ka Itihasa Dr. Rajendra Prakash Bhatnagar
25. Ayurveda- Prabhashaka Jainacharya Acharya Raj Kumar Jain
26. CharakaChintana Acharya Priyavrata Sharma
27. Vagbhata Vivechana Acharya Priyavrata Sharma
28. Atharvaveda and Ayurveda Dr. Karambelkara
29. Ayurvedic Medicine Past and Present Pt. Shiv Sharma
30. Ancient Scientist Dr. O.P. Jaggi
31. Luminaries of Indian Medicine Dr. K.R. Shrikanta Murthy
32. Ayurveda Ke Itihasa Ka Parichaya Dr. RaviduttaTripathi
33. Ayurveda Ke Pranacharya Ratnakara Shastri
34. Ayurveda Itihasa Parichaya Prof. Banwari Lal Gaur

PADARTHA VIJNANAM

Table: Contents of Course

Sr	A2 List of Topics	B2	C2	D2	E2

No	Paper I	Term	Marks	Lecture hours	Non-Lecture hours
1	Ayurveda Nirupana 1.1 Lakshana of Ayu, composition of Ayu. 1.2 Lakshana of Ayurveda. Swaroopa and Prayojana of Ayurveda 1.3 Lakshana and classification of Siddhanta. 1.4 Introduction to Basic Principles of Ayurveda and their significance.	I	25	5	6
2	Padartha and Darshana Nirupana 2.1 Padartha Lakshana, Enumeration and classification of Padartha, Bhava and Abhava Padartha, Padartha according to Acharya Charaka (Karana-Padartha). 2.2 Etymological derivation of the word “Darshana”. Classification and general introduction to 9 Schools of Indian Philosophy with an emphasis on: Nyaya, Vaisheshika, Sankhya, Yoga, Meemamsa and Vedanta darshana. 2.3 Ayurveda as unique and independent school of thought (philosophical individuality of Ayurveda). 2.4 Principles and examples in contemporary sciences which will enhance understanding concept of Padartha. 2.5 Relevance of Study of Darshana and Padartha Vignana in Ayurveda	I		10	14
3.	Dravya vijnaneeyam 3.1 Dravya: Lakshana, Classification and Enumeration 3.2 Panchabhuta: Various theories regarding the creation (theories of Taittiriyaopanishad, Nyaya-Vaisheshika, Sankhya-Yoga, Sankaracharya, Charaka and Sushruta), Lakshana and qualities of each Mahabhoota. 3.3 Kala: Etymological derivation, Lakshana, division / units and significance. 3.4 Dik: Lakshana, division and significance. 3.5 Atma: Lakshana, classification, seat, Gunas, Linga according to Charaka, the method / process of knowledge formation (atmanah jnasya pravrittih). 3.6 Purusha: According to Ayurveda - Ativahikapurusha/ Sukshmasharira/ Rashipurusha/ Chikitsapurusha/ Karmapurusha/ Shaddhatvatmakapurusha. 3.7 Manas: Lakshana, Synonyms, Qualities, Objects, Functions, dual nature of mind (ubhayaatmakatvam), as a substratum of diseases, Influence of Panchabhoutika aahara and aushadha (penta-elemental diet) on manas.	II	48	14	20

	3.8 Role of Panchamahabhuta and Triguna in Dehaprakriti and Manasaprakriti respectively. 3.9 Tamas as the tenth Dravya. 3.10 Practical study/Application and Importance of each Kaarana dravya in Ayurveda. 3.11 Principles and examples in contemporary sciences which will enhance understanding concept of Kaarana dravya.				
4.	Guna vijnaneeyam 4.1 Etymological Derivation, Classification and Enumeration according to various Darshana and Charaka, 4.2 Lakshana and Classification of Sartha Guna, Gurvadiguna, Paradiguna, Adhyatmaguna (41 Guna) 4.3 Gunapradhanyata (Importance of Guna) 4.4 Practical / clinical application of each Guna in Ayurveda 4.5 Principles and examples in contemporary sciences which will enhance understanding concept of Guna.	II		4	6
5.	Karma vijnaneeyam 5.1 – Introduction of concept of Karma According to Darshanaand Ayurveda – Classification of Karma 5.3 - Practical application of karma 5.4 - Principles and examples in contemporary sciences which will enhance understanding concept	II		2	4
6.	Samanya vijnaneeyam 6.1 – Introduction of concept of Saamaanya According to Darshana and Ayurveda. – Classification of Saamaanya 6.3 - Practical application of saamaanya 6.4 - Principle and examples in contemporary sciences which will enhance understanding theconcept of Saamanya.	III		3	6
7.	Vishesha vijnaneeyam 7.1 – Introduction of concept of Vishesha according to Darshana and Ayurveda 7.2 - Classification of Vishesha 7.3 - Practical Application of vishesha 7.4- Principles and examples in contemporary sciences which will enhance understanding the concept of Vishesha	III	27	3	6
8.	Samavaya vijnaneeyam 8.1 – Introduction of concept of Samavaaya According toDarshana and Ayurveda. 8.2 – Practical application of Samavaaya 8.3- Principles and examples in contemporary sciences which will enhanceunderstanding theconcept of Samavaya	III		2	4

9	Abhava vijñaneeyam 9.1 – Introduction of concept of Abhaava According to Darshana and Ayurveda. 9.2 – Classification of Abhaava. 9.3 – Practical application of Abhaava 9.4- Principles and examples in contemporary sciences which will enhance understanding the concept of Abhava.	III		2	4

Paper II					
	A2 List of Topics	B2 Term	C2 Marks	D2 Lecture hours	E2 Non-Lecture hours
1	Pariksha 1.1.Definition, Significance, Necessity and Use of Pariksha. 1.2.Definition of Prama, Aprama, Prameya, Pramata, Pramana. 1.3.Significance and importance of Pramana, Enumeration of Pramana according to different schools of Philosophy. 1.4.Four types of methods for examination in Ayurveda (Chaturvidha-Parikshavidhi), Pramana in Ayurveda. 1.5.Subsutation of different Pramanas under three Pariksha. 1.6.Practical application of methods of examination (Parikshavidhi) in Nidan and Chikitsa.	I	26	6	12
2	2. Aptopadesha Pariksha/Pramana 2.1.Lakshana of Aptopadesha, Lakshana of Apta. 2.2.Lakshana of Shabda, and its types. 2.3.Shabdavritti-Abhidha, Lakshana, Vyanjana and Tatparyakhya.ShaktigrahaHetu. 2.4.Vaakya: Characteristics, Vaakyarthajnanahetu-Aakanksha, Yogyata, Sannidhi. 2.5.Importance of Aptopadesha in maintaining Health, Prevention of Diseases, Diagnostics, Therapeutics and Research.	I		6	10
3.	3. Pratyaksha Pariksha/Pramana 3.1.Lakshana of Pratyaksha, types of Pratyaksha-Nirvikalpaka- Savikalpaka with description, description of Laukika and Alaukika types and their further classification. 3.2.Indriya-prapyakaritvam, six types of Sannikarsha. 3.3.Indriyanam lakshanam, classification and enumeration of Indriya. Description of Panchapanchaka, Penta-elemental nature of	II	42	8	14

	Indriya (<i>Panchabhautikatwa</i> of Indriya) and similarity in sources (<i>Tulyayonitva</i>) of Indriya. 3.4. Trayodasha Karana, dominance of Antahkarana. 3.5. Hindrances in direct perception (<i>pratyaksha-anupalabdihikaarana</i>), enhancement of direct perception (Pratyaksha) by various instruments/ equipments, necessity of other Pramanas in addition to Pratyaksha. 3.6. Practical study/ application of Pratyaksha in Sharir, Nidan (Diagnosis), Chikitsa (Treatment) and Anusandhan (Research).				
4.	4. Anumanapariksha/Pramana 4.1. Lakshana of Anumana. Introduction of Anumiti, Paramarsha, Vyapti, Hetu, Sadhya, Paksha, Drishtanta. Types of Anumana mentioned by Charaka and Nyayadarshana. 4.2. Characteristics and types of Vyapti. 4.3. Lakshana and types of Hetu, Description of Ahetu and Hetwabhasa. 4.4. Characteristics and significance of Tarka (logic). 4.5. Practical study/ application of Anumanapramana in Sharir, Nidan, Chikitsa and Anusandhan.	II		10	15
5.	5. Yuktipariksha/Pramana 5.1. Lakshana and description. 5.2. Importance in Ayurveda. 5.3. Practical study and utility in diagnostics, therapeutics and research.	III		2	2
6.	6. UpamanaPramana 6.1. Lakshana. 6.2. Application in Sharir, diagnostics, therapeutics and research.	III		2	4
7.	Karya- Karana Siddhanta 7.1. Lakshana of Karya and Kaarana. Types of Kaarana. 7.2. Significance of Karya and Kaarana in Ayurveda. 7.3. Different opinions regarding the manifestation of Karya from Kaarana: Satkaryavada, Parinamavada, Vivartavada, Asatkaryavada, Arambhavada, Paramanuvada, Kshanabhanguravada, Pilupaka, Pitharpaka, Anekantavada, Swabhavavada, Swabhavoparamavada. Importance/ Utility of each of these in Ayurveda 7.4 Study of cause effect relationship, causality, causation in Contemporary sciences.	III	32	11	13

Table: Learning objectives (Theory) of Course

Paper I									
A3 Course outcome	B3 Learning Objective (At the end of the session the students should be able to)	C3 Domain	D3 Must to know/desire to know/Nice to know	E3 Level Does/ Shows how/Shows/ Knows how/ Knows	F3 T-L method	G3 Assessment	H3 Formative /summative	I3 Term	J3 Integration
Topic 1- Ayurveda Nirupana Time (Lecture: - _5 hours Non lecture 6 hours)									
CO1	Describe the Nirukti (etymology) and Definition of Ayu	Cognitive/ Recall	Must Know	Knows	Lecture Group discussion	Written and Viva	F and S	I	
CO1	Describe the components of Ayu	Cognitive/ Recall	Must Know	Knows	Lecture Group Discussion Enquiry Based learning	Written and Viva	F and S	I	
CO1	Explain Synonyms of Ayu with their meaning and importance	Cognitive Recall	Must Know	Knows	Lecture Group Discussion	Written and Viva	F and S	I	
CO1	Distinguish between 4 types Ayu namely Sukhayu, Dukhayu, Hitayu, Ahitayu	Cognitive Comprehension	Must Know	Knows	Lecture Group Discussion/ Problem Based Learning	Written and Viva, Quiz	F and S	I	
CO1	Realises that the balance between hitayu and Sukhayu will offer	Affective	Must know	Knows	Group Discussion/ Debate	viva	F	I	

	better living								
CO1	Describe Lakshana of Ayurveda and Enlist Synonyms of Ayurveda	Cognitive Recall	Must Know	Knows	Lecture Group Discussion	Written and Viva	F and S	I	
CO1	Explain different Swarupa of Ayurveda and Discuss Ayurveda Prayojana	Cognitive Comprehension	Must Know	Knows	Lecture Group Discussion/Problem Based Learning	Written and Viva Open Book Test	F and S	I	
CO1	Explain Trisutra of Ayurveda and discuss Nityatva (eternity) of Ayurveda	Cognitive Comprehension	Must Know	Knows	Lecture Group Discussion/Debate	Written and Viva	F and S	I	
CO1, CO 2	Define Siddhanta	Cognitive Recall	Must Know	Knows	Lecture Presentation Discussion	Written and Viva	F and S	I	
CO1, CO 2	Distinguish the types of Siddhanta	Cognitive Comprehension	Must Know	Knows	Lecture Group Discussion/Enquiry Based Learning	Written and Viva, Puzzle	F and S	I	
CO1, CO 2	Elaborate the Basic Principles of Ayurveda like Lokapurusha Samya Siddhanta Panchamahabhoota Siddhanta Tridosha Siddhanta Samanya Vishesha Siddhanta Karya Karana Siddhant	Cognitive Comprehension	Must Know	Knows	Lecture/Group Discussion /Problem Based Learning/ Flipped Classroom	Written and Viva, quiz PBA CBA	F and S	I	
CO1, CO 2	Justify the Application of Basic Principles in	Affective	Must know	Knows	Lecture Demonstration/	Written and Viva	F and S	I	

	Ayurveda				Group Discussion				
CO1, CO 2	Recite the concern verses from Tarkasangraha and Charak Samhita	Cognitive Recall	Desirable to know	Knows	Audio clips, classroom recitation	Viva, recitation competition	F and S	I	
Topic 2- Padartha and Darshana Nirupana Time (Lecture:- _10__ hours Non lecture __14__ hours)									
CO1, CO 2	Classify padartha, differentiate bhava, abhava padartha and Appreciate Shat karana of Acharya Charaka.	Cognitive Recall	Must Know	Knows	Lecture/ Discussions PBL	Written and Viva, puzzle	F & S	I	
CO1, CO 2	Discuss similarity and dissimilarity of padartha	Cognitive Comprehension	Desirable to Know	Knows	Lecture/ Discussions/ Activity based learning	Written and Viva	F & S	I	
CO2	Explain nirukti and vyakhya (definition) of darshana	Cognitive Recall	Must Know	Knows	Lecture	Written and Viva	F & S	I	
CO2	Describe Origin of darshana and Explain Importance of darshana (prayojana)	Cognitive Comprehension	Must know	Knows how	Lecture / Group Discussion	Written and Viva, Quiz	F & S	I	
CO1, CO 2	Analyse terms viz - philosophy, metaphysics, aesthetics, epistemology, psychology in relation with darshana	Cognitive Comprehension	Nice to know	Knows	Lecture / Group Discussion/ Activity Based learning	Written and Viva	F & S	I	
CO2	Classify darshana and differentiate between asthika, nasthika, asthikanasthika darshana	Cognitive Recall	Must Know	Knows	Lecture / Enquiry Based Learning	Written and Viva	F & S	I	

CO1, CO 2	Enumerate darshana relevant for Ayurveda study and mention the pioneers of each darshana	Cognitive Recall	Must Know	Knows	Lecture/ Role play/Group Discussion	Written and Viva, Puzzle	F & S	I	
CO1, CO 2	Outline the reason for study of darshana in Ayurveda and Comprehend Philosophical foundation of Ayurveda	Cognitive Comprehension	Must Know	Knows how	Lecture/ Problem Based Learning/ Group discussion/Tutorial	Written and Viva, Open Book Test	F & S	I	
CO2	Explain meaning of nyaya and synonyms of nyayadarshana	Cognitive Recall	Must Know	Knows	Lecture Group discussion	Written and Viva	F & S	I	
CO2	Enumerate nyayoktha 16 padarthas, 12 prameyas	Cognitive Recall	Desirable to Know	Knows	Lecture /Enquiry Based Learning	Written and Viva	F & S	I	
CO2	Recall the content of nyaya sutra	Cognitive Recall	Nice to know	Knows	Lecture	Written and Viva	F & S	I	
CO2	Outline salient features of nyayadarshana viz- chaturvida pramana, pitharapaka, arambhavada.	Cognitive comprehension	Must Know	Knows	Lecture/ Group discussion / Activity Based Learning	Written and Viva , Quiz	F & S	I	
CO2	Explain meanings of vaisheshika and synonyms	Cognitive Recall	Must Know	Knows	Lecture/	Written and Viva	F & S	I	
CO2	Recall the content of vaisheshika sutra	Cognitive Recall	Nice to Know	Knows	Lecture	Written and Viva	F & S	I	
CO2	Identify salient features of vaisheshika darshana viz-shatpadartha, paramanuvada, peelupakavada	Cognitive comprehension	Must Know	Knows	Lecture group discussion/Activity based learning	Written and Viva, quiz, puzzle	F & S	I	

CO2	Explain the meaning of sankhya	Cognitive Recall	Must Know	Knows	Lecture	Written and Viva		I	
CO2	Enumerate, define and categorise 25 tatvas	Cognitive Recall	Must Know	Knows	Lecture discussion	Written and Viva puzzle	F & S	I	
CO2	Recall the trividhadukha, triguna, satkaryavada	Cognitive Recall	Must Know	Knows	Lecture/ Inquiry based learning	Written and Viva	F & S	I	
CO2	Define yoga and explain ashtangayoga	Cognitive comprehension	Must Know	Knows	Lecture Group discussion/demostration	Written and Viva, quiz	F & S	I	
CO2	Recall content of yoga sutra	Cognitive Recall	Nice to know	Knows	Lecture	Written and Viva	F & S	I	
CO2	Enumerate chittavrutti, panchaklesha, ashtasiddhi	Cognitive Recall	Must Know	Knows	Lecture Debate /Group Discussion	Written and Viva, quiz	F & S	I	
CO2	Recall different type of yoga	Cognitive Recall	Nice to know	Knows	Lecture Self-Directed learning/Activity based learning	Written and Viva, open book test	F & S	I	
CO1, CO 2	Outline the salient features of meemamsa darshana and Vedanta darshana Viz. karma siddhanta, atma, maya, vivartavada,	Cognitive comprehension	Must Know	Knows	Lecture Group Discussion/ Debate	Written and Viva, Quiz	F & S	I	
CO1, CO 2	Explain similarity between Nyaya, vaisheshika, Sankhya, yoga, meemamsa and Vedanta darshana with Ayurveda	Cognitive comprehension	Must Know	Knows how	Lecture discussion PBL/ Flip classroom	Written and Viva	F & S	I	
CO1, CO 2	Explain Charvaka, Jaina and Bouddha	Cognitive comprehension	Must Know	Knows	Lecture Group	Written and Viva	F & S	I	

	darshana and their influence in Ayurveda	on			Discussion				
CO1, CO 2	Demonstrate Ayurveda as unique and independent school of thought (philosophical individuality of Ayurveda).	Cognitive Problem solving	Must Know	Knows how	Lecture/ Group Discussions PBL	Written and Viva	F & S	I	
CO 1 CO 2	Compare the the Srishtiutpatti krama by different darshanas with contemporary theories like- Big Bang, The multiverse, brane world, the hylographic universe, Simulation theory etc	Cognitive Comprehension	Nice to Know	Knows	Lecture with Videos, Group discussion/ self learning	Puzzle, viva	F	I	
CO 1	Respect ancient philosophy and Ayurveda	Affective	Must know	Know	Discussion	Discussion Debate	F	I	
CO1, CO 2	Enumerate padartha according to different schools of thought	Cognitive Recall	Desirable to Know	Knows	Lecture Group Discussion	Written and Viva, Puzzle	F & S	I	
CO1, CO 2	Find principles and examples in contemporary sciences which will enhance understanding concept of Padartha. For ex-matter and energy.	Cognitive/ Problem solving	Nice to know	knows	Lecture/ Discussions/ Self-learning,	-	F	I	
CO1, CO 2	Analyse role of padartha in darshana and in Ayurveda and Demonstrate the role of Padarthavijnana in Ayurveda	Cognitive / Problem solving	Must Know	Knows how	Lecture/ Seminars /PBL	Written and Viva, Open Book Test	F & S	I	

CO2	Recite concern verses	Cognitive Recall	Desirable to know	knows	Edutainment Audio clips, classroom recitation	Viva, recitation competition	F&S	I	
Topic-3 Dravya vijnaneeyam Time (Lecture:- __14_ hours Non lecture _20_ hours)									
CO3	Explain Nirukti and Paribhasha (definition) of Dravya	Cognitive Recall	Must Know	Knows	Lecture	Written and Viva	F and S	II	
CO3	Classify Dravya and Differentiate between Karana and Karya dravya	Cognitive Recall	Must Know	Knows	Lecture Group Discussion/ Enquiry Based Learning	Written and Viva, Puzzle	F and S	II	
CO3	Enumerate Darvyas as per different schools of thoughts	Cognitive Recall	Must Know	Knows	Lecture Group Discussion	Written and Viva, puzzle	F and S	II	
CO3, CO1	Value Practical application of study of Dravya in Ayurveda	Affective	Desirable to know	Knows how	Lecture Group Discussion	Written and Viva	F and S	II	
CO3	Explain the various theories (theories of Taittiriyaopaniṣad, Nyāya-Vaiśeṣika, Sāṅkhya-Yoga, Sāṅkarācārya, Cāraka and Suśruta) regarding creation of Pañcamābhūtā	Cognitive/ Comprehension	Must Know	Knows	Lecture Group Discussion /Activity Based Learning	Written and Viva, Quiz	F and S	II	
CO3	Describe Prithvi Mahābhūta Explain qualities of Prithvi Mahābhūta	Cognitive / Comprehension	Must Know	Knows	Lecture Seminar/ Group Discussion	Written and Viva	F and S	II	
CO3	Describe Āp Mahābhūta Explain qualities of Āp	Cognitive, Comprehension	Must Know	Knows	Lecture Seminar/ Group Discussion	Written and Viva	F and S	II	

	Mahabhoota								
CO3	DescribeTeja Mahabhoota Explain qualities of Teja Mahabhoota	Cognitive, Comprehension	Must Know	Knows	Lecture Seminar/ Group Discussion	Written and Viva	F and S	II	
CO3	Describe Vayu Mahabhoota Explain qualities of Vayu Mahabhoota	Cognitive, comprehension	Must Know	Knows	Lecture Seminar/ Group Discussion	Written and Viva	F and S	II	
CO3	Describe Aakash Mahabhoota. Explain qualities of Aakash Mahabhoota	Cognitive, Comprehension	Must Know	Knows	Lecture Seminar/ Group Discussion	Written and Viva	F and S	II	
CO3, CO1	Value Practical application of Panchamahabhoota in Ayurveda	Affective	Must know	Knows	Lecture Group Discussion, Demonstration	Written and Viva, Open Book Test	F and S	II	
CO2	Compare elementary particles/subatomic particles with Tanmatra/triguna.	Cognitive/ Recall	NK	Know	Video clips, discussions SDL	Quiz	F	II	
CO3, CO1	Define the term <i>Kala</i> from various <i>darshanas</i> and <i>Ayurveda</i> .	Cognitive/ Recall	Must know	Knows	Lecture	Written and Viva	F & S	II	
CO3	Explain classification/types of <i>Kala</i>	Cognitive/ Recall	Must know	Knows	Lecture	Written and Viva	F & S	II	
CO3, CO1	Find illustrations of kala explained in Ashtang Hridaya.	Cognitive/ Problem Solving	Must know	Knows	Lecture /Activity Based Learning	Written and Viva	F & S	II	
CO3, CO2	Give examples of importance of Kala in	Cognitive/ Recall	Must know	Knows how	Problem Based Learning/	Written and Viva, Quiz	F & S	II	

CO1	Ayurveda and time as per contemporary sciences				Group Discussion				
CO3	Define <i>the term Dik</i> . Explain classification/ division of <i>Dik</i> .	Cognitive/ Recall	Must know	Knows	Lecture /Activity Based Learning	Written and Viva, puzzle	F & S	II	
CO3, CO1	Illustrate significance of <i>Dishas</i> in Ayurveda with examples.	Cognitive/ Comprehension	Must know	Knows how	Lecture /Seminar	Written and Viva	F & S	II	
CO3	Find illustrations of <i>Dik</i> explained in <i>Ashtangahridaya</i> .	Cognitive/ Problem solving	Must know	Knows how	Group Discussion	Written and Viva, Open book test	F & S	II	
CO3	Define the term <i>Atma</i> ,	Cognitive/ Recall	Must know	Knows	Lecture	Written and Viva	F & S	II	
CO3	Explain <i>atma</i> at different levels, <i>seat</i> , <i>Gunas</i> of <i>Atma</i> ,	Cognitive/ Recall	Must know	Knows	Lecture	Written and Viva	F & S	II	
CO1 CO3	Explain <i>Atma Linga</i> according to <i>Charaka Samhita</i> .	Cognitive/ comprehension	Must know	Knows	Lecture / Flipped Classroom	Written and Viva	F & S	II	
CO3	Describe the method / process of knowledge formation (<i>atmanah jnasya pravrittih</i>).	Cognitive/ Comprehension	Must know	Knows how	Lecture/ Demonstration/	Written and Viva	F & S	II	
CO3	Describe <i>Purusha</i> as mentioned in <i>Ayurveda</i>	Cognitive/ Recall	Must know	Knows	Lecture	Written and Viva	F & S	II	
CO3	Differentiate <i>Ativahikapurusha</i> / <i>Sukshmasharira</i> / <i>Rashipurusha</i> / <i>Chikitsapurusha</i> / <i>Karmapurusha</i> / <i>Shad-dhatvatmaka-purusha</i> .	Cognitive/ Comprehension	Must know	Knows how	Lecture / Group discussions	Written and Viva	F & S	II	

CO3	Recognize and state significance of Atmavijnanam	Affective	Desirable to know	Knows	Group Discussions/ Problem Based Learning	viva	F	II	
CO3	Define term Manas, Enlist synonyms, Explain it's Guna. Karma, Vishay. Explain dual nature of mind. (ubhayaatmakatvam),	Cognitive/Recall and Comprehension	Must know	Knows	Lecture / Activity Based Learning/Debate	Written and Viva. Puzzle	F & S	II	
CO3	Explain influence of Panchabhoutika aahara and aushadha (penta-elemental diet) on manas	Cognitive/Recall	Must know	Knows how	Lecture/ discussions/ PBL	Written and Viva. Open Book Test	F & S	II	
CO3	Recognizes the utility of Knowledge of Mana	Affective	Must Know	Knows	Case Based learning	viva	F & S	II	
CO3, CO1	Explain Concept of mind in other sciences.	Cognitive/Recall	Nice to know	Knows	Discussions/ Videos	Written and Viva	F	II	
CO1	Explain Role of Panchamahabhuta and Triguna in Dehaprakriti and Manasaprakriti respectively.	Cognitive/Comprehension	Must know	Knows how	Lecture / discussions/ C B L	Written and Viva	F & S	II	
CO3	Discuss the role of Tamas as the tenth Dravya	Cognitive/Comprehension	Desirable to know	Know	Lecture Edutainment Role Play	Written and Viva	F & S	II	
CO3	Realize Practical application of study of dravya in Ayurveda	Affective	Desirable to know	Know	Group Discussions/ Case Base Learning/ Demonstration.	Written and Viva, quiz	F & S	II	

CO3	Recite Dravya Granth of Tarka Sangrah& defn from Charak	Cognitive Recall	Desirable to know	knows	Audio clips/ classroom recitation	Viva, Recitation Competetion	F&S		
CO3. CO2	Discuss principles and examples in contemporary sciences which will enhance understanding the concept of Karana dravya. For ex- Quantum Physics	Cognitive/Comprehension	Nice to know	Know	Lecture/ Discussions/ Self-learning activity	Open book testh	F	II	

Topic -4 Guna vijñaneeyam Time (Lecture:-4 hours Non lecture 6 hours)

CO3	Define Guna and classify Guna according to various Darshanas and Charaka Samhita	Cognitive Recall	Must know	knows how	Lecture /Demonstration	Written and Viva	F&S	II	
CO3	Explain the Lakshana of indriyarthā Gunas with examples.	Cognitive Comprehension	Must know	Knows how	Lecture / Group Discussion	Written and Viva	F&S	II	
CO3	Discuss the Lakshana of Gūrvadī Guna with examples.	Cognitive Comprehension	Must know	Knows how	Lecture /Seminar/ Group Discussion	Written and Viva, puzzle	F&S	II	
CO3	Explain the Lakshana of Parādī Guna with examples.	Cognitive Comprehension	Must know	Knows how	Lecture /Seminar/ Group Discussion	Written and Viva, Puzzle	F&S	II	
CO3	Describe the Lakshana of Adhyatma Guna with examples.	Cognitive Comprehension	Must know	Knows how	Lecture /Seminar/ Group Discussion	Written And Viva	F&S	II	
CO3	Appreciate the importance of Guna	Affective	Must know	Knows	Discussion	Written Discussion	F&S	II	

	(Gunapradhanyata)					viva			
CO3	Describe the practical application of Indriyarth Gunas in diagnosis of disease and Treatment	Cognitive Comprehension	Must know	Knows how	Lecture / Demonstration/ Case based learning	Written And Viva	F&S	II	
CO3	Describe the practical application of Gurvadi Guna in diagnosis of disease and Treatment	Cognitive Comprehension	Must know	Knows how	Lecture / Demonstration/ Case based learning	Written And Viva	F&S	II	
CO3	Describe the practical application of Paraadi Gunas.	Cognitive Comprehension	Must know	Knows how	Lecture / Demonstration/ Activity based learning	Written And Viva	F&S	II	
CO3	Describe the practical application of Adhyatma Guna .	Cognitive Comprehension	Must know	knows how	Lecture / Demonstration/ Problem Based Learning	Written And Viva	F&S	II	
CO3	Recite the concern verses from TarkaSangrah and Charak Samhita	Cognitive Recall	Desirable to know	knows	Audio clip/ classroom recitation	viva	F&S Recitation competition	II	
CO1 CO2	Discuss Principles and examples in contemporary sciences which will enhance understanding the concept of Guna.	Cognitive Comprehension	Nice to know	Knows	Lecture/ Discussions/ Self-learning activity	-	F	II	
Topic - 5. Karma vijnaneeyam Time (Lecture:- _2_ hours Non lecture _4__hours)									
CO3	Define <i>Karma</i> acco. to various <i>Darshana</i> and <i>Ayurveda</i> .	Cognitive Recall	Must know	Knows	Lecture	Written And Viva	F&S	II	

CO3	Compare the <i>Karma Lakshana</i> (characteristics) from <i>Charaka Samhita</i> and <i>Darshana</i>	Cognitive Comprehension	Must know	Knows	Lecture/ Group discussion/ Flipped Classroom	Written And Viva	F&S	II	
CO3	Explain the types of <i>Karma</i>	Cognitive Comprehension	Must know	Knows	Lecture and discussion, demonstration	Written And Viva	F&S	II	
CO3	Describe the process of production and destruction of <i>Laukika Karma</i> with one example.	Cognitive Comprehension	Desirable to know	Knows how	Lecture and demonstration	Written And Viva	F&S	II	
CO3	Describe the <i>Adhyaatmika</i> karma and its causal relationship with health and disease.	Cognitive Comprehension	Must know	Knows how	Lecture and discussion	Written And Viva	F&S	II	
CO3	Enlist the other types of processes or pharmacological actions which came under the title of <i>Karma</i> in <i>Ayurveda</i> . Viz: <i>Panchakarma</i> , <i>Shastrakarma</i> , <i>Lekhana</i> , <i>Bruhana</i> etc.	Cognitive Recall	Must know	Knows how	Lecture and discussion/ Self Directed Learning	Written And Viva	S	II	
CO3	Recite the concern verses from <i>TarkaSangrah</i> and <i>Charak Samhita</i>	Cognitive Recall	Desirable to know	knows	Audio clip/ classroom recitation/ Edutainment	viva	F&S Recitation competition	II	
CO1 CO2	Discuss principles and examples in contemporary sciences which will enhance understanding the	Cognitive Recall	Nice to know	Knows	Lecture/ Discussions/ Self-learning	-	F	II	

	concept of Karma.								
Topic - 6 . Samanya vijnaneeyam Time (Lecture:- _3_ hours Non lecture _6_ hours)									
CO3	Explain the Samanya(According to <i>Ayurveda & Darshana</i>)	Cognitive Comprehension	Must know	Knows	Lecture	Written And Viva	F&S	III	
CO3	Distinguish the Samanya concept of <i>Ayurveda</i> from <i>Darshana</i> .	Cognitive Comprehension	Must know	Knows	Lecture and discussion	Written And Viva	F&S	III	
CO3	Describe the <i>Anuvrutti Buddhi</i>	Cognitive Recall	Desirable to know	knows	Lecture and discussion	Written	F & S	III	
CO3	Explain the types of Samanya (Acc. To <i>Ayurveda</i> and <i>Darshana</i>)	Cognitive Recall	Must know	Knows	Lecture and discussion/ Flipped Classroom	Written And Viva	F & S	III	
CO3	Explain the importance of samanya in diagnosis and treatment	Cognitive Comprehension	Must know	Knows	Lecture and discussion/Case Based Learning	Written And Viva ,Quiz	S	III	
CO3	Identify the examples of <i>Dravya-guna-karma Samanya</i> with each <i>DOSHA-DHATU-MALA</i>	Cognitive Comprehension	Must know	Knows how	Lecture and Demonstration/ Group Discussion	Written And Viva , Open Book Test	S	III	
CO3	Recite the concern verses from TarkaSangrah and Charak Samhita	Cognitive Recall	Desirable to know	knows	Audio clip/ classroom recitation	viva	F&S Recitation competition		
CO1	Discuss principle and examples in contemporary sciences which will enhance understanding the	Cognitive Comprehension	Nice to know	knows	Self -Directed learning	-	F	III	

	concept of Samanya. For ex-system biology								
Topic - 7 . Vishesh vijnaneeyam Time (Lecture:- __3__ hours Non lecture __6__ hours)									
CO3	Explain Vishesha According to <i>Ayurveda & Darshana</i>	Cognitive Comprehension	Must know	Knows	Lecture and Group Discussion	Written And Viva	F&S	III	
CO3	Distinguish <i>Vishesha</i> concept of <i>Ayurveda</i> from <i>Darshana</i> .	Cognitive Comprehension	Must know	Knows	Lecture and Group Discussion	Written and Viva	F&S	III	
CO3	Describe the <i>Vyavrutti Buddhi</i>	Cognitive Recall	Desirable to know	knows	Lecture and discussion	Written	F & S	III	
CO3	Explain <i>Vishesha</i> in the context of <i>Mahabhoota Paramanu</i>	Cognitive Recall	Nice to know	knows	Lecture	Written	F & S	III	
CO3	Discuss the <i>Viruddha Vishesha</i> and <i>Aviruddha Vishesh</i> and other types of <i>Vishesha</i>	Cognitive Comprehension	Must know	Knows how	Lecture and discussion, demonstration	Written And Viva	F&S	III	
CO3	Explain the statement “ <i>Pravruttirubhayasyatu</i> ”	Cognitive Comprehension	Must know	Knows how	Lecture, Problem Based Learning	Written Viva	F&S	III	
CO3	Provide different classifications of <i>vishesha</i> and their utility in Diagnosis and Treatment.	Cognitive recall	Must know	Knows how	Lecture/ Activity Based Learning	Written, Viva, Open Book Test	F&S	III	
CO3	Identify the examples of <i>Dravya-guna-karma Vishesha</i> with each <i>DOSHA-DHATU-MALA</i>	Cognitive Comprehension	Must know	Knows how	Lecture and demonstration/ Game Based Learning	Written And Viva Quiz	S	III	
CO1, CO2	Describe principles and examples in contemporary sciences	Cognitive Comprehension	Nice to know	knows	Lecture/ Discussions/ Self-learning	viva-	F	III	

	which will enhance understanding the concept of Vishesha For ex- System Biology				activity				
CO3	Recite the concern verses from TarkaSangrah and Charak Samhita	Cognitive Recall	Desirable to know	knows	Audio clip/ classroom recitation	viva	F&S Recitation on competition	III	

Topic - 8. Samavay vijnaneeyam

Time (Lecture:- __2__ hours Non lecture __4__ hors)

CO3	Explain Samavaya(Acc. To <i>Ayurveda</i> and <i>Darshana</i>)	Cognitive Recall	Must know	Knows	Lecture	Written And Viva	F&S	III	
CO3	Describe the eternal relation between ayutasiddhavritti	Cognitive Comprehension	Must know	Knows how	Lecture and demonstration	Written And Viva	F&S	III	
CO1 CO2	Discuss principles and examples in contemporary sciences which will enhance understanding the concept of Samavaya	Cognitive Recall	Nice to know	knows	Lecture/ Discussions/ Self-learning activity	-	F	III	
CO3	Recite the concern verses from TarkaSangrah and Charak Samhita	Cognitive Recall	Desirable to know	knows	Audio clip/ classroom recitation	Viva, Recitation competition	F&S		

Topic - 9. Abhav vijnaneeyam

Time (Lecture:- __2__ hours Non lecture __4__ horus)

CO3	Define <i>Abhava</i>	Cognitive Recall	Must know	Knows	Lecture and discussion	Written And Viva	F&S	III	
CO3	Discuss the supportive and contradictory views for the acceptance of <i>Abhava</i> as a <i>Padartha</i>	Cognitive comprehension	Must know	Knows How	Lecture Group Discussion/ debate	Written And Viva	F&S	III	

CO3	Explain the view of <i>Ayurveda</i> about <i>Abhava</i>	Cognitive Recall	Must know	Knows	Lecture demonstration	Written And Viva	F&S	III	
CO3	Explain the four types of <i>Abhava</i>	Cognitive Recall	Must know	Knows	Lecture ,Activity Based Learning	Written And Viva , Puzzle	F&S	III	
CO3	Demonstrate the utility of the knowledge of <i>Abhava</i> in <i>Ayurveda</i>	Cognitive Problem solving	Must know	Knows how	Lecture, Group discussions Problem Based Learning	Written And Viva	F&S	III	
CO1 CO2	Discuss principles and examples in contemporary sciences which will enhance understanding the concept of <i>Abhava</i>	Cognitive Recall	Nice to know	knows	Lecture/ Discussions/ Self-learning activity	-	F	III	
CO3	Recite the concern verses from <i>TarkaSangrah</i> and <i>Charak Samhita</i>	Cognitive Recall	Desirable to know	knows	Audio clip/ classroom recitation	viva	F&S Recitation competition		

Paper II

Topic 1- (Pariksha) Time (Lecture:- 6 hours Non lecture 12 hours)

CO4	Describe Pariksha	Cognitive/ Recall	Must know	Knows	Lecture/Group Discussion	Written And Viva	F&S	I	
CO4	Explain the necessity & significance of pariksha	Cognitive Comprehension	Must know	Knows how	Lecture/Problem Based Learning/Debate	Written And Viva	F&S	I	
CO4	Describe Buddhi and its classification	Cognitive / Recall	Must know	Knows	Lecture/Activity based learning	Written And Viva	F&S	I	
CO4	Describe Prama, Prameya, Pramata, Pramana and differentiate Prama and	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva, open book test	F&S	I	

	Aprama								
CO4	Describe the Significance of Pramana	Cognitive / comprehension	Must know	Knows how	Problem based learning	Written And Viva	F&S	I	
CO4	Enumerate Pramana according to different schools of philosophy.	Cognitive / Recall	Must know	Knows	Lecture	Written And Viva, puzzle	F&S	I	
CO4	Enumerate Pariksha as per Ayurveda.	Cognitive / Recall	Must know	Knows	Lecture/ Enquiry based learning	Written And Viva	F&S	I	
CO4	Describe the Pramana accepted by different schools of Philosophy with one example each.	Cognitive / Recall	Must know	Knows	Lecture/ group discussion	Written And Viva, quiz	F&S	I	
CO4	Describe 4 Pariksha explained by Ayurveda with one example each	Cognitive / Recall	Must know	Knows	Lecture/ activity based learning	Written And Viva, puzzle	F&S	I	
CO4	Justify the inclusion of Pramanas under three Pariksha	Cognitive / Problem solving	Must know	Knows how	Problem based learning and flipped classroom	Written And Viva	F&S	I	
CO4	Describe the practical application of Pariksha Vidhi in Diagnosis and Treatment.	Cognitive / Recall	Must know	Knows	Case based learning/ Group discussion	Written, open book test And Viva	F&S	I	
CO4	Establish that the Pramanas are tool to gain the knowledge	Affective	Must know	knows	Group discussion	Viva	F&S	I	
CO4	Recite the concern Verses from Tarkasangrah & CharakSamhita	Cognitive Recall	Desirable to know	knows	Audio clips, classroom Recitation	Viva, Recitation competetion	F&S	I	

7. Topic 2- (Aptopdesha Pariksha/Pramana) Time (Lecture:- __6__ hours Non lecture __10__horus)I									
CO 4	Describe Apta and Aptopadesha	Cognitive / Recall	Must know	Knows	Lecture	Written And Viva	F&S	I	
CO 4	Describe the significance of Aptopadesha in Chikitsa	Cognitive / Recall	Must know	Knows	Case based learning/ Group discussion	Written And Viva	F&S	I	
CO 4	Define the term Shabda	Cognitive / Recall	Must know	Knows	Lecture	Written And Viva	F&S	I	
CO 4	Describe types of Shabda	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	I	
CO 4	Define the term Shaba artha bodhaka Vrutti	Cognitive / Recall	Must know	Knows	Lecture/ group discussion	Written And Viva	F&S	I	
CO 4	Enumerate Shabaartha bodhaka vrutti	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva, quiz	F&S	I	
CO 4	Define Abhidha Vrutti with illustration	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	I	
CO 4	Define Lakshana Vrutti with examples	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	I	
CO 4	Enumerate the types of Lakshanavrutti and define each of them with example	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	I	
CO 4	Define Vyanjana vrutti with example	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	I	
CO 4	Define Tatparyakhya vrutti with example	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	I	

CO 4	Define the term Pada with specification to Shakti and enumerate the types of Pada	Cognitive / Recall	Must know	Knows	enquirybased learning	Written And Viva	F&S	I	
CO 4	Enumerate Shaktigraha hetu	Cognitive / Recall	Must know	Knows	Lecture/ group discussion/ Problem based learning	Written And Viva, puzzle	F&S	I	
CO 4	Describe Shakti graha hetu	Cognitive / Recall	Must know	Knows	Lecture/ Tutorial/ Problem based learning	Written And Viva	F&S	I	
CO 4	Enumerate Vaakyarthajnana hetu	Cognitive / Recall	Must know	Knows	Lecture/ group discussion/ Problem based learning	Written And Viva, quiz	F&S	I	
CO 4	Define Akanksha with example	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning/ Problem based learning	Written And Viva	F&S	I	
CO 4	Define Yogyata with example	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning/ Problem based learning	Written And Viva	F&S	I	
CO 4	Define Sannidhi with example	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning/ Problem based learning	Written And Viva	F&S	I	
CO 4	Describe importance of Aptopadesha in maintaining Health, Prevention of diseases,	Cognitive/ Comprehension	Must know	knows	Lecture/ Activity based learning/ Problem based	Written And Viva, open book test	F&S	I	

	diagnostics, therapeutics and research.				learning				
CO4	Recite the concern Verses from Tarkasangrah & CharakSamhita	Cognitive Recall	Desirable to know	knows	Audio clips, classroom Recitation	Viva, Recitation competetion	F&S	I	
Topic 3- Pratyaksha Pariksha/Pramana Time (Lecture:- __8_ hours Non lecture _14__horus)									
CO4	Define Pratyaksha	Cognitive / Recall	Must know	Knows	Lecture/ Tutorial/Activity based learning	Written And Viva	F&S	II	
CO4	Enumerate the types of Pratyaksha	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	II	
CO4	Describe types of Pratyaksha	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning/ Problem based learning	Written And Viva, quiz	F&S	II	
CO4	Describe Indriya Prapyakaritva Mechanism of sensory perception)	Cognitive / comprehension	Must know	Knows	Lecture/ Flip classroom/ Problem based learning	Written And Viva,	F&S	II	
CO4	Define Sannikarsha	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	II	
CO4	Describe the types of Sannikarsha	Cognitive / comprehension	Must know	Knows how	Lecture/ Problem based learning	Written And Viva, puzzle	F&S	II	
CO4	Define Indriya	Cognitive / Recall	Must know	Knows	Lecture/ Activity based	Written And Viva	F&S	II	

					learning				
CO4	Enumerate the types of Indriya	Cognitive / Recall	Must know	Knows	Lecture/ role play	Written And Viva	F&S	II	
CO4	Define Jnanendriya	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	II	
CO4	Enlist the functions of Karmendriya	Cognitive / Recall	Must know	Knows	Problem based learning	Written And Viva	F&S	II	
CO4	Describe the function of Manas in relation to Jnanotpatti	Cognitive / Recall	Must know	Knows	Lecture/ Problem based learning	Written And Viva	F&S	II	
CO4	Justify the role of Manas as ubhayendriya in relation with Jnanotpatti and Karma.	Cognitive / problem solving	Must know	Knows how	Problem based learning / Group discussion/Debate	Written And Viva, open book test	F&S	II	
CO4	Enumerate Panchapanchaka and describe its significance with respect to Pratyaksha Jnana	Cognitive / Recall	Must know	Knows	Lecture/ Problem based learning / Group discussion	Written And Viva, quiz	F&S	II	
CO4	Enumerate and describe briefly the various theories of Darshana and Ayurveda, which highlight the relationship of Indriya and Panchamahabhuta.	Cognitive / Comprehension	Must know	Knows	Group discussion/ role play/debate	Written And Viva, open book test	F&S	II	
CO4	Justify the specificity of Indriya for perceiving specific Artha	Cognitive / Problem Solving	Must know	Knows how	Activity based learning/ Problem based learning / Group discussion	Written And Viva	F&S	II	

CO4	Enumerate Trayodasha Karana	Cognitive / Recall	Must know	Knows	Lecture/Tutorial / Activity based learning	Written And Viva, puzzle	F&S	II	
CO4	Enumerate Antahkarana	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	II	
CO4	Enumerate the functions of Antahkarana	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	II	
CO4	Illustrate the role Antahkarana in Jnanotpatti with example to highlight the significance	Cognitive / Comprehension	Must know	Knows how	Lecture/ Problem based learning / Group discussion	Written And Viva, open book test	F&S	II	
CO4	Describe the factors which create hindrance for perception with an illustration (pratyaksha-anupalabdhi-karana)	Cognitive / Comprehension	Must know	Knows	Activity based learning/ Problem based learning / Group discussion	Written And Viva, puzzle	F&S	II	
CO4	Enumerate a few equipments or aids which help in enhancing the direct perception	Cognitive / Recall	Must know	Knows	demonstrations/ Problem based learning / Group discussion	Written And Viva, quiz	F&S	II	
CO4	Justify the necessity of other pramana with textual references and illustrations	Cognitive / Application	Must know	Knows how	Lecture/ Activity based learning/ Problem based learning / Group discussion	Written And Viva, open book test	F&S	II	
CO4	Describe the practical application of Pratyaksha in Sharir, Nidan, Chikitsa and Anusandhan (research).	Cognitive / comprehension	Must know	Knows	Lecture/ case-based learning / Group discussion	Written And Viva	F&S	II	

CO4	Justify the role Pratyaksha (Observation and interpretation skills for generalization of results) in research	Cognitive / Application	Must know	Knows how	Lecture/ Activity based learning/ Problem based learning / Group discussion	Written And Viva	F&S	II	
CO4	Realizes importance as well as limitation of Pratyaksha	Affective	Must know	Knows	Group discussion	Viva	F&S	II	
CO4	Recite the concern Verses from Tarkasangrah & CharakSamhita	Cognitive Recall	Desirable to know	knows	Audio clips, classroom Recitation	Viva, Recitation competetion	F&S	II	

Topic 4 - Anumana pariksha/Pramana Time (Lecture:- _10__ hours Non lecture _15__ hours)

CO4	Describe Anumana	Cognitive / Recall	Must know	Knows	Lecture	Written And Viva	F&S	II	
CO4	Define the terms with an example (Anumiti, Paramarsha, Vyapti, Hetu, Sadhya, Paksha, Drishtanta)	Cognitive / Recall	Must know	Knows	Lecture/ enquiry based learning	Written And Viva, quiz	F&S	II	
CO4	Describe the types of anumana	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning/ group discussion	Written And Viva,	F&S	II	
CO4	Describe Pancha Avayava Vakya	Cognitive / Recall	Must know	Knows	Lecture/ gamification/ Problem based learning / Group discussion	Written And Viva	F&S	II	
CO4, CO2	Associate Contemporary method of carrying out research with Pancha Avayava Vakya	Cognitive / Comprehension	Desirable to know	Knows how	Self directed learning, / Problem based learning / Group discussion	Written And Viva, open book test	F&S	II	

CO4	Define vyapti	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	II	
CO4	Describe the types of vyapti	Cognitive / Recall	Must know	Knows	Lecture/ Problem based learning	Written And Viva	F&S	II	
CO4	Define hetu	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	II	
CO4	Describe the types of hetu	Cognitive / Recall	Must know	Knows	group discussion	Written And Viva	F&S	II	
CO4	Enlist Sad-hetu Lakshana	Cognitive / Recall	Must know	Knows	Lecture/ Problem based learning	Written And Viva, quiz	F&S	II	
CO4	Define Hetwabhasa	Cognitive / Recall	Must know	Knows	Lecture/ Problem based learning	Written And Viva	F&S	II	
CO4	Explain the types of Hetwabhasa	Cognitive / Comprehension	Must know	Knows	Lecture/Tutorial group discussion	Written And Viva, puzzle, quiz	F&S	II	
CO4	Describe Ahetu	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	II	
CO4	Describe Tarkaas per Nyaya Sutra and Tarka Sangraha	Cognitive / Recall	Must know	Knows	Lecture Tutorial/ Problem based learning	Written And Viva, quiz	F&S	II	
CO4	Distinguish between Tarka as Aprama and tool in Anumana	Cognitive / Comprehension	Must know	Knows how	Enquiry based learning/ group discussion/debate	Written And Viva	F&S	II	
CO4	Justify the role of Tarka in Anumana	Cognitive / Problem Solving	Must know	Knows how	Activity based learning/ Problem based learning / Group	Written And Viva, open book test	F&S	II	

					discussion				
CO4	Demonstrate the practical applications of Anumana Pariksha (with few examples) in Sharir, Nidan, Chikitsa and Anusandhan (research).	Cognitive / Application	Must know	Knows how	Role play/ Game based learning /Group discussion	Written And Viva, open book test	F&S	II	
CO4	Recite the concern Verses from Tarkasangrah & CharakSamhita	Cognitive Recall	Desirable to know	knows	Audio clips, classroom Recitation	Viva, Recitation competetion	F&S	I	
Topic 5 - Yukti pariksha/Pramana Time (Lecture:- _2__ hours Non lecture _2__ hours)									
CO4	Describe Yukti	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning/ Group discussion	Written And Viva	F&S	III	
CO4	Compare Yukti as an independent Pariksha and as a part of Anumana	Cognitive / Comprehension	Must know	Knows how	Lecture/ Activity based learning/ Problem based learning / Group discussion	Written And Viva, open book test	F&S	III	
CO4	Describe the Importance of Yukti in Ayurveda	Cognitive / Recall	Must know	Knows how	Lecture / Activity based learning/ Problem based learning / Group discussion	Written And Viva	F&S	III	
CO4	Describe the practical application of Yukti in Sharir, Nidan, Chikitsa and Anusandhan (research).	Cognitive Recall	Must know	Knows how	Lecture/ Activity based learning/ Problem based learning / Group	Written And Viva	F&S	III	

					discussion				
CO4	Recite the concern Verses from CharakSamhita	Cognitive Recall	Desirable to know	knows	Audio clips, classroom Recitation	Viva, Recitation competition	F&S	III	
8. Topic 6 – Upamana Pramana Time (Lecture:- __2__ hours Non lecture _4__horus)									
CO4	Define Upamana..Enlist the types of Upaman	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	III	
CO4	Describe the Importance of Upamana in Ayurveda	Cognitive / Recall	Must know	Knows	Lecture/ Problem based learning / Group discussion	Written And Viva	F&S	III	
CO4	Describe the practical applications of Upamana in Sharir, Nidan, Chikitsa and Anusandhan.	Cognitive/ Comprehension	Must know	Knows	Lecture/ Game based learning/Problem based learning / Group discussion	Written And Viva, quiz	F&S	III	
CO4	Recite the concern Verses from Tarkasangrah & Charak	Cognitive Recall	Desirable to know	knows	Audio clips, classroom Recitation	Viva, Recitation competition	F&S	III	
Topic 7 - Karya- Karana Siddhanta Time (Lecture:- _11__ hours Non lecture _13__hours)									
CO5 CO2	Define Karya and Karana. List types of Karana. Charakokta Dashvidha Parikshya Bhava.	Cognitive/ Recall	Must know	Knows	Lecture Tutorial	Written and Viva	F & S	III	
CO5	Explain Charakokta Dashvidha Parikshya Bhava.	Cognitive/Comprehension	Must know	Knows	Lecture/Problem Based learning	Written and Viva	F & S	III	
CO5 CO2	Describe the significance of Karya and Kaarana in Ayurveda	Cognitive/ Comprehension	Must know	Knows how	Lecture/problem based activity	Written and Viva	F & S	III	

CO5 CO2	Realises the utility of Charakokta Dashvidha Parikshya Bhav in understanding situations and taking decisions	Affective	Must know	Knows	Group discussion/ Role play/ Debate		F	III	
CO5 CO2	Distinguish different opinions regarding the manifestation of Karya from Karana	Cognitive / Application	Must know	Knows how	Edutainment Role play/ Debate group discussion/debate	Written and Viva, quiz	F & S	III	
CO5 CO2	Analyse Satkaryavada and relate it with Ayurveda Siddhanta	Cognitive / Application	Must know	Knows how	Lecture & Group Discussion/debate	Written and Viva	F & S	III	
CO5 CO2	Analyse Asatkaryavada & relate it with Ayurveda Siddhanta	Cognitive / Application	Must know	Knows how	Lecture & Group Discussion/debate	Written and Viva	F & S	III	
CO5 CO2	Analyse Parinamavada & relate it with Ayurveda Siddhanta	Cognitive / Application	Must know	Knows how	Lecture & Group Discussion	Written and Viva	F & S	III	
CO5 CO2	Analyse Arambhavada & relate it with Ayurveda Siddhanta	Cognitive / Application	Must know	Knows how	Lecture & Group Discussion	Written and Viva	F & S	III	
CO5 CO2	Analyse Paramanuvada and relate it with Ayurveda Siddhanta	Cognitive / Application	Must know	Knows how	Lecture & Group Discussion	Written and Viva	F & S	III	
CO5 CO2	Explain Vivartavada and relate it with Ayurveda Siddhanta	Cognitive/ Comprehension	Must know	Knows how	Lecture & Group Discussion	Written and Viva	F & S	III	
CO5 CO2	Explain Kshanabhangurvada and relate it with Ayurveda Siddhanta	Cognitive/ Comprehension	Must know	Knows how	Lecture & Group Discussion	Written and Viva	F & S	III	

CO5 CO2	Explain Swabhavavada and relate it with Ayurveda Siddhanta	Cognitive/ Comprehension	Must know	Knows how	Lecture & Group Discussion	Written and Viva	F & S	III	
CO5 CO2	Explain Peelupakavada and relate it with Ayurveda Siddhanta	Cognitive/ Comprehension	Must know	Knows how	Lecture & Group Discussion/debate	Written and Viva	F & S	III	
CO5	Explain Pitharapakavada and relate it with Ayurveda Siddhanta	Cognitive/ Comprehension	Must know	Knows how	Lecture & Group Discussion/debate	Written and Viva	F & S	III	
CO5	Explain Anekantavada and relate it with Ayurveda Siddhanta	Cognitive/ Comprehension	Must know	Knows how	Lecture & Group Discussion	Written and Viva	F & S	III	
CO5 CO2	Explain Swabhavoparamavada.	Cognitive/ Comprehension	Must know	Knows how	Lecture & Group Discussion	Written and Viva	F & S	III	
CO5 CO2	Recite the concern Verses from Tarkasangrah & CharakSamhita	Cognitive Recall	Desirable to know	knows	Audio clips, classroom Recitation	Viva, Recitation competition	F&S	III	
CO5, CO2	Value cause and effect theory	Affective	Must know	Knows	Debate/Group Discussion	Viva	F	III	
CO 5, CO2	Analyse cause effect relationship, causality, causation in contemporary sciences	Cognitive / problem solving	Nice to know	Knows	Self directed learning , Flipped classroom, Group Discussions.	-	-	III	

List of Practicals

Course PADARTHA VIJNANAM : Practical List

Marks: 100

Hours:- 45 (included in non Lecture hours)

SN	Name of Topic/ Name of Practical	Term	Activity / Practical
P1	Ayurved Nirupan	I	Ayurved Perception identification: Ask the meaning of Ayurveda to your parents, friends and family members (min 10) and write it, give your opinion on it. Introduction to communication skills. Conduct of survey.
P2	Darshana and Padartha	I	• Darshan concept development: Find and write names of different philosophies? • Discussions: meanings of philosophy, darshana, spirituality, religion. Are they same or different? Write in Activity Book.
P3	Hitayu/ Sukhayu lakshanas	I	• Identification of characters of Hitayu, & Sukhayu in Healthy individuals.
P4	Dravya	I	1. Identification of Guna and Karma. Make a list of 10 dravyas surrounding you and identify Guna and Karma in it. 2. Panchbhautik nature identification: Demonstrate the Panchamahabhuta in any five ahara dravya and five sharira dravya/ avayava with a neat labeled diagramme. (ex-cell, blood, vata, pitta, kapha etc). 3. Determination of Directions: Identify the directions in and enlist the content in each direction in your campus. 4. Conceptualize Time : Discussion and understanding of Kala as per Ayurved and contemporary sciences. 5. Categorization of Aushadhi dravya by dominance of Mahabhoot e.g. Parthiv / Jaleeya/ Agney/ Vayaveey/ Akasheey dravya with reasons. 6. Early Clinical Exposure(ECE): Visit the OPD, find the diseases common for different age groups (balyavastha/ tarunyavastha/ vrudhastha)
P5	Guna	II	Identification:

			Sartha Guna : Identify concept of Shabda, Sparsha, Rupa, Rasa, Gandha in Dravya. Application and demonstration find the different therapies based on 5 Sartha Gunas. e.g. Gandha. Shabda, Sparsha. Observe /Experience/ Study / Read book or article present on (any one) Aromatherapy- Gandha Chikitsa. Music therapy/ Mamtra Chikitsa -Shabda guna. Sparsha- Touch therapy. Gurvadi Guna: Identify guna in any five ahara dravya : different vargas. in Sharir dravya: dosha, dhatu mala. Comparison Gurvadi gunas and correlate with concepts learned in Physics, Chemistry and Biology. Observation(survey) of the effects of Seasons on Gurvadi gunas in body, nature etc. Paradi Guna and their application in five examples. Atma Guna identification: Making or Framing their real life situations related to Atma Guna(sukha, dukkha etc)
P6	Karma	II	Conceptualization Karma, its application in branch of Ashtanga Ayurveda.(panchakrma/ Shastrakarma etc Illustration: Make a collage of pictures/ photos depicting five types of karma and their similarity with concepts learned in Physics, Chemistry etc.
P7	Pratyaksha Praman	II	Observation: Note down the factors from Prakruti analysis which you can understand through pratyaksh (like- colour, dry skin) Identification: Find few identification marks for identification of herbs/ minerals which need Pratyaksha. ECE: Pramans in examination of patient and Diagnosis of disease.

			Identifies the gunas which can be perceived by one sense (ekendriya) organ and more than one sense organ (Dwiendriya etc). Demonstrate with examples of Shabda,(snigdha/ ruksha etc) Sparsha (snigdha/ ruksha etc), Rupa, Rasa(taste threshold video), Gandha. (5 examples)
P8	Pratyaksha Praman Limitations	II	Observation: Find out how one can overcome limitations of Pratyaksha by advances in equipment. (microscope, telescope etc) Justification of use of various equipment in examination of patient and Diagnosis of disease. (X ray, USG etc)
P9	Anuman Praman	II	Application in Real life situation Write 3 examples of Vyapti (associations)in real life. Find and explain 5 examples of Anumana pramana as per types. Write 3 examples of panchavayava vakya. Correlate it with practicals that you have conducted. Examples of Hetvabhas.(Any three) Study use of inference in various sciences.
P10	Samanya Vishesh Siddhant	III	Identification: Visit vanaushadhi udyan of your college. Find samanyatva and visheshatva among plants. Illustration : Make a chart of food articles and activities to illustrate the relationship of samanya/vishesha with dosha-dhatu-malas. Application: Make a list/ collection of seasonal vegetables and fruits which are Samanya/Vishesha with the dosha.(five examples)
P11	Samvay	III	Conceptualization Mention five real life examples of Nitya and anitya sambandha.
P12	Abhav	III	Application: Write five real life experiences of pragabhava, pradhwamsabhava, atyantabhava and anyonyabhav.
P13	Upman Praman	III	Illustration : Upamana in practical life or with your prior learning. (Examples of

			upamana from Ashtang Hridaya and Charak samhita)and prior learning (Examples in Physics, chemistry etc)
P14	Yukti Praman	III	Conceptualization: How various factors influence the process of the decision making? Application : Write 5 examples of Yukti in practical life or with your prior learning. ECE: Role of Yukti in Sharir, Nidan, Chikitsa and Anusandhan.
P15	Satkaryavad and other vadas	III	Justification : Parinama vada: Describe 3 real life or with your prior learning examples (Physics, Chemistry etc). Justification of Satkarya vada.: Describe 3 real life or with your prior learning examples. Swabhavoparama vada : Describe 3 real life or with your prior learning examples. Pakajotpatti siddhanta.: Write 3 examples of real life or with your prior learning. Justification of Arambhavada Describe 3 real life or with your prior learning examples
P16	Cause and effect theory	III	Illustration: Karya Karan Bhav: Write Samavayi, asamavayi and Nimitta Karana of a karya in real life examples (5 examples). Examples learned in Physics, Chemistry, Biology. Search Find out use of cause effect theory in other sciences. Schematic representation of cause effect in any examples. Application: Assess the 10 factors of Charakokta Karyakarana bhava regarding any task consider the task as karya Remember and write theories of evolution you learned within and other than syllabus.
A1	Other Activities in Journal.	I, II, III.	1. Oral presentation: on allotted topic, PPT slides be made and Copy of slides be pasted in activity book 2. Quiz: Participation of all students in Quiz on some topic of Padartha vijnana. 3. Recitation: Important shloka of padartha vijnana recitation everyday or alternate days by students and written in diary. 4. Each student will do Pick and speak on topics of Padartha Vijnana.

CO 1	Discuss characters of hitayu, & Sukhayu	Cognitive/Recall	MK	Knows how	Demonstration/discussion/brainstorming	Viva	F&S	I	
CO 1	Identifies characters of hitayu, & Sukhayu in healthy individuals	Cognitive/ problem solving	MK	Knows How	Demo/Practical	Viva	F& S	I	
Practical 4- Dravya Time (Practical/ Clinical 6 hours)									
CO1,3	Define dravya, discuss nature of dravya	Cognitive Recall	MK	Knows how	Demonstration/discussion/brainstorming	Viva	F&S	I	
CO1,3	Identify pentaelemental nature of Ahar Dravya Aushadh Dravya in given examples	Cognitive/ problem solving	MK	Shows	Practical/Demonstration	Viva/ Practicals	F& S	I	
CO1,3	Identify the Guna and Karma in the given dravya	Cognitive/ problem solving	MK	Knows how	Practical/Demonstration	Viva/ Practicals	F&S	I	
CO1,3	Categorize the Aushadhi dravya by dominance of Mahabhoot e.g. Parthiv /Jaleeya/ Agney/ Vayaveey/ Akasheey dravya with reasons	Cognitive/ problem solving	MK	Knows how	Practical/Demonstration	Viva/ Practicals	F&S	I	
CO1,3	Identify the directions in and enlist the content in each direction in your campus.	Cognitive/ problem solving	MK	Knows how	Practical/Demonstration	Viva/ Practicals	F&S	I	
CO1,3	Discuss the concept of Kala as per Ayurved and contemporary sciences.	Cognitive/ Recall	MK	Knows	Demonstration/discussion/brainstorming	Viva	F&S	I	

CO1,3	Visit the OPD, find the diseases common for different age groups (balyavastha/ tarunyavastha/ vrudhavadastha)	Cognitive/ problem solving	MK	Knows how	Early Clinical Exposure.	Viva/ Practicals	F&S	I	
Practical - 5(Guna) Time (Practical/ Clinical 5 hours)									
CO 3	Discuss Guna,	Cognitive/ Recall	MK	Knows how	Demonstration/ discussion/ brainstorming	Viva	F&S	II	
CO 3	Identify Gunas in given Ahar dravya.	Cognitive/ problem solving	MK	Knows How	Demo/Practical	Viva/ Practicals	F&S	II	
CO 3	Identify Gunas in given Sharir dravya.	Cognitive/ problem solving	MK	Knows how	Practical/Demonstration	Viva/ Practicals	F&S	II	
CO 3	Identify the specification of Shabda, Sparsha, Rupa, Rasa, Gandha in Dravya	Cognitive/ problem solving	MK	Knows how	Demonstration of Dravyas like-kutki, gojihva, guduchi, yashtimadhu, sariva etc.	Viva/ Practicals	F&S	II	
CO 3	find the different therapies based on 5 Sartha Gunas. e.g.Gandha. Shabda, Sparsha.	Cognitive/ problem solving	DK	knows	Demonstration/ discussion/ brainstorming	Viva/ Practicals	F&S	II	

CO 3	Observe of the effects of Seasons on Gurvadi gunas in body, nature	Cognitive/ problem solving	MK	Knows how	Practical/Demo nstration	Viva/ Practicals	F&S	II	
CO 3	Correlate Gurvadi gunas with concepts learned in Physics, Chemistry and Biology.	Cognitive/ comprehen sion	MK	Knows how	Demonstration/ discussion/ brainstorming	Viva/ Practicals	F&S	II	
CO 3	Identify the paratva- aparatva in five examples	Cognitive/ problem solving	MK	Knows how	Practical/Demo nstration	Viva/ Practicals	F&S	II	
CO 3	Perform the Sanskar (toyasannikarsha/vasan/ Bhavana)	Cognitive/ problem solving and Psychomot or	MK	Shows	Practical/Demo nstration	Viva/ Practicals	F&S	II	
CO 3	Frame the real life situations related to Atma Guna(sukha, dukkha etc)	Cognitive/ problem solving	MK	Knows how	Demonstration/ discussion/ brainstorming	Viva/ Practicals	F&S	II	
Practical -6 Karma Time (Practical/ Clinical 3 hours)									
CO 3	Discuss Karma	Cognitive/ Recall	MK	Knows how	Demonstration/ discussion/ brainstorming	Viva	F&S	II	
CO 3	Classify Karma in given examples (panchakarma/Shastrakar	Cognitive/ problem solving	MK	Knows how	Demonstration/ Practical	Viva/ Practicals	F&S	II	

	ma)								
CO 3	Illustrate five types of Karma in collage of pictures/ photos	Cognitive/ problem solving	MK	Knows how	Practical/Demo nstration	Viva/ Practicals	F&S	II	
CO 3	compare Karma with concepts learned in Physics, Chemistry etc.	Cognitive/ Comprehe nsion	MK	Knows	Practical/Demo nstration	Viva/ Practicals	F&S	II	
Practical – 7 Pratyaksha Praman Time (Practical/ Clinical 5 hours)									
CO4	Discuss Pratyaksha Praman	Cognitive/ Recall	MK	Knows how	Demonstration/ discussion/ brainstorming	Viva	F&S	II	
CO4	Find identification marks for identification of herbs/ minerals which need Pratyaksha.	Cognitive/ problem solving	MK	Knows how	Demonstration/ Practical	Viva/ Practicals	F&S	II	
CO4	Note down the factors from Prakruti analysis which need pratyaksh (like- colour, dry skin)	Cognitive/ problem solving	MK	Knows how	Practical/Demo nstration	Viva/ Practicals	F&S	II	
CO4	Discuss the use of pratyaksha in examination of patient and Diagnosis of disease.	Cognitive/ problem solving	MK	Knows how	ECE/ discussion	Viva/ Practicals	F&S	II	
CO4	identifies with examples of Shabda,(snigdha/ ruksha etc) Sparsha (snigdha/ ruksha etc), Rupa, Rasa(taste threshold video),	Cognitive/ problem solving	MK	Knows how	Practical/Demo nstration/ Shabd from recordings, (snigdha/ ruksha etc)	Viva/ Practicals	F&S	II	

	Gandha.				Sparsha by touching or instruments. (snigdha/ruksha etc), Rupa, Rasa(taste threshold video), Gandha.(intensity of Smell)				
CO4	Identifies the gunas which can be perceived by one sense (ekendriya) organ and more than one sense organ (Dwiendriya etc).	Cognitive/ problem solving	MK	Knows how	Demonstration/ discussion/ brainstorming	Viva/ Practicals	F&S	II	
Practical -8 Pratyaksha Badhakar Bhav Time (Practical/ Clinical 2 hours)									
CO4	Discuss Pratyaksha Badhakar Bhav (limitations of pratyaksha.)	Cognitive/ recall	MK	Knows	Lecture	Viva	F&S	II	
CO4	Identify and classifies Pratyaksha badhakar Bhav in given examples.	Cognitive/ problem solving	MK	Knows how	Demonstration/ Practical. Ask examples or encourage to identify examples.	Viva/ Practicals	F&S	II	
CO4	Justify the use of various equipment in	Cognitive/ problem solving	MK	Knows how	Demonstration/ discussion/ brainstorming/	Viva/ Practicals	F&S	II	

	examination of patient and Diagnosis of disease.				Video Clips				
Practical -9 Anuman praman Time (Practical/ Clinical 5 hours)									
CO4	Discuss Anuman praman	Cognitive/ Recall	MK	Knows	Demonstration/ discussion/ brainstorming	Viva	F&S	II	
CO4	Identify and classify Anuman praman with type in given examples.	Cognitive/ problem solving	MK	knows	Demonstration/ Practical, Ask examples or encourage to identify examples.	Practical/De monstration	F&S	II	
CO4	Find examples of Vyapti (associations)in real life.	Cognitive/ problem solving	MK	Knows how	Practical/Demo nstration. Ask examples or encourage to identify examples.	Practical/De monstration	F&S	II	
CO4	Apply panchavayava vakya for drawing inference in practicals conducted	Cognitive/ problem solving	MK	Knows how	Practical/Demo nstration	Practical/De monstration	F&S	II	
CO4	Identify Hetvabhas in given examples	Cognitive/ problem solving	MK	Knows how	Practical/Demo nstration. Ask examples or encourage to identify examples.	Practical/De monstration	F&S	II	

CO4	Draw inference in various sciences on the basis of Vyapti.	Cognitive/ recall	MK	knows	Demonstration/ discussion/ brainstorming	Practical/ Demonstration	F&S	II	
Practical -10 Samanya Vishesh Siddhant Time (Practical/ Clinical 5 hours)									
CO 3	Discuss Samanya vishesh Siddhant	Cognitive/ Rcall	MK	Knows	Demonstration/ discussion/ brainstorming	Viva	F&S	III	
CO 3	Identify and classifies Samanya vishesh Siddhant with type in given examples.	Cognitive/ problem solving	MK	Knows how	Demonstration/ Practical/ Ask examples or encourage to identify examples.	Viva/ Practical	F&S	III	
CO 3	Identify samanyatva and visheshatva among plants in Vanaushadhi udyan	Cognitive/ problem solving	MK	Knows how	Practical/ Demonstration.	Viva/ Practicals	F&S	III	
CO 3	Make a chart/ eChart of food articles and activities to illustrate the relationship of samanya/vishesha with dosha-dhatu-malas.	Cognitive/ problem solving	MK	Knows how	Practical/ Demonstration	Presentation /Viva/ Practicals	F&S	III	
CO 3	Make a poster seasonal vegetables and fruits which are Samanya/Vishesha with the dosha.	Cognitive/ problem solving	MK	Knows how	Practical	Presentation /Viva/ Practicals	F&S	III	
Practical -11 Samavay Time (Practical/ Clinical 1 hour)									
CO 3	Discuss Samavay	Cognitive/ Recall	MK	Knows	Demonstration/ discussion/ brainstorming	Viva	F&S	III	

CO 3	Mention five real life examples of Nitya and anitya sambandha.	Cognitive/ problem solving	MK	Knows how	Demonstration/ Practical/ Ask examples or encourage to identify examples.	Viva/ Practical	F&S	III	
Practical -12 Abhav Time (Practical/ Clinical 1)									
CO 3	Discuss Abhav	Cognitive/ Recall	MK	Knows how	Demonstration/ discussion/ brainstorming	Viva	F&S	III	
CO 3	Write real life experiences of pragabhava, pradhwamsabhava, atyantabhava and anyonyabhav.	Cognitive/ problem solving	MK	Shows	Demonstration/ Practical/ Ask examples or encourage to identify examples.	Viva	F&S	III	
Practical - 13 Upman Praman Time (Practical/ (Practical/ Clinical 1 hour)									
CO4	Discuss Upaman Praman	Cognitive/ Recall	MK	Knows how	Demonstration/ discussion/ brainstorming	Viva/ Practical	F&S	III	
CO4	Illustrate Upamana in practical examples and real life situation.	Cognitive/ problem solving	MK	Knows how	Demonstration/ Practical/ Ask examples or encourage to identify examples.	Viva/ Practicals	F&S	III	
CO4	Identify Examples of upamana from Ashtang Hridaya and Charak Samhita	Cognitive/ problem solving	MK	Knows how	Demonstration/ discussion/ brainstorming.	Viva/ Practicals	F&S	III	

CO4	Identify examples in Physics, chemistry biology where Upaman is used	Cognitive/ Comprehen sion	MK	Knows how	Demonstration/ discussion/ brainstorming/ Ask examples or encourage to identify examples.	Viva/ Practicals	F&S	III	
Practical -14 Yukti Praman Time (Practical/ Clinical 1 hour)									
CO4	Discuss Yukti Praman	Cognitive/ Recall	MK	Knows	Demonstration/ discussion/ brainstorming	Viva	F&S	III	
CO4	Illustrate examples of Yukti in practical life or with your prior learning.	Cognitive/ problem solving	MK	Knows how	Demonstration/ Practical/ Ask exapmles or encourage to identify examples.	Viva/ Practicals Quiz	F&S	III	
CO4	Identify Role of Yukti in Nidan, Chikitsa and Anusandhan (research).	Cognitive/ problem solving	MK	Knows how	ECE/ Demonstration/	Viva/ Practicals/ PBL	F&S	III	
Practical -15 Various Vadas Time (Practical/ Clinical 3 hour)									
CO5 CO2	Discuss Satkaryavad	Cognitive/ Recall	MK	Knows how	Demonstration/ discussion/ brainstorming	Viva	F&S	III	
CO5 CO2	Justify Satkaryavad through real life examples/ examples from prior learning	Cognitive/ comprehen sion	MK	Knows how	Demonstration/ Practical/ /Ask examples or encourage to identify examples.	Viva/ Practicals/ PBL	F&S	III	
CO5 CO2	Justify Parinamvad	Cognitive/ comprehen	MK	Knows how	Practical/Demo nstration/ /Ask	Viva/ Practicals	F&S	III	

	through real life examples/ examples from prior learning	sion			examples or encourage to identify examples.				
CO5 CO2	Justify Pakajotpatti through real life examples/ examples from prior learning	Cognitive/ comprehension	MK	Knows how	Practical/Demonstration/ /Ask examples or encourage to identify examples.	Viva/ Practicals	F&S	III	
CO5 CO2	Justify Swabhavoparamvad through real life examples/ examples from prior learning	Cognitive/ comprehension	MK	Knows how	Demonstration/ discussion/ brainstorming/ /Ask examples or encourage to identify examples.	Viva/ Practicals	F&S	III	
CO5 CO2	Justify Arambhavad through real life examples/ examples from prior learning	Cognitive/ comprehension	MK	Knows how	Demonstration/ Practical//Ask examples or encourage to identify examples.	Viva/ Practicals	F&S	III	
Practical -16 Cause and Effect theory Time (Practical/ Clinical 2 hours)									
CO5, CO2	Discuss Cause and effect theory	Cognitive/ comprehension	MK	Knows	Demonstration/ discussion/ brainstorming	Viva/ Quiz	F&S	III	
CO5 CO2	Identify Samavayi, Asamavayi and Nimittakaran of a Karya in real life examples/ examples with prior learning	Cognitive/ problem solving	MK	Knows How	Demonstration/ Practical/Ask examples or encourage to identify examples.	Viva/ Practicals	F&S	III	

CO5	Find out use of cause effect theory in other sciences.	Cognitive/ comprehension	MK	Knows how	Practical/Demonstration	Viva/ Practicals/ Debate	F&S	III	
CO5	Represent cause and effect schematically in any examples	Cognitive/ comprehension	MK	Knows how	Practical/Demonstration	Viva/ Practicals	F&S	III	
CO5	Assess the 10 factors of Charakokta Karyakarana bhava regarding any task consider the task as karya	Cognitive/ problem solving	MK	Knows how	Practical/Demonstration	Viva/ Practicals	F&S	III	
CO5	Write theories of evolution you learned within and other than syllabus.	Cognitive/ comprehension	MK	Knows how	Practical/Demonstration	Viva/ Practicals	F&S	III	

Table: Non Lecture Activities**Table- Course PADARTHA VIJANAM Non Lecture Activities- 140**

	List non lecture Teaching-Learning methods *	No of Activities
1	GROUP DISCUSSION	20
2	PRACTICALS AND DEMONSTRATIONS	45
3	ACTIVITY BASED LEARNING	10
4	PROBLEM BASED LEARNING	10
5	ENQUIRY BASED LEARNING	8
6	CASE BASED LEARNING	6
7	GAME BASED LEARNING	8
8	FLIPPED CLASSROOMS	6
9	DEBATE	8
10	SEMINARS	6
11	TUTORIALS	5
12	ROLE PLAY	5
13	SELF DIRECTED LEARNING	3
		140

Table: Assessment Summary**A - Number of Papers and Marks Distribution**

S.No.	Subject Code	Papers	Theory	Practical/Clinical Assessment					Grand Total
				Practical /Clinical	Viva	Electives	IA	Sub Total	
2.	AyUG-PV	2	200	100	60	10 (Set-FB)	30	200	400

B - Scheme of Assessment (formative and Summative)

SR.NO.	PROFESSIONAL COURSE	DURATION OF PROFESSIONAL COURSE		
		First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)
1	First	3 PA & First TT	3 PA & Second TT	3 PA & UE

PA: Periodical Assessment; TT: Term Test; UE: University Examinations

C - Calculation Method for Internal assessment Marks (30 Marks)

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/3)	Converted to 30 Marks (D/15)*30)	Term Test (Marks converted to 30)	Sub Total _/60 Marks	Term Assessment (..../30)

FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Methods which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks)(MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert to 30 marks.							

D -Evaluation Methods for Periodical Assessment

S. No.	Evaluation Methods
12.	Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3.
13.	Practical / Clinical Performance
14.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
15.	Open Book Test (Problem Based)
16.	Summary Writing (Research Papers/ Samhitas)
17.	Class Presentations; Work Book Maintenance
18.	Problem Based Assignment
19.	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
20.	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
21.	Small Project
22.	PADARTHA VIJANAM Specific Test on Topics in list of practicals.

E- Paper Layout

I PROFESSIONAL BAMS EXAMINATIONS

Paper-I

Time: 3 Hours Maximum Marks: 100

INSTRUCTIONS: All questions compulsory

TOTAL MARKS 100

		Number of Questions	Marks per question	Total Marks
Q 1	Multiple Choice Questions (MCQ)	20	1	20
Q 2	Short answer questions (SAQ)	8	5	40
Q 3	Long answer questions (LAQ)	4	10	40
				100

I PROFESSIONAL BAMS EXAMINATIONS

Paper-II

Time: 3 Hours Maximum Marks: 100

INSTRUCTIONS: All questions compulsory

TOTAL MARKS 100

		Number of Questions	Marks per question	Total Marks
Q 1	Multiple Choice Questions (MCQ)	20	1	20
Q 2	Short answer questions (SAQ)	8	5	40
Q 3	Long answer questions (LAQ)	4	10	40
				100

F- Distribution of Theory Exam

	Paper I			D Type of Questions “Yes” can be asked. “No” should not be asked.		
	A List of topics	B Term	C Marks	MCQ (1 mark)	SAQ (5 marks)	LAQ (10 marks)
1	Ayurveda nirupana	I	25	Yes	Yes	Yes
2	Padartha and darshana nirupana	I		Yes	Yes	Yes
3.	Dravya vijnaneeyam	II	48	Yes	Yes	Yes
4.	Guna vijnaneeyam	II		Yes	Yes	Yes
5.	Karma vijnaneeyam	II		Yes	Yes	Yes
6.	Samanya vijnaneeyam	III	27	Yes	Yes	Yes
7.	Vishesha vijnaneeyam	III		Yes	Yes	Yes
8.	Samavaya vijnaneeyam	III		Yes	Yes	No
9	Abhava vijnaneeyam	III		Yes	Yes	No

	Paper II			D Type of Questions “Yes” can be asked. “No” should not be asked.		
	A List of Topics	B Term	C Marks	MCQ (1 Mark)	SAQ (5 Marks)	LAQ (10 Marks)
1	Pariksha	I	26	YES	YES	YES
2	Aptopdesha Pariksha/Pramana	I		YES	YES	YES
3.	Pratyaksha Pariksha/Pramana	II	42	YES	YES	YES
4.	Anumanapariksha/Pramana	II		YES	YES	YES
5.	Yuktipariksha/Pramana	III	32	YES	YES	NO
6.	UpamanaPramana	III		YES	YES	NO
7.	Karya- Karana Siddhanta	III		YES	YES	YES

G- Question paper blue print
Paper I –

A Question Sr. No	B Type of Question	C Question Paper Format
.Q1	Multiple choice Questions (MCQ)	1. Topic number 1 2. Topic number 2 3. Topic number 3

	20 Questions 1 mark each All compulsory (Must Know 15 MCQ Desirable to know 3 MCQ Nice to know 2 MCQ)	4. Topic number 4 5. Topic number 5 6. Topic number 6 7. Topic number 7 8. Topic number 8 9. Topic number 9 10. Topic number 2 11. Topic number 3 12. Topic number 4 13. Topic number 5 14. Topic number 6 15. Topic number 7 16. Topic number 9 17. Topic number 1 18. Topic number 2 19. Topic number 3 20. Topic number 4
Q2	Short answer Questions (SAQ) Eight Questions 5 Marks Each All compulsory (Must know 7 . Desirable to know 1 No Questions on Nice to know.)	1. Topic no.1 2. Topic no.2 3. Topic no.3 4. Topic no.4 5. Topic no.5 6. Topic no.6/ Topic no.7 7. Topic no.8/ Topic no.9 8. Topic no.3/ Topic no.4
Q3	Long answer Questions (LAQ) Four Questions 10 marks each All compulsory (All questions on Must to know. No Questions on Nice to know and Desirable to know.)	1. Topic no.1/ Topic no.2 2. Topic no.3 3. Topic no.4/Topic no.5 4. Topic no.6/ Topic no.7

Paper II

A Question Sr. No	B Type of Question	C Question Paper Format
Q1	Multiple choice Questions (MCQ) 20 Questions 1 mark each All compulsory	1. Topic number 1 2. Topic number 2 3. Topic number 3 4. Topic number 4 5. Topic number 5 6. Topic number 6 7. Topic number 7

	(Must know 15 MCQ Desirable to know 3 MCQ Nice to know 2 MCQ)	8. Topic number 1 9. Topic number 2 10. Topic number 3 11. Topic number 4 12. Topic number 5 13. Topic number 6 14. Topic number 7 15. Topic number 1 16. Topic number 2 17. Topic number 3 18. Topic number 4 19. Topic number 7 20. Topic number 4
Q2	Short answer Questions (SAQ) Eight Questions 5 Marks Each All compulsory (Must know 7 . Desirable to know 1 No Questions on Nice to know.)	1. Topic no.1 2. Topic no.2 3. Topic no.3 4. Topic no.4 5. Topic no.5 6. Topic no.6 7. Topic no.7 8. Topic no.3/ Topic no.4
Q3	Long answer Questions (LAQ) Four Questions 10 marks each All compulsory (All questions on must know No Questions on Nice to know and Desirable to know)	1. Topic no.1/ Topic no.2 2. Topic no.3 3. Topic no.4 4. Topic no.7

H Distribution of Practical Exam

Practical – (Practical 100 +Viva 60+Elective 10+ IA 30) =(Total 200 Marks)

SN	Heads	Marks
1	Practical (Total Marks 100)	100
a.	Spotting (4 Spots) Problem based on Principles in PV. Topics 1. Pratyaksha praman/Pratyaksha Badhakar Bhav 2. Vada (Any one) 3. Abhav/Samavay	20

	4. Upaman/Yukti	
b.	Journal of Activity book/ Projects. (Viva on journal and communication skill)	20
c.	Practical I (10 Marks Each) 1. Identify panchamahabhoot dominance in the given dravya 2. Identify Samanya- Vishesh in the given dravyas 3. Identify the Gunas in the given dravyas (Use different dravyas for different students.)	30
d.	Practical II (Problem based questiones/ Situations)(10 Marks Each)(Any three) 1. Identify and explain the Karya Karan with types in given problem 2. Frame and Write Panchavayav vakya for the given anuman. 3. Identify Vyapti, Paksh, Sadhya, Hetu, Pakshadharmata, Sapaksha, Vipaksha in the give example. 4. Identify and explain Hetvabhas in given example. 5. Identify the vada applicable in given example.(any one vada.) 6. Identify Upama, Sajna- sajni sambhandha in given example.	30
2	Viva Voce	60
	Recitation of Shloka: 10 marks (sutras in Tarka sangraha, Samhitas, other)	
	Questions on Darshan 10 marks	
	Question on Dravya/ Guna/ Karma. 10 marks	
	Question on Samany/vishesh/samavaya/ Abhav 10 Marks	
	Question on one Praman 10 Marks	
	Question on Karya karan bhav 10 Marks.	
3	Internal Assessment	30
4	Electives	10
		200

References /Resources

Reference Books

PadarthaVignana books

1. Padarthavigyan
2. AyurvediyaPadarthaVigyana
3. Ayurved Darshana
4. PadarthaVigyana
5. PadarthaVigyana
6. SankhyatantwaKaumadi

Authorus

Acharya Ramraksha Pathak
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7.	Psycho Pathology in Indian Medicine	Dr. S.P. Gupta
8.	CharakEvumSushrutkeDarshanik Vishay	Prof.Jyotirmitra Acharya
9.	AyurvediyaPadarthaVigyana	Dr. Ayodhya Prasad Achal
10.	PadarthaVigyana	Dr. Vidyadhar Shukla
11.	Post graduate text book of Samhitha&Sidhanta	Dr P.P.Kirathamoorthy and Dr Anoop AK
12.	Padartha Vigyana	Dr. Ravidutta Tripathi
13.	AyurvediyaPadarthaVigyana	Vaidya Ramkrishna Sharma Dhand
14.	AyurvediyaPadartha Vignan Parichaya	Vaidya Banwarilal Gaur
15.	AyurvediyaPadartha Darshan	Pandit Shivhare
16.	Scientific Exposition of Ayurveda	Dr. Sudhir Kumar
17.	Padarthavignana and Ayurveda itihasa	Dr C R Agnives
18.	Essentials of padarthavignana	Dr Vinodkumar MV
19.	Padarthavignanevam Ayurveda Itihas	Dr RamnihorTapsi Jaiswal
20.	AyurvediyaPadarthavignana	Dr C R Agnives
21.	AyurvediyaMoulikaSiddhanta	Dr V J Thakkar

KRIYA SHARIRA

Table : Contents of Course

Paper I – AyUG-KS					
Sr N o	A2 List of Topics AyUG-KS Paper I	B2 Term	C2 Mark s	D2 Lecture hours	E2 Non- Lectur e hours
PART-A (Marks-60)					
1	Sharir: DefinitionandsynonymsoftermKriya, Sharir & Shaarir. DescriptionofSharirDoshaandManasaDosha.Mutual relationshipbetweenTriguna-Tridosha&Panchmahabhuta.	I	08	2	1
2	BasicprinciplesofAyurveda: Dosha dhatu mala mulam hi shariram. DescriptionofbasicsofSrotas	I		2	1
3.	Tridosha: General descriptionofTridosha. Inter relationshipbetween Ritu-Dosha-Rasa-Guna.BiologicalrhythmsofTridoshaonthebasisofday-night-age-seasonandfoodintake.RoleofDoshaintheformationofPrakritiofanindividualandinmaintainingofhealth.Prakritaand VaikritaDosha.	I		3	0
4.	VataDosha: Vyutpatti(derivation),Nirukti(etymology)oft hetermVata,generalallocations,generalpropertiesandgenera lfunctionsofVata,fivetypesofVata(Prana,Udana,Samana, Vyana,Apana)withtheirspecificlocations,specificproperti es,andspecificfunctions.	I	26	6	2
5.	PittaDosha: Vyutpatti,NiruktiofthetermPitta,generalloca	I		5	1

	tions, general properties and general functions of Pitta, five types of Pitta (Pachaka, Ranjaka, Alochaka, Bhrajaka, Sadhaka) with their specific locations, specific properties, and specific functions. Similarities and differences between Agni and Pitta.				
6.	Kapha Dosha: Vyutpatti, Nirukti of the term Kapha, general locations, general properties and general functions of Kapha, five types of Kapha (Bodhaka, Avalambaka, Kledaka, Tarpaka, Śleshaka) with their specific locations, specific properties, and specific functions.	II		4	1
7.	Dosha Vriddhi-Kshaya: Etiological factors responsible for Dosha Vriddhi, Dosha Kshaya and their manifestations.	II		1	1
8.	Kriyakala: Concept of Kriyakala, applied physiology of diseases produced due to the vitiation of vata, pitta and kapha.	II		1	1
9	Prakriti: Deha- Prakriti: Vyutpatti, Nirukti, various definitions and synonyms for the term "Prakriti". Intra-uterine and extra-uterine factors influencing Deha-Prakriti, classification and characteristic features of each kind of Deha-Prakriti. Manasa-Prakriti: Introduction and types of Manasa-Prakriti	II		7	3
10.	Ahara: Definition, classification and significance of Ahara, Ahara-vidhi-vidhana, Ashta Aharavidhi Viseshayatana, Ahara Parinamkar Bhava.	III		3	1
11.	Agni: Definition and importance, synonyms, classification, location, properties and functions of Agni and functions of Jatharagni, Bhutagni, and Dhatvagni.	III		4	1
12.	Aharapaka (Process of digestion): Description of Annavaha Srotas and their Mula. Description of Avasthapaka (Madhura, Amla and Katu). Description of Nishthapaka (Vipaka) and its classification. Role of Grahani & Pittadhara Kala. Separation of Sara and Kitta. Absorption of Sara. Genesis of Vata-Pitta-Kapha during Aharapaka process. Definition of the term Koshtha. Classification of Koshtha and the characteristics of each type of Koshtha.	III	26	7	2

PART-B (Marks-40)

1	Physiology Homeostasis: Definition and mechanisms of maintenance of homeostasis. Cell physiology. Membrane physiology. Transportation of various substances across cell membrane. Resting membrane potential and action potential. Acid-base balance, water and electrolyte balance. Study of basic components of food.	I	23	5	1

2	Physiology of Respiratory system: functional anatomy of respiratory system. Definition of ventilation, mechanism of respiration, exchange and transport of gases, neural and chemical control of respiration, artificial respiration, asphyxia, hypoxia. Introduction to Pulmonary Function Tests.	II		5	2
3	Physiology of Gastrointestinal system: Functional anatomy of gastro-intestinal tract, mechanism of secretion and composition of different digestive juices. Functions of salivary glands, stomach, liver, pancreas, small intestine and large intestine in the process of digestion and absorption. Movements of the gut (deglutition, peristalsis, defecation) and their control. Enteric nervous system. Digestion and metabolism of proteins, fats and carbohydrates. Vitamins & Minerals-sources, daily requirement, functions, manifestations of hypo and hypervitaminosis.	II		7	2
4	Physiology of Nervous System: General introduction to nervous system, neurons, mechanism of propagation of nerve impulse, physiology of CNS, PNS, ANS; physiology of sensory and motor nervous system, Functions of different parts of brain and physiology of special senses, intelligence, memory, learning and motivation. Physiology of sleep and dreams, EEG. Physiology of speech and articulation. Physiology of temperature regulation.	III	17	7	3
5	Physiology of Endocrine glands: General introduction to endocrine system, classification and characteristics of hormones, physiology of all endocrine glands, their functions and their effects.	III		6	2

Paper II – AyUG-KS

	A2 List of Topics Paper I I	B2 Term	C2 Mark s	D2 Lecture hours	E2 Non- Lecture hours

PART-A (Marks-60)

1	Dhatu: Etymology, derivation, definition, general introduction of term Dhatu, different theories related to Dhatuposhana (Dhatuposhana Nyaya)	I		2	1
2	Rasa Dhatu: Etymology, derivation, location, properties, functions and Praman of Rasa-dhatu. Physiology of Rasavaha Srotas, Formation of Rasa Dhatu from Aahara Rasa, circulation of Rasa (Rasa-Samvahana), role of Vyana Vayu and Samana Vayu in Rasa Samvahana. Description of functioning of Hridaya. Ashtavidha Sara, characteristics of Tvakasara Purusha, conceptual study of Aashraya-Aashrayi Bhaava and its	I	18	4	1

	relation to Rasa and Kapha. Manifestations of kshaya and Vriddhi of Rasa				
3.	Rakta Dhatu: Etymology, derivation, synonyms, location, properties, functions and Praman of Rakta Dhatu. Panchabhautikakva of Rakta Dhatu, physiology of Raktavaha Srotas, formation of Raktadhatu, Ranjana of Rasa by Ranjaka Pitta, features of Shuddha Rakta, specific functions of Rakta, characteristics of Raktasara Purusha, manifestations of Kshaya and Vriddhi of Raktadhatu, mutual interdependence of Rakta and Pitta.	I		3	1
4.	Mamsa Dhatu: Etymology, derivation, synonyms, location, properties and functions of Mamsa Dhatu, physiology of Mamsavaha Srotas, formation of Mamsa Dhatu, characteristics of Mamsasara Purusha, manifestations of Kshaya and Vriddhi of Mamsa Dhatu, Concept of Peshi.	I		2	1
5.	Meda Dhatu: Etymology, derivation, location, properties, functions and Praman of Meda Dhatu, physiology of Medovaha Srotas, formation of Medo Dhatu, characteristics of Medasara Purusha and manifestations of Kshaya and Vriddhi of Meda.	I		3	1
6.	Asthi Dhatu: Etymology, derivation, synonyms, location, properties, functions of Asthi Dhatu. Number of Asthi. Physiology of Asthivaha Srotas and formation of Asthi Dhatu, characteristics of Asthisara Purusha, mutual interdependence of Vata and Asthi Dhatu, manifestations of Kshaya and Vriddhi of Asthi Dhatu.	II		2	1
7.	Majja Dhatu : Etymology, derivation, types, location, properties, functions and Praman of Majjaa Dhatu, physiology of Majjavaha Srotas, formation of Majja Dhatu, characteristics of Majja Sara Purusha, relation of Kapha, Pitta, Rakta and Majja, manifestations of Kshaya and Vriddhi of Majja Dhatu.	II		3	1
8.	Shukra Dhatu: Etymology, derivation, location, properties, functions and Praman of Shukra Dhatu, physiology of Shukraravaha Srotas and formation of Shukra Dhatu. Features of Shuddha Shukra, characteristics of Shukra-Sara Purusha, manifestations of Kshaya and Vriddhi of Shukra Dhatu.	II		3	1
9	Concept of Ashraya-Ashrayi bhava i.e. inter-relationship among Dosha, Dhatu Mala and Srotas. Applied physiology of diseases asserting saptadhatu enlisted under dhatu pradoshaj vikar.	II		1	1

10.	Ojas: Etymological derivation, definition, formation, location, properties, Praman, classification and functions of Ojas. Description of Vyadhikshamatva. Bala Vriddhikara Bhava. Classification of Bala. Etiological factors and manifestations of Ojavisramsas, Vyapat and Kshaya.	II		3	1
11.	Upadhatu: General introduction, etymological derivation and definition of the term Upadhatu. Formation, nourishment, properties, location and functions of each Upadhatu. Stanya: Characteristic features and methods of assessing Shuddha and Dushita Stanya, manifestations of Vriddhi and Kshaya of Stanya. Artava: Characteristic features of Shuddha and Dushita Artava. Differences between Raja and Artava, physiology of Artavavaha Srotas. Tvak: classification, thickness of layer and functions.	II		6	1
12.	Mala: Etymological derivation and definition of the term Mala. Aharamala: Enumeration and description of the process of formation of Aharamala. Purisha: Etymological derivation, definition, formation, properties, quantity and functions of Purisha. Physiology of Purishavaha Srotas, manifestations of Vriddhi and Kshaya of Purisha. Mutra: Etymological derivation, definition, formation, properties, quantity and functions of Mutra. Physiology of Mutravaha Srotas, physiology of urine formation in Ayurveda, manifestations of Vriddhi and Kshaya of Mutra. Sveda: Etymological derivation, definition, formation and functions of Sveda. Manifestations of Vriddhi and Kshaya of Sveda. Description of Svedvaha Srotas Dhatumala: Brief description of each type of Dhatumala.	III	23	6	2
13	Indriyavidnyan: Physiological description of Panchagyaanendriya and physiology of perception of Shabda, Sparsha, Rupa, Rasa and Gandha. Physiological description of Karmendriya.	III		1	1
14	Manas: Properties, functions and objects of Manas. Physiology of Manovaha Srotas.	III		2	1
15	Atma: Properties of Atma. difference between Paramatma and Jivatma; Characteristic features of existence of Atma in living body.	III		2	0
16	Nidra&Swapna: Nidrotipatti, types of Nidra, physiological and clinical significance of Nidra; Svapnotipatti and types of Swapna.	III		2	0

PART-B (Marks-40)

1	Haemopoietic system: composition, functions of blood and blood cells, Haemopoiesis (stages and development of RBCs, and WBCs and platelets), composition and functions of bone marrow, structure, types and functions of haemoglobin, mechanism of blood clotting, anticoagulants, physiological basis of blood groups, plasma proteins, introduction to anaemia and jaundice.	I	18	5	2
2	Immunity: classification of immunity: Innate, acquired and artificial. Different mechanisms involved in immunity: Humoral (B-cell mediated) and T-Cell mediated immunity. Hypersensitivity.	I		2	0
3	Physiology of cardio-vascular system: Functional anatomy of cardiovascular system. Cardiac cycle. Heart sounds. Regulation of cardiac output and venous return. Physiological basis of ECG. Heart-rate and its regulation. Arterial pulse. Systemic arterial blood pressure and its control.	I		5	2
4	Muscle physiology: comparison of physiology of skeletal muscles, cardiac muscles and smooth muscles. Physiology of muscle contraction.	II	07	2	0
5	Adipose tissue: lipoproteins like VLDL, LDL and HDL triglycerides. Functions of skin, sweat glands and sebaceous glands.	II		2	1
6	Physiology of male and female reproductive systems: Description of ovulation, spermatogenesis, oogenesis, menstrual cycle.	II	15	5	2
7	Physiology of Excretion: functional anatomy of urinary tract, functions of kidney. Mechanism of formation of urine, control of micturition. Formation of faeces and mechanism of defecation.	III		4	2
8	Special Senses, Sleep and Dreams: Physiology of special senses. physiology of sleep and dreams	III		5	1

Table: Learning objectives (Theory)

PAPER I									
A3 Course out	B3 Learning Objective (At the end of	C3 Do mai n	D3 Must to know/	E3 Leve l Does	F3 T-L method	G3 Asse sme nt	H3 Form ative /sum	I3 Te rm	J3 Inte grati on

com e	the session the Students should be able to)		desire to know/ Nice to know	/ Sho ws how/ Sho ws/ Kno ws how/ Kno ws			mativ e		
Paper I (Part A) (60 Hours)									
Topic 1 – Sharir (human body) (3 hr) [Lecture: 2 hours, non-lecture: 1 hour]									
C O 1	Explain the definition and synonyms of the term <i>kriya</i> , <i>sharira</i> and <i>shaarira</i>	Cognitiv e (recall, compreh ension)	Mk	K	Lectu re	Written/ (MCQ, MEQ, LAQ, SAQ) Viva voce	F & S	I	
C O 2	Enlist the <i>shariradosh a</i> and <i>manasadosh a</i> and	Cognitiv e (recall, compreh ension)	Mk	K	Lectu re Discu ssion	Written/ Viva voce	F & S	I	
C O 1	Explain mutual relationship between <i>triguna</i> , <i>panchmaha bhuta</i> and <i>tridosha</i>	Cognitiv e (compre hension)	Mk	Kh	Lectu re Discu ssion	Written/ Viva voce	F & S	I	
Topic 2 – Basic Principles of Kriya Sharir (3 hr) [Lecture: 2 hours, non-lecture: 1 hour]									
C O 1	Express critical view of why <i>dosha-dhatu-mala</i> are described in specific numbers.	Cognitiv e (recall)	Dk	Kh	Discu ssion	Written	F	I	
C O 1	Explain the principle of “ <i>dosha-dhatu-mala</i> ”	Cognitiv e (recall)	Mk	Kh	Lectu re Discu ssion	Written	F & S	I	

	<i>mulam hi shariram</i> ".								
C O 1	Discuss term homeostasis in <i>dosha-dhatu-mala</i> .	Cognitive (comprehension)	Dk	Kh	Discussion	Viva voce	F	I	
C O 1	Explain role of <i>srotas</i> in the body.	Cognitive (comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
C O 1	Explain the basic concept of <i>srotas</i> and classify different <i>srotas</i> based on Rachana (morphological), <i>kriya</i> (functions) and <i>guna</i> (properties)	Cognitive (comprehension)	Mk	Kh	Lecture Discussion Flipped classroom	Written/ Viva voce	F & S	I	<i>Rachana sharir</i>
C O 1	Describe the significance of the knowledge of <i>srotas</i> in <i>kriyasharira</i>	Cognitive (comprehension)	Mk	Kh	Discussion	Written/ Viva voce	F & S	I	
C O 1	Compare <i>mulasthanas</i> of <i>srotas</i> described in <i>samhitas</i> in view of <i>kriyasharir</i> and contemporary medical science	Cognitive (application)	Dk	Kh	Model Discussion Tutorial Assignment	Viva voce	F & S	I	
C O 1	Find out similarities and differences between <i>srotas</i> and system of contemporary science.	Cognitive (application)	Nk	Kh	Discussion Self-learning Think-Pair-Share	Short notes	F	I	

C O 1	Document observations on correlation of any environmental global change and physiological variation as per Ayurved, contemporary sciences.	Cognitive (application)	Nk	Kh	Discussion Self-learning Think-Pair-Share	Short notes	F	I	
C O 1	Recognize the contribution of Ayurveda in the formation of four basic principles of Bioethics mentioned in contemporary science.	Cognitive (recall) (comprehension)	Nk	Kh	Lecture Discussion	Written	F	I	
Topic 3 – Tridosha (Three humors of the body) (3 hr) [Lecture: 3 hours, non-lecture: 0 hours]									
C O 1	Describe <i>utpatti</i> (<i>prasad & malabhuta</i>), locations of <i>dosha</i> .	Cognitive (recall)	Mk	K	Lecture	Written/ Viva voce	F & S	I	
C O 1	State biological rhythms or circadian cycle of <i>tridosha</i> based on day-night-age-season food intake and relation to the environment	Cognitive (comprehension)	Mk	Kh	Lecture discussion Seminar	Written/ Viva voce	F & S	I	
C	Explain the	Cognitive	Mk	Kh	Lecture	Written/	F	I	

O 1	applied role of <i>dosha</i> in maintaining health and State of equilibrium and recognize the role of <i>dosha</i> in the formation of <i>prakriti</i> of an individual	e (compre hension)			re discus sion Semi nar	Viva voce	& S		
C O 1	State importance of <i>dosha</i> in lifestyle management and mutual relationship between <i>ritu-kala-dosha-rasa-guna</i>	Cognitiv e (applicat ion)	Nk	Kh	Discu ssion PBL	Viva voce	S	I	
C O 1	Interpret <i>gurvadi guna</i> of <i>dosha</i> in term of applied physiology and clinical aspect in different chapters of Charak.	Cognitiv e (applicat ion)	Nk	Kh	Discu ssion PBL/ CBD	Written	F	I	<i>Padartha Vijnana. Kayachik itsa</i>
C O 1	Interpret <i>sama & niram lakshana</i> of <i>dosha</i>	Cognitiv e (compre hension)	Dk	Kh	Discu ssion	Written	F	I	
C O 1	Discuss the evidences of functional significance of <i>vata</i> , <i>pitta</i> and <i>kapha</i> in perspective of nervous,	Cognitiv e (applicat ion)	Nk	Kh	Discu ssion Think -Pair- Share	Self- assessm ent	S A	I	

	endocrine, immune or any other system.								
CO1	Discuss how to examine vruddhi-kshaya of dosha	Cognitive (comprehension)	Dk	Kh	Discussion PBL	Viva voce	S	I	
CO1	State materialism and immaterialism of tridosha	Cognitive (comprehension)	Mk	Kh	Discussion	Viva voce	F	I	
Topic 4 – Vata dosha (8 hr) [Lecture: 6 hours, non-lecture: 2 hours]									
CO1	Define the <i>vyutpatti</i> and <i>nirukti</i> of <i>vata</i> .	Cognitive (Recall)	Mk	K	Lecture	Written/ Viva voce	F & S	I	
CO1	Describe <i>guna</i> and general locations of <i>vata dosha</i> .	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO1	Describe general properties & functions of <i>vata dosha</i> and demonstrate the normal <i>gun</i> , <i>karma of vata dosha</i> in a healthy person.	Cognitive (Comprehension)	Mk	Kh/S h	Lecture Discussion	Written/ Viva voce	F & S	I	<i>Rognidan Vikriti Vidnyan</i>
CO1	Enlist five types of <i>vata</i> and describe <i>prana</i> , <i>udana vata</i> with their specific locations, properties and	Cognitive (Recall & Comprehension)	Mk	Kh	Lecture Confusion technique Demonstration Chart, Mode	Written/ Viva voce Skill assessment	F & S	I	

	functions.				l				
C O 1	Explain the term <i>nishwas</i> , <i>ucchwas</i> , <i>shwasan</i> & describe the role of <i>prana vayu</i> & <i>udana vayu</i> in <i>shwasan prakriya</i> .	Cognitive (Comprehension)	Mk	Kh	Lecture	Written/Viva voce	F & S	I	
C O 1	Describe <i>shwasan prakriya</i> according to <i>sharangadhara</i> .	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Model, Video	Written/Viva voce	F & S	I	
C O 1	Describe clinical importance of classification of <i>swara</i> and <i>vyanjana</i> according to their <i>uccharanasthan</i> .	Cognitive (Application)	Nk	Sh	Demonstration Discussion Assignment PBL/CBL	Self-assessment	S A	I	Sanskrit
C O 1	Describe the formation and articulation of <i>shabda</i> (words) and explain the bio-physiology of induction of <i>vaak</i> and role of <i>udaan vaayu</i> in it.	Cognitive (Comprehension)	Dk	Kh	Lecture A/V aids.	Written/Viva voce	F & S	I	
C O 1	Explain role of pranayama, <i>puraka</i> ,	Cognitive (Analysis)	Nk	Sh	Demonstration Discussion	Self-assessment	S A	I	<i>Swasthavrutta</i>

	<i>rechaka and kumbhaka in samyakash wasana, swara/ghosha utpatti</i>				ssion Assig nment PBL/ CBL				
C O 1	Describe <i>samana</i> with their specific locations, properties and functions.	Cognitiv e (Compr ehensio n)	Mk	Kh	Lectu re Discu ssion Confu sion techni que Demo nstrati on Chart, Mode l	Written/ Viva voce	F & S	I	
C O 1	Describe <i>vyana vata</i> with their specific locations, properties and functions.	Cognitiv e (Compr ehensio n)	Mk	Kh	Lectu re Discu ssion Confu sion techni que Demo nstrati on Chart, Mode l	Written/ Viva voce	F & S	I	
C O 1	Describe role of <i>vyana vayu&sama na vayu</i> in the process of <i>rasa-samvahana na</i>	Cognitiv e (Compr ehensio n)	Mk	Kh	Lectu re Discu ssion Semi nar	Written/ Viva voce	F & S	I	
C O 1	Review the contribution of <i>vyana and saman vayu</i> in the process of	Cognitiv e (Compr ehensio n)	Dk	K	Discu ssion	Written/ Viva voce	F	I	

	cardiac circulation.								
CO1	Interpret microbiota, gut brain axis for understanding enteric nervous system in perspective of <i>vata</i> , <i>saman vayu</i> .	Cognitive (Comprehension)	Nk	K	Discussion	Self-assessment	SA	I	
CO1	Describe <i>Apana vata</i> with their specific locations, properties and functions.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Confusion technique Demonstration	Written/ Viva voce	F & S	I	
CO1	Document & discuss your observations on correlation of functions of <i>apana vayu</i> with which type of nervous system & why?	Cognitive (Comprehension)	Nk	K	Discussion	Self-assessment	SA	I	
CO1	Illustrate gati (directions) of types of vata by using lebel diagramme.	Cognitive (analysis)	Dk	Kh	Illustration	Self-assessment Peer evaluation.	SA	I	
CO3	Explain difference between	Cognitive (Compr	MK	Kh	Chalk - board	Written/ Viva voce	F & S	I	

	<i>kshaya & vriddhi lakshana of vata Dosha</i>	ehensio n)			Prese ntatio n Symp osium Discu ssion				
C O5	Interpret which type of <i>vata dosha</i> gets vitiated and in which clinical condition the use of proper <i>aahar dravya</i> is prevalent as per <i>kshaya, vriddhi of vata dosha</i> .	Cognitiv e (Applica tion)	Dk	Sh	Demo nstrati on Discu ssion PBL	Written/ Viva voce	F & S	I	
C O 1	Recite and to explain the important verses of <i>vata dosha</i> . (ex- <i>sthana, karma, types, vriddhi and kshaya</i>)	Cognitiv e (Recall)	Dk	Sh	Discu ssion Recit ation	Written/ Viva voce	F & S	I	Sanskrit Samhita
Topic 5 – Pitta dosha (6 hr) [Lecture: 5 hours, non-lecture: 1 hour]									
C O 1	Define the <i>vyutpatti</i> and <i>nirukti</i> of <i>pitta</i> .	Cognitiv e (Recall)	Mk	Kh	Lectu re	Written/ Viva voce	F & S	II	
C O 1	Describe <i>guna</i> and general locations of <i>pittadosha</i> .	Cognitiv e (Compr ehensio n)	Mk	Kh	Lectu re Discu ssion Demo nstrati on	Written/ Viva voce Skill assessm ent	F & S	II	
C O 1	Describe general properties & functions of	Cognitiv e (Recall &	Mk	Kh	Lectu re Discu ssion	Written/ Viva voce	F & S	II	<i>Rognidan Vikriti Vidnyan</i>

	<i>pittadosha</i> and explain the normal <i>guna</i> , <i>karma of pitta dosha</i> in a healthy person.	Comprehension)			Seminar				
CO1	Enlist five types of <i>pittadosha</i> and describe <i>pachaka</i> with their specific locations, properties and functions.	Cognitive Recall	Mk	Kh	Lecture Discussion Demonstration	Written/ Viva voce	F & S	II	
CO1	Record your opinions about functions of pachak pitta and digestive enzymes separately.	Cognitive (Comprehension)	Nk	Kh	Group discussion	Self-assessment	SA	II	
CO1	Describe <i>ranjaka</i> pitta with their specific locations, properties and functions.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Demonstration	Written/ Viva voce	F & S	II	
CO1	Describe role of <i>ranjaka</i> pitta in <i>rasarajan</i> process as per different <i>aacharyas</i> .	Cognitive (Comprehension)	Dk	Kh	Lecture	Written/ Viva voce	F & S	II	
CO1	Interpret stages of erythropoiesis and role	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	

	of intrinsic factor, vit. B ₁₂ etc in hemopoiesis.	n)			Seminar				
CO1	Describe <i>alochaka</i> , <i>bhrajaka</i> , <i>sadhaka</i> pitta with their specific locations, properties and functions.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Demonstration	Written/ Viva voce	F & S	II	
CO1	Discuss rhodopsin and iodopsin along with <i>alochakapitta</i> and note down	Cognitive (Recall)	Nk	Kh	Self study	Self-assessment	S A	II	
CO1	Elaborate the functions of <i>bhrajaka</i> pitta in term physiology.	Cognitive (Comprehension)	Nk	Kh	Self study	Self-assessment	S A	II	
CO1	Describe the role of <i>sadhaka</i> pitta in <i>sadhana</i> , concentration and observe changes upon heart rate and respiratory rate	Attitude (Imitation)	Nk	Sh	Discussion Demonstration	Self-assessment	S A	II	
CO1	Find out similarities and differences between functions of <i>sadhaka</i>	Cognitive (Analysis)	Nk	Kh	Self study	Self-assessment	S A	II	

	pitta and neurotransmitter.								
CO1	Explain difference between <i>kshaya</i> & <i>vridhdhilakshana</i> of <i>pitta Dosh</i>	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO5	Interpret which type of <i>pittadosha</i> gets vitiated and in which clinical condition the use of proper <i>aahardravya</i> is prevalent as per <i>kshaya</i> , <i>vridhhi</i> of <i>pittadosha</i> .	Cognitive (Application)	Dk	Sh	Demonstration Discussion PBL	Written/ Viva voce	F & S	II	Swasthavrutta
CO1	Distinguish the similarities & differences between <i>agni</i> and <i>pitta</i> in terms of their <i>guna</i> with examples in compendia.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion PBL Seminar	Written/ Viva voce	S	II	
CO1	Make inferences and find evidences / examples in daily regimen to support generalization of <i>agni</i> & <i>pitta</i>	Cognitive (Analysis)	Nk	Sh	Demonstration Discussion Assignment PBL/ CBL	Self-assessment	S A	II	

	statement.								
C O 1	Recite and explain the important verses of <i>pitta dosha</i> . (ex- <i>sthana</i> , <i>karma</i> , <i>types</i> , <i>vridhhi</i> and <i>kshaya</i>)	Cognitive (Recall)	Dk	Kh	Discussion Recitation	Written/ Viva voce	F & S	II	
Topic 6 – Kapha dosha (5 hr) [Lecture: 4 hours, non-lecture: 1 hour]									
C O 1	Define the <i>vyutpatti</i> and <i>nirukti</i> of <i>kaphadosha</i> .	Cognitive (Recall Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
C O 1	Describe general properties & functions of <i>kapha dosha</i> and demonstrate the normal <i>guan</i> , <i>karma</i> of <i>kapha dosha</i> in a healthy person.	Cognitive (Recall) (Application)	Mk	Kh	Lecture Discussion Demonstration	Written/ Viva voce Skill assessment	F & S	II	
C O 1	Enlist five types of <i>kapha dosha</i> & describe <i>bodhaka kapha kledaka</i> , <i>tarpaka</i> with their specific locations, properties and functions.	Cognitive (Recall)	Mk	Knows	Lecture Discussion	Written/ Viva voce	F & S	II	
C O	Identify the role of	Cognitive	Dk	Kh	Lecture	Written/ Viva	F &	II	

1	saliva in taste perception and also in other way.	(Comprehension)			Discussion	voce	S		
C O 1	Describe role of <i>kledakakapha</i> in lubricating and protective properties of mucus.	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/Viva voce	F & S	II	
C O 1	Describe the role of <i>tarpakakapha</i> in protects the sensory organs.	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/Viva voce	F & S	II	
C O 1	Describe <i>avalambaka</i> , <i>sleshaka</i> with their specific locations, properties and functions.	Cognitive (Recall)	Mk	Knows	Lecture Discussion	Written/Viva voce	F & S	II	
C O 1	Describe the role of <i>avalambaka</i> in heart protection and <i>sleshakakapha</i> in arthritis.	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/Viva voce	F & S	II	
C O 1	Explain difference between <i>kshaya</i> & <i>vridhila</i> of <i>kapha</i> Dosh	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/Viva voce	F & S	II	
C O	State importance	Cognitive	Nk	Kh	Lecture	Self-assessm	S A	II	<i>Kayachikitsa</i>

1	of <i>prakritshleshmikbala / veerya & vikritshleshmik mala</i> & find out significance of above cognitive in applied aspect	(Applica tion)			Discu ssion	ent			
C O 5	Interpret which type of <i>kapha dosha</i> gets vitiated and in which clinical condition the use of proper <i>aahar dravya</i> is prevalent as per <i>kshaya, vriddhi of kapha dosha</i> .	Cognitiv e (Applica tion)	Nk	Sh	Demo nstrati on Discu ssion PBL	Viva voce	F & S	II	<i>Swasthav rutta</i>
C O 1	Recite and explain the important verses of <i>kapha dosha</i> . (ex- <i>sthana, karma, vriddhi and kshaya</i>)	Cognitiv e (Recall & Compre hension)	Dk	Sh	Discu ssion Recit ation	Written/ Viva voce	F & S	II	
C O 1	Describe neural & chemical communication system of body	Cognitiv e (Compr ehensio n)	Nk	Kh	Self study	Self- assessm ent	S A	II	
Topic 7 – Dosha Vriddhi-Kshaya (Hyper and hypo state of dosha) (2 hr) [Lecture: 1 hour, non-lecture: 1 hour]									
C O 1	Describe etiological factors	Cognitiv e (Compr	M k	Kh	Lectu re Discu	Written/ Viva voce	F & S	II	<i>Drav yagu na</i>

	causing <i>tridosha vriddhi & kshaya</i> on the basis of <i>dravya, guna, karma, aahaar & vihara</i> .	ehensio n)			ssion				
C O 1	Describe, observe and interpret individual causes and symptoms of <i>panchavidha vataprakop a</i> . (Ashtanga Hridaya nidana sthana 16)	Cognitiv e (Compr ehensio n Applicat ion)	Nk	Sh	Demo nstrati on Discu ssion PBL	Self- assessm ent	SA	II	
C O 1	Describe <i>vriddhi-kshaya lakshana of vata dosha</i>	Cognitiv e (Compr ehensio n)	M k	Kh	Lectu re Discu ssion	Written/ Viva voce	F & S	II	
C O 1	Describe <i>vriddhi & kshaya lakshana of pitta and kapha dosha</i>	Cognitiv e (Compr ehensio n)	M k	Kh	Lectu re Discu ssion	Written/ Viva voce	F & S	II	
C O 1	Enumerate the <i>nanatmaj vyadhi of tridosha</i>	Cognitiv e (Recall)	Nk	K	Lectu re	Self- assessm ent	SA	II	
	Topic 8 – Kriyakala (Treatment as per prevalent kala) (2 hr) [Lecture: 1 hour, non-lecture: 1 hour]								
C O 1	Explain the Concept of <i>kriyakala</i> & enumerate stages of <i>kriyakala</i> .	Cognitiv e (Recall) (Compr ehensio n)	M k	Kh	Lectu re Discu ssion	Written/ Viva voce	F & S	II	<i>Rogn idan Vikriti Vidn yan</i>

C O 1	Describe the stages <i>sanchaya, prakopa, prasara of kriyakala.</i>	Cognitive (Comprehension)	M k	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
C O 1	Describe the stages <i>sthansanshraya, vyaktavastha & bhedavastha of kriyakala.</i>	Cognitive (Comprehension)	M k	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
C O 1	Describe the applied physiology of diseases produced due the vitiation of <i>vata, pitta</i> and <i>kapha</i> .	Cognitive (Comprehension)	Nk	Sh	Lecture Discussion	Self-assessment	SA	II	
C O 1	Describe ideas given in the <i>shat-kriyakala</i> about preventive measures	Cognitive (Comprehension)	Nk	Kh	Group discussion	Self-assessment	SA	II	
Topic 9 – Prakriti (Deha- Prakriti, Manasa- Prakriti) (Body constitution, personality, temperament of individuals) (10 hr) [Lecture: 7 hours, non-lecture: 3 hours]									
C O 1	Define the term <i>prakriti</i> and describe etymology & different meanings of the term <i>prakriti</i> .	Cognitive (recall)	M k	K	Lecture Discussion	Written/ Viva voce	F & S	II	
C O 1	Describe the role of different <i>matrijadibhava</i> (genetic, intra-uterine and extra-	Cognitive (Comprehension)	M k	Kh	Lecture Discussion Symposium	Written/ Viva voce	F & S	II	

	uterine factors) influencing <i>prakriti</i> according to <i>Charaka and Sushruta</i>								
C O 1	Describe the classification of different <i>prakriti</i> according to various Samhitas	Cognitive (Comprehension)	M k	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
C O 1	Enumerate types of <i>deha prakriti</i> and classify <i>dehaprakriti</i> into <i>ekadoshaja</i> , <i>dvanvaja</i> , <i>samadoshaja</i> .	Cognitive (Recall)	M k	Kh	Lecture Discussion Model Demonstration	Written/ Viva voce	F & S	II	
C O 1	Describe the <i>guna</i> (attributes) of <i>vata prakriti</i> according to <i>Charaka Samhita</i>	Cognitive (Comprehension)	M k	Sh	Lecture Discussion Model Demonstration	Written/ Viva voce	F & S	II	
C O 1	Describe the <i>guna</i> (attributes) of <i>pitta prakriti</i> according to <i>Charaka Samhita</i>	Cognitive (Comprehension)	M k	Sh	Discussion Role play real life experience	Written/ Viva voce	F & S	II	
C O 1	Describe the <i>guna</i> (attributes) of <i>kapha prakriti</i> according to	Cognitive (Comprehension)	M k	Sh	Lecture Discussion video show	Written/ Viva voce	F & S	II	

	Charaka Samhita				Simulation				
CO1	Describe <i>guna</i> of <i>vata</i> , <i>pitta&kapha prakriti</i> according to Vagbhata (abhiruchi) & Sushruta's <i>amhita</i> (<i>anukatva</i>)	Cognitive (Comprehension)	Mk	Sh	Discussion Model Demonstration Team project work, Tutorial	Written/ Viva voce	F & S	II	
CO1	Describe the <i>guna</i> (attributes) of <i>vata</i> , <i>pitta&kapha prakriti</i> according to Sharangadhara Samhita	Cognitive (Comprehension)	Nk	Sh	Discussion	SA	SA	II	
CO1	Describe the relationship between individual <i>prakriti</i> & <i>agni</i> , <i>koshtha</i> .	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO1	Describe classification of <i>bhautik prakriti</i> and characteristic features of the individuals belonging to each kind of <i>bhautik prakriti</i> .	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO1	Describe classification of <i>manas prakriti</i> and characteristic features of	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	

	the <i>satvicprakriti</i> .								
C O 1	Describe the characteristic features of <i>rajasic&ta masic manas prakriti</i> .	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
C O 1	Describe classification of and characteristic features of the individuals belonging to each kind of <i>jatyadi-prakriti</i>	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written	F & S	II	
C O 1	Similarities and difference between the <i>sharirik&manasprakriti</i> descriptions given in various Samhitas.	Cognitive (Comprehension)	Dk	Kh	Discussion Team project work	Written	F	II	<i>Kaya chikitsa</i>
C O 1	Significance of the Cognitive of <i>prakriti</i> in clinical aspect and <i>pathya-apathyakalpana</i> in <i>ahara</i> and <i>vihara</i> of each type of <i>prakriti</i> .	Cognitive (Comprehension)	Mk	Kh	Discussion Self-learning Buzz group	Written Role play	F & S	II	
C O 1	Appreciate the use of various validated tools for assessing	Cognitive (Application)	Mk	Sh	Discussion Tutorial, Demonstrati	Written/ Viva voce	F & S	II	

	Ayurvedic concept of human constitution (prakriti) (software/questionnaire) to evaluate <i>prakriti</i> -Ex- CCRAS portal				on				
C O 1	Describe the relevance of <i>desha-kala-ritu-vaya-ahara-vihara-satmya, aushadha</i> of parents especially of mother on <i>prakriti</i> of individual.	Cognitive (Application/Analysis)	Dk	Kh	Tutorial, Discussion	Viva voce Seli-assessment	SA	II	<i>Kaya chikitsa</i>
C O 1	Appreciate the application of recent advances in the domain of research related to <i>prakriti</i> (genetic, physiological basis)	Cognitive (Application/Analysis)	Nk	Kh	Discussion	Seli-assessment	SA	II	
C O 1	Recite and explain the important verses of <i>vata, pitta&kaphadoshaja prakriti</i> .	Cognitive (Recall & Comprehension)	Dk	Kh	Discussion Recitation	Written/ Viva voce	F & S	II	
C O 1	Observe distinguish features of individuals of three	Cognitive (Application)	Nk	Sh	Team project work	Team assessment	TA	II	

	contrasting <i>prakriti</i> types <i>vata</i> , <i>pitta</i> and <i>kapha</i> by IGIB. Link: https://doi.org/10.1186/1479-5876-6-48								
C O 1	Observe standardized <i>prakriti</i> assessment tool by CCRAS. Link: doi/10.5005/jp-journals-10064-0019	Cognitive (Application)	Nk	Sh	Team project work	Team assessment	TA	II	
C O 1	Compare human constitution (<i>prakriti</i>) & genomic	Cognitive (Comprehension)	Nk	Kh	Group discussion	Self-assessment	SA	II	
C O 1	Record the known physiological variation of your friends in different <i>rutu</i> as per different <i>prakriti</i> .	Cognitive (Application)	Dk	Kh	Real life experience Role play	Demonstration	SA	II	
C O 1	Discuss correlation of genotype and phenotype with <i>prakriti</i> .	Cognitive (Comprehension)	Nk	Kh	Group discussion	Self-assessment	SA	II	
C O 1	Trace interrelationship between aging and <i>prakriti</i>	Cognitive (Comprehension)	Nk	Kh	Discussion	Self-assessment	SA	II	
C O	Point out hematologic	Cognitive	Nk	Kh	Survey	Self-assessment	SA	II	

1	al difference as per different prakriti.	(Analysiss)				ent			
CO1	Discuss <i>manasprakruti</i> and personality.	Cognitive (Comprehension)	Dk	Kh	Role pay	Self-assessment	SA	II	
CO1	Role of prakriti (Ayurgenomics) in the concept of personalised medicine	Cognitive (Comprehension)	Nk	Kh	Group discussion Seminar	Self-assessment	SA	II	
CO1	Explore the Immunophenotyping & human dosha prakriti.	Cognitive (Comprehension)	Nk	Kh	Online material	Self-assessment	SA	II	
Topic 10 – Ahara (Diet and nutrition in Ayurveda) (4 hr) [Lecture: 3 hours, non-lecture: 1 hour]									
CO1	Describe the <i>Nirukti</i> (etymology) & <i>paribhasa</i> (definition) of ahara.	Cognitive (Recall)	Mk	K	Lecture Discussion	Written/Viva voce	F & S	III	
CO1	Describe the <i>Bheda</i> (classification) and <i>upayogita</i> (importance) of <i>ahara</i> .	Cognitive (Recall)	Mk	Kh	Lecture Discussion	Written/Viva voce	F & S	III	
CO1	Define, enlist and describe the types of <i>ahara</i> in detail with examples	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Tutorial	Written/Viva voce	F & S	III	
CO1	Define, enlist and describe <i>ashta ahara-vidhi-</i>	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Seminar	Written/Viva voce	F & S	III	<i>Swat havritta</i>

	<i>viseshayata na</i> (8 factors to be considered while preparing and processing the food) in detail with examples								
C O 1	Describe <i>aharavidhi vidhana</i> (rules for consuming the food) in detail with examples.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
C O 1	Explains the role of <i>ahara vidhi vidhana</i> in the context of present-day lifestyle, cooking habits and eating behaviour.	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion Real life experience Evidence based learning	Written/ Viva voce	F & S	III	
C O 1	Define, enlist and describe <i>ahara parinamkar a bhava</i> (factors responsible for proper digestion) and the importance of each of these factors in the process of digestion	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
C	Explain the	Cognitive	Dk	Sh	Lecture	Written/	SA	III	Swat

O 1	concept of <i>viruddha ahara</i> (incompatible diet) and its relevance in present-day food processing methods and dietary consumption behaviour in individuals.	e (application)			re Discussion Observation	Viva voce			<i>havri tta</i>
C O 1	Explain the role of <i>ahara</i> in today's aspect related to <i>anupana</i> habits etc.	Cognitive (application)	Nk	Sh	Lecture Discussion	Self assessment	SA	III	
C O 1	Explain the role in today's lifestyle of food, compatible food, the proper time for food taking, practice regarding food intake etc. in individual's health.	Cognitive (application)	Nk	Sh	Lecture Discussion Assignment	Self-notes	SA	III	
C O 1	Explain dietary guidelines, how to eat food in Ayurvedic view.	Cognitive (application)	Nk	Kh	Lecture Discussion	Self assessment	SA	III	
	Topic 11 – Agni (The digestive fire of the body) (5 hr) [Lecture: 4 hours, non-lecture: 1 hour]								
C O	Describe different	Cognitive	Mk	Kh	Lecture	Written/Viva	F & S	III	

1	meanings of <i>agni</i> in different contexts and define <i>agni</i> in the context of <i>kriyasharir</i> .	(Comprehension)			Discussion	voice			
CO1	State the importance of <i>agni</i> in maintaining the different aspects of human physiology	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/Viva voce	F & S	III	
CO1	Enumerate and explain the different synonyms of <i>agni</i> regarding <i>kriyasharir</i> .	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/Viva voce	F & S	III	
CO1	Enumerate and define various classifications of <i>agni</i> concerning their locations and functions in the body	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/Viva voce	F & S	III	
CO1	Describe the physiological roles of <i>jatharagni</i> , <i>bhutagni</i> and <i>dhatvagni</i> and explain the differences and similarities between the three.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/Viva voce	F & S	III	<i>Kaya chikitsa</i>
CO	Classify and explain the	Cognitive	Mk	Kh	Lecture	Written/Viva	F & S	III	<i>Rognidan</i>

1	features of four functional / abnormal states of <i>jatharagni</i> : <i>samagni</i> , <i>vishamagni</i> , <i>mandagni</i> & <i>tikshnagni</i> and explain evaluation process of <i>jarana-shakti</i> .	(Comprehension)			Discussion	voce			
CO 1	Enumerate the factors affecting the normal functioning of Agni and the symptoms of improper functioning of <i>agni</i> seen in certain clinical conditions	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Viva voce	F	III	
CO 1	Enumerate and discuss different entities in the body that can represent different forms of <i>agni</i> from the contemporary physiology and biochemistry (hormones, enzymes etc) point of view	Cognitive (Comprehension)	Nk	Kh	Lecture Discussion	Self assessment Debate	SA	III	

C O 1	Record the opinions among your friends on the concept of free radicals & antioxidant	Cognitive (Application)	Nk	Sh	Team project work	Team assessment	TA	III	
C O 1	Identify digestive and metabolic functions of <i>Agni</i> & its clinical importance.	Cognitive (Application)	Nk	Sh	Group discussion	Self Assessment	SA	III	
C O 1	Distinguish the similarities & differences between <i>agni</i> and <i>pitta</i> in terms of their <i>guna</i> with examples in compendia. (mentioned in <i>pitta</i> also)	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion PBL	Written/ Viva voce	S	III	
Topic-12. Annapachana / Aahara-paka (Digestion and metabolism in Ayurveda) (9 hr) [Lecture: 7 hours, non-lecture: 2 hours]									
C O 1	Describe the <i>annavahasrotas</i> along with its <i>mulasthanas</i>	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
C O 1	Enumerate and describe different organs of <i>annavahasrotas</i> and their important functions. according to Ayurveda and	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	

	contemporary physiology								
C O 1	Describe three stages of digestion: <i>madhura</i> , <i>amla</i> and <i>katu avasthapaka</i> in detail	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Tutorial	Written/ Viva voce	F & S	III	
C O 1	Describe the process of <i>udeerana</i> (increase/release) of <i>vata</i> , <i>pitta</i> , <i>kapha</i> during <i>avasthapaka</i>	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
C O 1	Describe the formation of <i>prakrit</i> and <i>vaikrit</i> dosha (<i>prasadbhuta</i> , <i>malabhuta dosha</i>) and their role.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	<i>Rognidan</i>
C O 1	Describe the definition of <i>vipaka</i> (<i>nisthapaka</i>) and classification of <i>vipaka</i> .	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
C O 1	Describe how to identify <i>vipak</i> of <i>aahar</i> as per their effect on the body.	Cognitive (application)	Dk	Sh	Lecture Discussion	Written/ Viva voce	F & S	III	
C O 1	Describe the similarities and differences between <i>avasthapak</i>	Cognitive (Comprehension)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S	III	

	<i>a and nishthapaka</i>								

CO 1	Explain the role of different sub-types of <i>dosha</i> in the process of digestion: <i>bodhaka kapha, prana vayu, kledaka kapha, samana vayu, pachaka pitta, apana vayu</i> etc.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the process of separation of <i>saara</i> and <i>kitta</i>	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	State the application of the theory of <i>pilu-paka</i> and <i>pithara paka</i> in <i>aharapaka</i>	Cognitive (Comprehension)	Nk	Kh	Lecture Discussion	Self-assessment	SA
CO 1	Explain the role of <i>grahani&pittadhar akala</i> & describe possible relation between <i>pittadhara</i> and <i>majjadhara kala</i> .	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	State the importance of <i>pachakapitta</i> and <i>jatharagni</i> in the process of digestion	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Explain the role of <i>bhutagni</i> and <i>dhatvagni</i> in <i>aharaparinaman</i>	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the process of formation of <i>ahara-rasa</i> and absorption of <i>sarabhaga / anna-veerya</i>	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Draw parallels between the different types of <i>agni</i> and various	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S

	digestive enzymes and hormones						
CO 1	Define <i>ahara gati</i> , <i>abhyavaharana shakti</i> , <i>annagrahana</i> , <i>pachana</i> , <i>vivechana</i> , <i>munchana</i> and <i>jaranashakti</i>	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Discuss applied clinical aspect of <i>annavahasrotas</i> : <i>arochaka</i> , <i>ajirna</i> , <i>atisara</i> , <i>grahani</i> , <i>chardi</i> , <i>parinama shula</i> etc	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Viva voce CBD	F & S
CO 1	Define different meanings of the term <i>koshtha</i> and explain the term in the context of <i>kriyasharira</i>	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Enumerate the different types of <i>koshtha</i> according to the predominance of <i>dosha</i> (<i>krura-mridu</i> and <i>madhya</i>)	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	State clinical significance of <i>koshtha</i> and the process of evaluating <i>koshtha</i> in an individual.	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce DOPS	F & S
	Part B (40 Hours) –						
	Topic 1 - Physiology Homeostasis (6 hr) [Lecture: 5 hours, non-lecture: 1 hour]						
CO 1	Define homeostasis and describe mechanisms of maintenance of homeostasis.	Cognitive (Recall/ Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Distinguish between the shell temperature and core temperature	Cognitive (Recall/ Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S

CO 1	Define the terms Cell death, Cell degeneration, Cell aging. Describe animal tissue.	Cognitive (Recall/Comprehension)	Mk	Kh	Lecture Discussion	Written/Viva voce	F & S
CO 1	Describe mechanism of positive and negative feedback system with at least two examples.	Cognitive (Recall/Comprehension)	Mk	Kh	Lecture Discussion	Written/Viva voce	F & S
CO 1	Describe the structure and function of cell, cell membrane, cytoplasmic organelles, genetic material (DNA & RNA.)	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/Viva voce	F & S
CO 1	Explain the process of DNA replication & inhibitors of replication.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/Viva voce	F & S
CO 1	Describe the acid-base balance, water and electrolyte balance.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/Viva voce	F & S
CO 1	Describe the concept of pH & buffer systems in the body and Na-K pump	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/Viva voce	F & S
CO 1	Describe and discuss transport mechanisms across cell membranes. (Active & facilitated)	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/Viva voce	F & S
CO 1	Describe and discuss the molecular basis of resting membrane potential and action potential	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/Viva voce	F & S
	Topic 2 - Physiology of respiratory system: (7 hr) [Lecture: 5 hours, non-lecture: 2 hours]						
CO 1	Describe divisions of the respiratory system based on its functions.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/Viva voce	F & S
CO 1	Describe pulmonary circulation.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/Viva voce	F & S
CO 1	Describe the	Cognitive	Mk	Kh	Lecture	Written/Viva voce	F & S

	mechanics of normal respiration, pressure changes during ventilation.	(Comprehension)			Discussion	Viva voce	
CO 1	Describe the lung volume and capacities, compliance, diffusion of lungs	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe and discuss the exchange and transport of gases - Oxygen and Carbon dioxide	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Seminar	Written/ Viva voce	F & S
CO 1	Describe the neural and chemical control of respiration.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe physiological situations that affect respiration and discuss artificial respiration, dyspnoea, asphyxia, hypoxia, cynosis.	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe Haldane effect & Kussmaul breathing.	Cognitive (Comprehension)	Nk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe basic of pulmonary function tests.	Cognitive (Comprehension)	Nk	Kh	Lecture Discussion	Written/ Viva voce	F & S
Topic 3 - Physiology of Gastrointestinal system (9 hr) [Lecture: 7 hours, non-lecture: 2]							
CO 1	Describe enzyme and its functions in metabolism	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion		

		h e n s i o n)			
CO 1	Describe functional anatomy and physiology of the digestive system	C o g n i t i v e (C o m p r e h e n s i o n)	Mk	K h	Lecture Discussion
CO 1	Describe the functions of salivary glands, stomach, liver, gall bladder pancreas, small intestine, large intestine in the process of digestion and absorption.	C o g n i t i v e (C o m p r e h e n s i o n)	Mk	K h	Lecture Discussion

		s i o n)			
CO 1	Describe the mechanism of secretion, composition, functions, and regulation of saliva, gastric, pancreatic, intestinal juices and bile secretion	C o g n i t i v e (C o m p r e h e n s i o n)	Mk	K h	Lecture Discussion
CO 1	Describe GIT movements deglutition, peristalsis, defecation and control	C o g n i t i v e (C o m p r e h e n s i o n)	Mk	K h	Lecture Discussion

		n)			
CO 1	Describe the major components of food, the process of digestion and metabolism of proteins, fats and carbohydrates	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Seminar
CO 1	Describe the physiological role of vitamins	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion
CO 1	Describe the Gut-	C	Dk	K	Lecture

	Brain Axis and enteric nervous system, and its function	o g n i t i v e (C o m p r e h e n s i o n)		h	Discussion
CO 1	Discuss the physiology aspects of gastro-oesophageal reflux disease, vomiting, diarrhoea, constipation	C o g n i t i v e (C o m p r e h e n s i o n)	Mk	K h	Lecture Discussion
	Topic 4 - Physiology of Nervous System (10 hr) [Lecture: 7 hours, non-lecture: 3 hours]				
CO 1	Describe organization of	C o	Mk	K h	Lecture Discussion

	nervous system.	g n i t i v e (C o m p r e h e n s i o n)			
CO 1	Describe the mechanism of propagation of nerve impulses.	C o g n i t i v e (C o m p r e h e n s i o n)	Mk	K h	Lecture Discussion
CO 1	Describe the functions & properties of synapse, reflex, receptors	C o g n i	Mk	K h	Lecture Discussion

		t i v e (C o m p r e h e n s i o n)			
CO 1	Describe the functional anatomy of the central nervous system (CNS) and peripheral nervous system (PNS)	C o g n i t i v e (C o m p r e h e n s i o n)	Mk	K h	Lecture Discussion Seminar
CO 1	Describe the physiology of autonomous nervous system (ANS)	C o g n i t i v	Mk	K h	Lecture Discussion

		e (C o m p r e h e n s i o n)			
CO 1	Describe the physiology of sensory (general sensations) and motor nervous system	C o g n i t i v e (C o m p r e h e n s i o n)	Mk	K h	Lecture Discussion
CO 1	Describe and discuss spinal cord, its functions, lesion & sensory disturbances	C o g n i t i v e (C	Dk	K h	Lecture Discussion

		o m p r e h e n s i o n)			
CO 1	Describe and discuss functions of the cerebral cortex, basal ganglia, thalamus, hypothalamus cerebellum, mid brain, pons and medulla oblongata.	C o g n i t i v e (C o m p r e h e n s i o n)	Nk	K h	Lecture Discussion
CO 1	Describe and discuss the physiological basis of intelligence, memory, learning and motivation.	C o g n i t i v e (C o m p	Mk	K h	Lecture Discussion

		r e h e n s i o n)			
CO 1	Describe the physiology of cranial nerves	C o g n i t i v e (C o m p r e h e n s i o n)	Mk	K h	Lecture Discussion
CO 1	Describe physiology of speech and articulation.	C o g n i t i v e (C o m p r e h	Mk	K h	Lecture Discussion

		e n s i o n)			
CO 1	Describe physiology of temperature regulation.	C o g n i t i v e (C o m p r e h e n s i o n)	Mk	K h	Lecture Discussion
CO 1	Describe the physiology of pain	C o g n i t i v e (C o m p r e h e n s i o n)	Nk	K h	Lecture Discussion

		i o n)			
	Topic 5 - Physiology of Endocrine glands (8 hr) [Lecture: 6 hours, non-lecture: 2 hours]				
CO 1	Enlists and describe hormones & endocrine glands based on synthesis, secretion, transport, physiological actions, regulation.	C o g n i t i v e (C o m p r e h e n s i o n)	Mk	K h	Lecture Discussion
CO 1	Describe hormones secreted by anterior & posterior pituitary gland, their functions, disorders of pituitary gland (hyper & hypo activity)	C o g n i t i v e (C o m p r e h e n s i	Mk	K h	Lecture Discussion

		o n)			
CO 1	Describe hormones secreted by the Thyroid gland, their functions & disorders of Thyroid and parathyroid gland (hyper and hypoactivity)	C o g n i t i v e (C o m p r e h e n s i o n)	Mk	K h	Lecture Discussion Seminar
CO 1	Describe hormones secreted by Pancreas, their functions & disorders of Pancreas (hyper and hypoactivity)	C o g n i t i v e (C o m p r e h e n s i o n)	Nk	K h	Lecture Discussion

CO 1	Describe hormones secreted by Adrenal cortex gland, their functions & disorders of Adrenal cortex gland (hyper and hypoactivity)	C o g n i t i v e (C o m p r e h e n s i o n)	Mk	K h	Lecture Discussion
CO 1	Describe hormones secreted by Adrenal medulla gland, their functions & disorders of Adrenal medulla (hyper and hypoactivity)	C o g n i t i v e (C o m p r e h e n s i o n)	Mk	K h	Lecture Discussion
CO 1	Enlist other Glands and their functions	C o g	Mk	K h	Lecture Discussion

		n i t i v e (C o m p r e h e n s i o n)			
CO 1	Describe the synthesis and functions of local hormones	C o g n i t i v e (C o m p r e h e n s i o n)	Mk	K h	Lecture Discussion

PAPER II

A3 Course outco	B3 Learning Objective (At the end of the	C3 Domain	D3 Must to know/desire to know/ Nice	E3 Level Does/ Shows	F3 T-L method

me	session the students should be able to)		to know	how/Shows/ Knows how/Knows			
	AyGU-KS						
	Paper II (60 Hours)						
	Topic-1. Introduction to <i>Dhatu</i> (3 hr) [Lecture: 2 hours, non-lecture: 1 hour]						
CO 1	Explain the etymology, derivation, definition, synonyms and general introduction of the term <i>dhatu</i> .	Cognitive (Recall)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Explain the difference between <i>dhatu</i> and <i>upadhatu</i> .	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Explain different theories related to <i>dhatuposhanaNyaya</i> (nourishment of different <i>dhatu</i> s).	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Seminar	Written / Viva voce	F & S
CO 1	Explain the applicability of <i>nyaya</i> in the different physiological mechanisms.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Jigsaw	Written/ Viva voce	F & S
CO 1	Describe <i>utpatti</i> & <i>poshana</i> of <i>dhatu</i> .	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Compile various terminologies related	Cognitive (Comprehension)	Dk	Sh	Assignment Tutorial	Self-assessment	SA

	to <i>dhau gati</i> and <i>dhātu poshana</i>	n)				t	
CO 1	Mention your opinion about <i>nyaya</i> concept on the basis of different metabolic pathways, transformation, transport of substances through cell membrane.	Cognitive (Application)	Nk	Kh	Group discussion Buzz group	Self-assessment	SA
CO 1	Discuss theory of tissues formation and differentiation in context with physiological changes of aging.	Cognitive (Application)	Nk	Kh	Group discussion Homework based assignment	Self-assessment	SA
CO 1	Discuss stem cells along with concepts of regeneration in Ayurveda	Cognitive (Recall/Comprehension)	Nk	Kh	Lecture Online teaching aids	self assessment	SA
CO 1	Study Ayurvedic aspect of <i>dhātu sarata</i> and its application	Cognitive (Application)	Nk	Kh	Group discussion Seminar	Self-assessment	SA
	Topic-2.Rasa Dhatu (5 hr) [Lecture: 4 hours, non-lecture: 1 hour]						
CO 1	Explain the etymology, derivation, location, properties, functions and <i>pramana</i> of <i>rasa-dhatu</i> . <i>panchabhautikatva</i> of <i>rasadhatu</i> .	Cognitive (Recall)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the functions of <i>rasavaha srotas</i> & <i>mula</i> of <i>rasavahasrotas</i> .	Cognitive (Recall)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the process of formation of <i>rasa dhatu</i> from <i>aahara rasa</i> , and circulation of <i>rasa-rakta</i> (<i>rasa-rakta samvahana</i>)	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe <i>kshaya-vridhi</i> & <i>rasapradoshaja vikara</i>	Cognitive (Comprehension)	Mk	Kh	Lecture Assignment	Written/ Viva voce	F & S

CO 1	Description of functioning of <i>hridaya</i> and physiological significance of <i>hridaya</i> .	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion Flipped classroom	Written/ Viva voce	F & S
CO 1	Description of <i>sira, dhamani and srotas</i>	Cognitive (Comprehension)	Nk	Kh	Discussion Video show	Written/ Viva voce	F & S
CO 1	Enumerate <i>ashtavidha sara</i> (8 types of <i>sara</i>), and describe the features of individuals belonging to <i>tvak-saara purusha</i> .	Cognitive (Recall)	Mk	K	Lecture, Role play, real life experience, Discussion Brainstorming	Written/ Viva voce	F & S
Topic-3. Rakta Dhatu (4 hr) [Lecture: 3 hours, non-lecture: 1 hour]							
CO 1	Explain the etymology, derivation, synonyms, location, properties, functions and <i>pramana of rakta dhatu</i> & explain the <i>panchabhautikatva of rakta dhatu</i> ,	Cognitive (Recall)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the physiology of <i>raktavaha srotas</i> , and describe the <i>mula of rakta-vaha srotas</i> and mutual interdependence of <i>rakta and pitta</i> .	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the formation of <i>rakta-dhatu, ranjana of rasa</i> by <i>Ranjaka pitta</i> , features of <i>shuddha rakta</i> , specific functions of <i>rakta</i>	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the characteristics of <i>raktasaara Purusha</i>	Cognitive (Recall)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the manifestations of <i>kshaya and vriddhi</i> and name	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Assignment	Written/ Viva voce	F & S

	<i>pradoshaja vikara of raktadhatu</i>						
CO 1	Elaborate the concept about inclusion or exclusion of rakta dhatu as a fourth dosha.	Cognitive (Comprehension)	Nk	Kh	Discussion Brainstorming	Written/ Viva voce	F
	Topic-4. MamsaDhatu (3 hr) [Lecture: 2 hours, non-lecture: 1 hour]						
CO 1	Describe the etymology, derivation, synonyms, location, properties and functions of <i>mamsadhatu</i> , physiology of <i>mamsavahasrotas</i> , <i>mula</i> of <i>mamsavahasrotas</i>	Cognitive (Recall)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the formation of <i>mamsadhatu</i> and the definition of <i>peshi</i> characteristics of <i>mamsasaarapurusha</i> ,	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe manifestations of <i>kshaya</i> and <i>vridhhi</i> of <i>mamsa</i> Dhatu & describe the physiological basis of these manifestations. Name <i>mamsa pradoshaja vikara</i> .	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Assignment	Written/ Viva voce	F & S
	Topic-5. Meda Dhatu (4 hr) [Lecture: 3 hours, non-lecture: 1 hour]						
CO 1	Describe the etymology, derivation, location, properties, functions and <i>pramana</i> of <i>medadhatu</i> .	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the <i>medovahasrotas</i> , its <i>mula</i> , the physiology of <i>medovahasrotas</i> , formation of	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S

	<i>medodhatu</i>						
CO 1	Describe the characteristics of <i>medasaarapurusha</i> and manifestations of <i>kshaya</i> and <i>vridhhi</i> of <i>meda</i> . Name <i>meda pradoshaja vikara</i> .	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Assignment	Written/ Viva voce	F & S
CO 1	Describe the clinical features of <i>sthaulya</i> and <i>karshya</i> along with the physiological basis of these clinical conditions	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Record the properties of lipid & <i>mamsa dhatu</i> .	Cognitive (Comprehension)	Nk	Kh	Discussion	Self assessment	F
	Topic-6. Asthi Dhatu (3 hr) [Lecture: 2 hours, non-lecture: 1 hour]						
CO 1	Describe the definition, synonyms, classification, properties (<i>guna</i>), and formation of <i>asthi dhatu</i> .	Cognitive (Comprehension)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the <i>asthidhara kala</i> ; relation with <i>purishdharakala</i> and the features of <i>asthi sarata</i> .	Cognitive (Comprehension)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the applied physiology of <i>asthi dhatu</i> (<i>asthi vridhhi/ asthi kshaya</i>) and name <i>asthi pradoshaja vikara</i>	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Assignment	Written/ Viva voce	F & S
	Topic-7 Majja Dhatu (4 hr) [Lecture: 3 hours, non-lecture: 1 hour]						
CO 1	Describe the definition, synonyms and location (<i>sthana</i>) of <i>majja dhatu</i> .	Cognitive (Recall)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the formation of <i>majja dhatu</i> <i>majjavaha srotas</i> and its <i>mula</i> .	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S

CO 1	Describe <i>majja dhara kala</i> in relation with <i>pittadhara kala</i> and the features of <i>majja sarata</i> .	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe applied physiology of <i>majja dhatu</i> (<i>majja vridhhi and kshaya</i>) and name <i>majja pradoshaja vikara</i>	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Assignment	Written/ Viva voce	F & S
CO 1	Comment on concept of <i>majja dhatu</i> and bone marrow	Cognitive (Comprehension)	Dk	Kh	Discussion Online teaching aids	Self assessment	F
Topic-8. Shukra Dhatu (4 hr) [Lecture: 3 hours, non-lecture: 1 hour]							
CO 1	Describe the etymology and derivation of <i>shukra dhatu</i> , location, properties, <i>pramana</i> functions of <i>shukra dhatu</i> .	Cognitive (Recall)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the formation of <i>shukra dhatu</i> , <i>poshana krama</i> and its <i>upadhatu</i> and <i>mala</i> .	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Puzzle	Written/ Viva voce	F & S
CO 1	Describe the mula of <i>shukravaha srotas</i> and the properties of <i>shuddha shukra</i> along with <i>shukra saara purusha</i> symptoms.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the features of <i>kshaya&vridhhi</i> of <i>shukra dhatu</i> & <i>shukrapradoshajavikara</i>	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Assignment	Written/ Viva voce	F & S
CO 4	Identify histological structure explain structure of different tissue (dhatu)	Cognitive (Comprehension) Psychomotor	Mk	Kh	Demonstration Perform	Practical Skill assessment OSPE	F & S
Topic-9. Ashraya- Ashrayi Bhava (2 hr) [Lecture: 1 hour, non-lecture: 1 hour]							
CO 1	Describe the concept of <i>ashraya-ashrayi</i>	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S

	<i>bhava</i> i.e. inter-relationship among <i>dosha</i> , <i>dhatu mala</i> and <i>srotas</i> .	n)					
CO 1	Describe the applied physiology of diseases affecting <i>saptadhatu</i> enlisted under <i>dhatu pradoshaja vikara</i> .	Cognitive (Comprehension)	Dk	Kh	Discussion Seminar	Written	F
CO 1	Explain use of <i>Ashraya- Ashrayi Bhava</i> in <i>laghan bruhan</i> .	Cognitive (application)	Nk	Kh	Discussion	Self-assessment	SA
	Topic -10. Oja (4 hr) [Lecture: 3 hours, non-lecture: 1 hour]						
CO 1	Recall etymological derivation, definition, classification, and <i>pramana</i> of <i>oja</i>	Cognitive (Recall)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the process of formation of <i>ojas</i> along with locations and properties	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the concept of <i>vyadhikshamatva</i> , explain <i>balavriddhikara bhava</i> .	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Classify <i>bala</i> and describe etiological factors (<i>kshayakaran</i>) for <i>oja visramsas</i> , <i>vyapat</i> and <i>kshaya</i> and elaborate the manifestation of these clinical conditions.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Collect different opinions on <i>oja</i> given by different <i>aacharya</i> and try to understand the logic behind it.	Cognitive (Recall)	Nk	Kh	Discussion	Written	F
CO 1	Interpret your opinion about <i>oja-bala-kapha</i> in its	Cognitive (Recall)	Nk	Kh	Discussion	Self-assessment	SA

	normal state.						
	Topic-11. Upadhatu (7 hr) [Lecture:6 hours, non-lecture: 1 hour]						
CO 1	Describe the general introduction, etymological derivation and definition of the term <i>upadhatu</i>	Cognitive (Recall)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the formation, nourishment, properties, location and functions of each <i>upadhatu</i> .	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the characteristic features and methods of assessing <i>shuddha</i> and <i>dushitastanya</i> .	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the characteristic features of <i>vridhhi</i> and <i>kshaya</i> of <i>stanya</i> .	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe characteristic features of <i>shuddha</i> and <i>dushitaartava</i> along with enumerating the differences between <i>raja</i> and <i>artava</i> .	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe <i>artava-vaha srotas</i> and its <i>mula</i> along with the common clinical conditions related to <i>artava-vaha srotas</i> (<i>kashtartava</i> , <i>vandhyata</i> , <i>pradara</i> etc).	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the classification, thickness of each layer and functions of <i>tvak</i>	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Interpret the skin layer as per contemporary	Cognitive (Recall)	Nk	Kh	Discussion	Written	F

	science.						
	Topic 12. Mala (8 hr) [Lecture: 6 hours, non-lecture: 2 hours]						
CO 1	Describe the etymological derivation and definition of the term <i>mala</i> .	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Enumerate <i>aharamala</i> and describe of the process of formation of <i>aharamala</i> .	Cognitive (Recall)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the etymological derivation, definition, formation, properties, quantity and functions of <i>purisha</i> .	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the physiology of <i>purishavahasrotas</i> , <i>purish visarjana</i> and manifestations of <i>vridhhi</i> and <i>kshhaya</i> of <i>purisha</i> .	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Explain the relation between <i>purishdharakala</i> and <i>asthidhara kala</i> .	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the etymological derivation, definition, formation, properties, quantity and functions of <i>mutra</i> .	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the physiology of <i>mutravahasrotas</i> and the process of urine formation and <i>mutra visarjana</i> in Ayurveda.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Explain the manifestations of <i>vridhhi</i> and <i>kshhaya</i>	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S

	of <i>mutra</i> .						
CO 1	Explain the urge of micturition & defecation in perspective of reflexes	Cognitive (Application)	Nk	Kh	Discussion	Self-assessment	SA
CO 1	Describe and enumerate <i>dhatumala</i> and describe the functions of each type of <i>dhatumala</i>	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Explain the etymological derivation, definition, formation and functions of <i>sveda</i> .	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Explain the functions of <i>svedvaha srotas</i> along with describing the manifestations of <i>vridhhi and kshaya of sveda</i> .	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Review Ayurveda compendia for several colour of purish and <i>mutra</i> as per their different diseased conditions.	Cognitive (Application)	Nk	Kh	Discussion	Self-assessment	SA
	Topic 13. Indriya vijnyana (2 hr) [Lecture: 1 hour, non-lecture: 1 hour]						
CO 1	Describe the <i>pancha-jnyaanendriya</i> and physiology of perception of <i>shabda, sparsha, rupa, rasa and gandha</i> .	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Tutorial	Written/ Viva voce	F & S
CO 1	Describe the physiology of <i>karmendriya</i>	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
	Topic 14. Manas (3 hr) [Lecture: 2 hours, non-lecture: 1 hour]						
CO 1	Describe location and properties,	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S

	functions and objects of <i>manas</i> .	n)					
CO 7	Describe the physiology of <i>dhee</i> , <i>driti</i> , <i>smriti</i> and <i>manovaha srotas</i> along with the applied physiology of <i>unmada</i> and <i>apasmara</i> .	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Real life experience	Written/ Viva voce	F & S
CO7	Describe <i>kriyatmak</i> (physiological) importance of <i>manas</i>	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S
	Topic 15. Atma (2 hr) [Lecture: 2 hours, non-lecture: 0 hours]						
CO 1	Describe properties and functions of <i>atma</i> .	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 7	Enumerate the difference between <i>paramatma</i> and <i>jivatma</i> , characteristic features of <i>atma</i> in living beings.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 7	Explain characteristic features of <i>atma</i> in living beings.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO7	Describe <i>kriyatmak</i> (physiological) importance of <i>atma</i>	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion tutorials	Written/ Viva voce	
	Topic 16. Nidra&Svapna (2 hr) [Lecture: 2 hours, non-lecture: 0 hours]						
CO 1	Describe the process of <i>nidrotpatti</i> , classify <i>nidra</i> .	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Explain the physiological and clinical significance of <i>nidra</i> .	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe <i>svapnotpatti</i> and types of <i>svapna</i> .	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Discuss about different types of <i>swapna</i> among your friends and try to understand relation of <i>swapna&prakriti</i> .	Cognitive (Comprehension)	Nk	Kh	Group Discussion	Team assessment	TA

	Part B (40 Hours) –						
	Topic 1. Physiology of Hemopoietic System (7 hr) [Lecture: 5 hours, non-lecture: 2 hours]						
CO 1	Describe the composition, functions of blood and blood cells.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Stages and development of RBCs, WBCs, platelets.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the composition and functions of bone marrow	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the process of erythropoiesis and explain necessary factors for erythropoiesis.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the formation & destruction of RBCs	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the structure, types, synthesis and functions of haemoglobin along with abnormalities of Hb.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the types of WBCs	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the mechanism of hemostasis, (coagulation of blood) and blood clotting factors.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Seminar	Written/ Viva voce	F & S
CO 1	Describe the ABO & Rh system of blood group and explain the physiological basis of blood groups.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Explain the concept of erythroblastosis fetalis on the basis of Rh incompatibility.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Seminar	Written/ Viva voce	F & S
CO 1	Describe the	Cognitive	Mk	Kh	Lecture	Written/	F & S

	classification and functions of plasma proteins.	(Comprehension)			Discussion	Viva voce	
CO 1	Describe the properties and hemostasis functions of platelets.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the physiological basis of manifestations of different blood disorders (anaemia, jaundice etc.)	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the functions of spleen.	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the functions of lymph.	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S
Topic 2. Immune System (2 hr) [Lecture: 2 hours, non-lecture: 0 hours]							
CO 1	Describe classification of immunity (Innate, acquired and artificial),	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the different mechanisms involved in immunity: Humoral (B-cell mediated) and T-Cell mediated immunity.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Distinguish between the passive immunization and active immunization	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the applied physiology of immunity: Immunodeficiency diseases, Hypersensitivity reactions, Auto-immune diseases etc.	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion Seminar	Written/ Viva voce	F & S

	Topic 3. Cardiovascular Physiology (7 hr) [Lecture: 5 hours, non-lecture: 2 hours]						
CO 1	Describe the mechanical and electrical properties of heart muscles, describe different phases of the Cardiac cycle.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the physiological and clinical significance of heart sounds.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the physiology of regulation of cardiac output and venous return.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the physiological basis of ECG.	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the regulation of heart-rate and arterial pulse,	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Define and describe the regulation of systemic arterial blood pressure	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the physiology of fetal circulation.	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Define and describe the regulation of systemic arterial blood pressure	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the history of the discovery of blood circulation	Cognitive (Comprehension)	Nk	Kh	Online	Self assessment	SA
	Topic 4. Muscle physiology (2 hr) [Lecture: 2 hours, non-lecture: 0 hours]						
CO 1	Compare and contrast the functions and properties of skeletal muscles, cardiac muscles and smooth muscles.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the physiology of muscle contraction of all types of	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S

	muscles.						
	Topic 5. Skin, Adipose Tissue and circulating Lipids (3 hr) [Lecture: 2 hours, non-lecture: 1 hour]						
CO 1	Describe the functions of the skin, sweat glands, sebaceous glands and subcutaneous tissue	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the functions of Adipose Tissue including adipokines	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the process of formation & metabolism of lipoproteins like VLDL, LDL and HDL and that of triglycerides.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the functional anatomy and physiology of the male reproductive system	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the physiology of regulation of spermatogenesis, functions of testosterone and male sexual act	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe physiology of the female reproductive system including oogenesis, ovulation and hormonal regulation of the menstrual cycle	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the functions of placenta	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the physiology of lactation	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the applied physiology of the reproductive system of male and female infertility.	Cognitive (Comprehension)	Nk	Kh	Lecture Discussion	Written/ Viva voce	F & S

	Topic 7. Renal Physiology (6 hr) [Lecture: 4 hours, non-lecture: 2 hours]						
CO 1	Describe the functional anatomy of kidney.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the functions of kidney, ureters and bladder.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe stages of the mechanism of urine formation.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Semiar	Written/ Viva voce	F & S
CO 1	Describe control of micturition.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the role of Juxta glomerular apparatus in regulation of blood pressure and pH of body fluids.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the applied physiology of the urinary system (urolithiasis, acute and chronic renal failure etc).	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the physiology of special senses.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the visual process and visual pathway	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the mechanism of hearing and auditory pathway	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the taste, smell and skin sensation	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S
CO 1	Describe the physiology of sleep and dreams	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S

List of Practicals

PRACTICALS (Marks-100)				
	List of Topics	Term	Lecture	Non-Lecture
1	Dhatu sararata parikshana	I	0	10
2.	Demonstrate laboratory equipment (spotting)	I	0	1
3.	Demonstrate blood collection	I	0	1
4.	Estimate haemoglobin	I	0	2
5.	Estimate bleeding time & clotting time	I	0	2
6.	Estimate blood grouping	I	0	2
7.	Prakriti parikshana	II	0	20
8.	Dosha vriddhi kshaya parikshana	II	0	4
9.	Dhatu vriddhi kshaya parikshana	II	0	5
10.	Nadi parikshana	II	0	3
11.	Pulse examination	II	0	2
12.	WBC estimation	II	0	2
13.	RBC estimation	II	0	2
14.	DLC estimation	II	0	2
15.	Measurement of Blood pressure	II	0	2
16.	Perform the procedure Inspection of respiratory system	II	0	2
17.	Perform the procedure Inspection of heart sound	II	0	3
18.	Agni parikshana	III	0	6
19.	Koshtha parikshana	III	0	2
20.	Urine examination	III	0	2
21.	Demonstrate ESR, PCV	III	0	1
22.	Observe the procedure of ECG	III	0	2
23.	Perform the procedure of examining the cranial nerves and reflexes	III	0	2

Table 4: Learning objectives (Practical) of AyUG- KS

B4 Learning Objective (At the end of the session the Students should be able to)	C4 Domain	D4 Must to know/de sire to know/Ni ce to know	E4 Level Does/ Shows how/Shows/ Knows how/ Know	F4 T-L method	G4 Assessment	H4 Formative /summative	I4 Term	
		AyUG – KS Practical (100 marks) (Total 200 Hr)						
		Practical (100 marks) =(Kriya Sharir 50 + Physiology 30 + Non Lecture practical activities 20)						

	1. Assessment of prakriti parikshana (20 classes) [Lecture: 0 hours, non-lecture: 20 hours]						
CO 3	Describe the procedure of <i>prakriti parikshan</i> of CCRAS portal.	Cognitive	Mk	Kh	Lecture Demonstration Discussion Observe Tutorial	Practical Viva voce	F & S
CO 3	Demonstrate <i>prakriti parikshan</i> under the supervision of teacher.	Psychomotor	Mk	Sh	Demonstration in practical room & Bed side clinic Discussion	Viva voce	F & S
CO 3	Determines <i>prakriti</i> of a person in an individual independently	Psychomotor	Mk	Dose	Demonstration in practical room & Bed side clinic Discussion Perform	Practical Viva voce Skill assessment OSPE, DOPS, CBD, Simulation	F & S
CO 1	Recite verses of <i>vata, pitta & kapha prakriti</i> .	Cognitive (Recall Comprehension)	Dk	Kh	Discussion Recitation	Viva voce	F & S
	2. Assessment of dhatusarata parikshana (10 classes) [Lecture: 0 hours, non-lecture: 10 hours]						
CO 2	Describe the procedure of <i>dhatusarata parikshana</i>	Cognitive	Mk	Kh	Lecture Demonstration Discussion Observe	Practical Viva voce	F & S
CO 2	Demonstrate <i>dhatusarata parikshana</i> under the supervision of the teacher.	Psychomotor	Mk	Sh	Demonstration in practical room & Bed side clinic Discussion Assist	Viva voce	F & S
CO 2	Evaluates <i>dhatusarata</i> in an individual independently	Psychomotor	Mk	Dose	Demonstration Bed side clinic Discussion Perform	Practical Viva voce Skill assessment OSPE, DOPS, CBD, Simulation	F & S
CO 1	Recite verses of <i>ashta dhatusarata</i> .	Cognitive (Recall & Comprehension)	Dk	Kh	Discussion Recitation	Viva voce	F & S
	3. Assessment of agni parikshana (6 classes) [Lecture: 0 hours, non-lecture: 6 hours]						
CO 2	Describe the	Cognitive	Mk	Kh	Lecture	Practical	F & S

	procedure of <i>agni parikshana</i>	e			Demonstration Discussion Observe	Viva voce	
CO 2	Demonstrate <i>agni parikshana</i> under the supervision of the teacher.	Psychomotor	Mk	Sh	Demonstration Bed side clinic Discussion Assist	Viva voce	F & S
CO 2	Analyse <i>agni</i> in an individual independently	Psychomotor	Mk	Dose	Demonstration Bed side clinic Discussion Perform	Practical Viva voce Skill assessment OSPE	F & S
CO 1	Recite verses of <i>agni</i> .	Cognitive (Recall & Comprehension)	Dk	Kh	Discussion Recitation	Viva voce	F & S
4. Assessment of <i>koshtha parikshana</i> (2 classes) [Lecture: 0 hours, non-lecture: 2 hours]							
CO 2	Discuss the procedure of <i>koshtha parikshana</i>	Cognitive	Mk	Kh	Lecture Demonstration Discussion Observe	Practical Viva voce	F & S
CO 2	Demonstrate <i>koshtha parikshana</i> under the supervision of the teacher.	Psychomotor	Mk	Sh	Demonstration Bed side clinic Discussion Assist	Viva voce	F & S
CO 2	Evaluate <i>koshtha</i> of an individual independently	Psychomotor	Mk	Dose	Demonstration Bed side clinic Discussion Perform	Practical Viva voce Skill assessment OSPE	F & S

5. Assessment of <i>dosha vrddhi kshaya lakshana</i> (4 classes) [Lecture: 0 hours, non-lecture: 4 hours]							
CO 3	Discuss the procedure of <i>dosha vrddhi kshaya lakshana</i>	Cognitive	Mk	Kh	Lecture Demonstration Discussion Observe	Practical Viva voce	F & S
CO 3	Demonstrate <i>dosha vrddhi kshaya parikshana</i> under the supervision of the teacher.	Psychomotor	Mk	Sh	Demonstration Bed side clinic Discussion Assist	Viva voce	F & S
CO 3	Perform <i>dosha</i>	Psychomotor	Mk	Dose	Demonstration	Practical	F & S

	<i>vrddhi kshaya parikshana</i> in an individual independently	otor			Bed side clinic Discussion Perform	Viva voce Skill assessment OSPE	
CO 1	Recite verses of <i>dosha vrddhi kshaya</i> .	Cognitive (Recall Comprehension)	Dk	Kh	Discussion Recitation	Viva voce	F & S
6. Assessment of <i>dhatu vrddhi kshaya parikshana</i> (5 classes) [Lecture: 0 hours, non-lecture: 5 hours]							
CO 3	Describe the procedure of <i>dhatu vrddhi kshaya lakshana</i>	Cognitive	Mk	Kh	Lecture Demonstration Discussion Observe	Practical Viva voce	F & S
CO 3	Demonstrate <i>dhatu vrddhi kshaya parikshan</i> under the supervision of the teacher.	Psychomotor	Mk	Sh	Demonstration Bed side clinic Discussion Assist	Viva voce	F & S
CO 3	Perform <i>dhatu vrddhi kshaya parikshan</i> in an individual independently	Psychomotor	Mk	Dose	Demonstration Bed side clinic Discussion Perform	Practical Viva voce Skill assessment OSPE	F & S
CO 1	Recite verses of <i>dhatu vrddhi kshaya</i> .	Cognitive (Recall & Comprehension)	Dk	Kh	Discussion Recitation	Viva voce	F & S

7. Assessment of <i>nadi parikshana</i> (3 classes) [Lecture: 0 hours, non-lecture: 3 hours]							
Describe the procedure of <i>nadi parikshana</i>	Cognitive	Mk	Kh	Lecture Demonstration Discussion Observation Tutorial	Practical Viva voce	F & S	II
Demonstrate <i>nadi parikshana</i> under the supervision of the teacher.	Psychomotor	Mk	Sh	Demonstration Bed side clinic Discussion Assist	Viva voce	F & S	II
Find out recent advances in <i>nadi pariksha</i>	Cognitive	Mk	Kh	Lecture Demonstration Discussion Observe	Practical Viva voce OSPE	F & S	II

	Part B 30 practical of 2 hr each
	[Lecture: 0 hours, non-lecture: 30 hours]

CO 4	Explain the general laboratory etiquette demonstrate the use of laboratory equipment.	Cognitive Psychomotor	Mk	Sh	Lecture Demonstration Discussion Observe	Practical Viva voce Skill assessment OSPE	F & S
CO 4	Discuss procedure of collection of a blood sample – prick, venepuncture method, use of anticoagulants.	Cognitive	Mk	Kh	Lecture Demonstration Discussion Assist	Viva voce	F & S
CO 4	Describe Observe procedure of haemoglobin estimation, bleeding time and clotting time, blood grouping and Rh typing, differential Leukocyte Counting procedure.	Cognitive	Mk	Kh	Lecture Demonstration Discussion Assist	Viva voce	F & S
CO 4	Evaluate Hb, Bleeding time, clotting time, blood grouping & Rh typing, several Leukocyte Count (independently).	Psychomotor	Mk	Sh	Lecture Demonstration Discussion Perform	Practical Viva voce Skill assessment OSPE	F & S
CO 4	Describe the procedure of WBC counting, RBC counting.	Cognitive	Mk	Kh	Lecture Demonstration Discussion Assist	Viva voce	F & S
CO 4	Count WBC, RBC (independently).	Psychomotor	Mk	D	Perform	Practical	F
CO 4	Describe the procedure of ESR, PCV	Cognitive	Mk	Sh	Lecture Demonstration Discussion Assist	Viva voce	F
CO 4	Describe the procedure of physical and chemical	Cognitive	Mk	Kh	Lecture Demonstration Discussion Assist	Viva voce	F & S

	examination of urine.						
CO 4	Identify physical and chemical properties of urine.	Psychomotor	Dk	Sh	Lecture Demonstration Discussion Assist	Practical Viva voce Skill assessment OSPE, DOPS	F & S
CO 4	Discuss the procedure of pulse examination demonstrated.	Cognitive	Mk	Kh	Lecture Demonstration Discussion Assist	Viva voce	F & S
CO 4	Examine pulse independently.	Psychomotor	Mk	Sh	Lecture Demonstration Discussion Perform	Practical Viva voce Skill assessment OSPE	F & S
CO 4	Describe the procedure of measurement of blood pressure	Cognitive	Mk	Kh	Lecture Demonstration Discussion Assist	Viva voce	F & S
CO 4	Measure blood pressure (independently).	Psychomotor	Mk	Sh	Lecture Demonstration Discussion Perform	Practical Viva voce Skill assessment OSPE	F & S
CO 4	Discuss the procedure of inspection of CVS and assessment of heart sounds	Cognitive	Mk	Kh	Lecture Demonstration Discussion Assist	Viva voce	F & S
CO 4	Illustrate inspection of CVS and assessment of heart sounds (independently).	Psychomotor	Mk	Sh	Lecture Demonstration Discussion Perform	Practical Viva voce Skill assessment OSPE	F & S
CO 4	Discuss the procedure of ECG recording demonstrated by the teacher.	Cognitive	Mk	Kh	Lecture Demonstration Discussion Assist	Viva voce Spotting	F & S
CO 4	Discuss procedure of inspection of the respiratory	Cognitive	Mk	Kh	Lecture Demonstration Discussion Assist	Viva voce	F & S

	system demonstrated by the teacher.						
CO 4	Examine of the respiratory system (independently).	Psychomotor	Mk	Sh	Lecture Demonstration Discussion Perform	Practical Viva voce Skill assessment OSPE	F & S
CO 4	Discuss the procedure of examining the cranial nerves and reflexes (superficial/ deep /visceral) demonstrated by the teacher.	Cognitive	Mk	Kh	Lecture Demonstration Discussion Assist	Viva voce Skill assessment OSPE	F & S
CO 4	Perform the procedure of examining the cranial nerves and reflexes (superficial/de ep/visceral) by students independently.	Psychomotor	Mk	Sh	Lecture Demonstration Discussion Perform	Practical Viva voce Skill assessment OSPE	F & S

Table 5: Non Lecture Activities Course AyUG- KS

Theory Non Lecture 50 (Paper I -25 & Paper II-25)		No of Activity hours
1.	Assignment - homework based	3
2.	Brainstorming	2
3.	Buzz group	1
4.	Case based learning	1
5.	Confusion technique	1
6.	Debate	1
7.	Demonstration	2
8.	Direct observation skill (DOPS)	1
9.	Flipped classroom	1
10.	Group Discussion	3
11.	Jigsaw or puzzle	1
12.	Mnemonics	2
13.	Model based learning	1
14.	Online teaching aids	1
15.	Panel discussion	1
16.	Problem based learning	2
17.	Real-life experience	1
18.	Recitation	3
19.	Role Play	1
20.	Self directed learning	3
21.	Seminar by students	5
22.	Simulated condition	1
23.	Skill assessment	2
24.	Symposium	2
25.	Team project work	1
26.	Think-Pair-Share	2
27.	Tutorial	3
28.	Video show	2
Practical Non Lecture 100 (200 hours)		
1.	Ayurveda Practicals – 50	100
2.	Modern Practicals – 30	60
3.	Activity based learning – 20	40
	Communication Skills, Small project / Experiment designing, Task-based learning, Teamwork based learning, Team project, Problem Based Learning (PBL)/(CBL), Group Discussion, Workshops, Field visits, Preparation of charts 1, models and computerized simulation models etc. , Seminar presentations by students	
Total Non Lecture hours		250

Additional Suggested topics for tutorials

Point No.	Name of Topic
T – 1 CO 6	<i>Atma lakshana</i>
T – 2 CO3	<i>Characteristics of Prakriti Eka doshaja, dwandwaja and sama prakriti. Clinical importance of deha prakriti, anukatva.</i>
T – 3 CO5	<i>Nadi vigyan</i>
T – 4 CO6	<i>Anukatva</i>
T – 5 CO6	<i>Indriya panch panchak and physiological study of panchajyanendriya and panchakarmendriya.</i>
T – 6 CO6	<i>Meanings of terminologies used for dhatu poshana nyaya related to dhatu poshana</i>
T – 7 CO1	<i>Ahara dravya vargikarana</i>
T – 8 CO1	<i>Avasthapaka & Vipak</i>

Suggested topics for seminar topics

Sr. No.	Content
S – 1 CO8	<i>Tridosha</i>
S – 2 CO8	<i>Agni</i>
S – 3 CO8	<i>Rasa rakta samvahan</i>
S – 4 CO8	<i>Pranavah srotas and shwasana prakriya</i>
S – 5 CO8	<i>Ashtavidh sara</i>
S – 6 CO8	<i>Trividh nyaya</i>
S – 7 CO8	<i>Prakriti</i>
S – 8 CO8	Basic concept of nervous system
S – 9 CO8	Rh Incompatibility
S – 10 CO8	Digesion of Carbohydrates, proteins & fats
S – 11 CO8	Blood clotting mechanism
S – 12 CO8	Immune system
S – 13 CO8	O ₂ -CO ₂ gasious exchange
S – 14 CO8	Hormones
S – 15 CO8	Renal system

Suggested topics for group discussion

Sr. No.	Content
GD – 1 CO1	<i>Dosha dhatu mala mulam hi shariram</i>
GD – 2 CO1	<i>Concept of agni</i>
GD – 3 CO1	<i>Concept of upadhatu</i>
GD – 4 CO1	<i>Role of ranjak pitta in formation of rakta dhatu</i>
GD – 5 CO1	<i>Concept of srotas</i>
GD – 6 CO1	<i>Physiology of purishadhara kala / asthidhara kala. Pittadhara kala/ majjadhara kala</i>
GD – 7 CO1	<i>Generation of doshas</i>
GD – 8 CO1	<i>Ashraya-ashrayi bhava sambhadha of asthi and vata</i>
GD – 9 CO1	<i>Process of urine formation described in ayurveda compendia</i>

GD – 10 CO1	<i>Avasthapaka</i>
GD – 11 CO1	Concept of <i>shatkriyakala</i>
GD – 12 CO1	<i>Manas Prakruti</i>

Table 6: Assessment Summary

6 A- Number of papers and Marks Distribution

S.No.	Subject Code	Papers	Theory	Practical/Clinical Assessment					Grand Total
				Practical /Clinical	Viva	Electives	IA	Sub Total	
3.	AyUG-KS	2	200	100	70	-	30	200	400

6 B - Scheme of Assessment (formative and Summative)

SR.NO.	PROFESSIONAL COURSE	DURATION OF PROFESSIONAL COURSE		
		First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)
1	First	3 PA & First TT	3 PA & Second TT	3 PA & UE

PA: Periodical Assessment; TT: Term Test; UE: University Examinations

6 C - Calculation Method for Internal assessment Marks (30 Marks)

TERM	PERIODICAL ASSESSMENT*					TERM TEST **	TERM ASSESSMENT	
	A	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/3)	Converted to 30 Marks (D/15*30)	Term Test (Marks converted to 30)	Sub Total _/60 Marks	Term Assessment (.../30)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Methods which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks)(MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert to 30 marks.							

6 D - Evaluation Methods for Periodical Assessment

S. No.	Evaluation Methods for Periodical Assessment
1.	Practical / Clinical Performance
2.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3.	Open Book Test (Problem Based)
4.	Summary Writing (Research Papers/ Samhitas)
5.	Class Presentations; Work Book Maintenance
6.	Problem Based Assignment
7.	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8.	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9.	Small Project
10.	Other activities explained in Table 3 Column G3 as per indicated term and objective of the topic.

6 E- Paper Layout

I PROFESSIONAL BAMS EXAMINATIONS

AyUG-KS

Paper-I

Time: 3 Hours Maximum Marks: 100

INSTRUCTIONS: All questions compulsory

TOTAL MARKS 100.

		Number of Questions	Marks per question	Total Marks
Q 1	Multiple Choice Questions (MCQ)	20	1	20
Q 2	Short answer questions (SAQ)	8	5	40
Q 3	Long answer questions (LAQ)	4	10	40
				100

AyUG-KS

Paper-II

Time: 3 Hours Maximum Marks: 100

INSTRUCTIONS: All questions compulsory

TOTAL MARKS 100.

		Number of Questions	Marks per question	Total Marks
Q 1	Multiple Choice Questions (MCQ)	20	1	20

Q 2	Short answer questions (SAQ)	8	5	40
Q 3	Long answer questions (LAQ)	4	10	40
				100

6 F- Disribution of Theory Exam

	Paper I Part-A (Marks-60)			D Type of Questions “Yes” can be asked. “No” should not be asked.		
	A List of Topics AyUG-KS	B Term	C Marks	MCQ (1 Mark)	SAQ (5 Marks)	LAQ (10 Marks)
1	Sharir:	I	8	Yes	Yes	No
2	BasicprinciplesofAyurveda:	I		Yes	Yes	No
3.	Tridosha:	I		Yes	Yes	No
4.	VataDosha:	I	26	Yes	Yes	Yes
5.	PittaDosha:	I		Yes	Yes	Yes
6.	KaphaDosha:	II		Yes	Yes	Yes
7.	DoshaVriddhi-Kshaya:	II		Yes	Yes	No
8.	Kriyakala:	II		Yes	Yes	No
9	Prakriti: Deha- Prakriti: Manasa-Prakriti:	II	26	Yes	Yes	Yes
10.	Ahara:	III		Yes	Yes	Yes
11.	Agni:	III		Yes	Yes	Yes
12.	Aharapaka	III		Yes	Yes	Yes
Part-B (Marks-40)						
1	Physiology Homeostasis:	I	23	Yes	Yes	Yes
2	Physiology of Respiratory system:	II		Yes	Yes	Yes
3	Physiology of Gastrointestinal system:	II		Yes	Yes	Yes
4	Physiology of Nervous System:	III	17	Yes	Yes	Yes
5	Physiology of Endocrine glands:	III		Yes	Yes	Yes

	Paper II PART-A (Marks-60)			D Type of Questions “Yes” can be asked. “No” should not be asked.		
	A List of Topics AyUG-KS	B Term	C Mark s	MCQ (1 Mark)	SAQ (5 Marks)	LAQ (10 Marks)
Part-A (Marks-60)						
1	Dhatu:	I	18	Yes	Yes	No
2	Rasa Dhatu:	I		Yes	Yes	Yes
3.	Rakta Dhatu:.	I		Yes	Yes	Yes
4.	Mamsa Dhatu:	I		Yes	Yes	Yes
5.	Meda Dhatu:	I		Yes	Yes	Yes
6.	Asthi Dhatu:	II	19	Yes	Yes	Yes
7.	Majja Dhatu :	II		Yes	Yes	Yes
8.	Shukra Dhatu:	II		Yes	Yes	Yes
9	Concept of Ashraya-Ashrayi bhava	II		Yes	Yes	No
10.	Ojas:	II		Yes	Yes	Yes
11.	Upadhatu: Stanya: Artava: Tvak:	II	23	Yes	Yes	Yes
12.	Mala: Purisha: Mutra: Sveda: Dhatumala:	III		Yes	Yes	Yes
13	Indriyavidnyan:	III		Yes	Yes	Yes
14	Manas:	III		Yes	Yes	Yes
15	Atma:	III		Yes	Yes	No
16	Nidra&Swapna:	III		Yes	Yes	No
Part-B (Marks-40)						
1	Haemopoetic system:	I	18	Yes	Yes	Yes
2	Immunity:	I		Yes	Yes	No
3	Physiology of cardio-vascular system:	I		Yes	Yes	Yes
4	Muscle physiology:	II	07	Yes	Yes	No
5	Adipose tissue:	II		Yes	Yes	No
6	Physiology of male and female reproductive	II	15	Yes	Yes	Yes
7	Physiology of Excretion:	III		Yes	Yes	Yes
8	Special Senses, Sleep and Dreams:	III		Yes	Yes	Yes

6 G- Question paper blue print

Paper I

AyUG-KS		
A Question Sr. No	B Type of Question	C Question Paper Format
.Q1	Multiple choice Questions (MCQ) 20 Questions 1 mark each All compulsory Must know part - 15 MCQ Desirable to know - 3 MCQ Nice to know part - 2 MCQ	MCQ no. Topic No 21. Topic number part A 1 22. Topic number part A 2 23. Topic number part A 3 24. Topic number part A 4 25. Topic number part A 4 26. Topic number part A 5 27. Topic number part A 6 28. Topic number part A 7 29. Topic number part A 8 30. Topic number part A 9 31. Topic number part A 9 32. Topic number part A 10 33. Topic number part A 11 34. Topic number part A 12 35. Topic number part A 12 36. Topic number part B 1 37. Topic number part B 2 38. Topic number part B 3 39. Topic number part B 4 40. Topic number part B 5
Q2	Short answer Questions (SAQ) Eight Questions 5 Marks Each All compulsory Must know - 7 SAQ Desirable to know - 1 SAQ No questions on Kice to know	9. Topic no. Part A 1/ Topic no. Part A 2/ Topic no. Part A 3 10. Topic no. Part A 4/ Topic no. Part A 5/ Topic no. Part A 6 11. Topic no. Part A 7/Topic no. Part A 8 12. Topic no. Part A 9/Topic no. Part A 10 13. Topic no. Part A 11/ Topic no. Part A 12/ 14. Topic no. Part B 1/ Topic no. Part B 2/ 15. Topic no. Part B 3 16. Topic no. Part B 4/ Topic no. Part B 5

Q3	Long answer Questions (LAQ) Four Questions 10 marks each All compulsory All questions on must know. No Questions on Nice to know and Desirable to know	5. Topic no. Part A 4/ Topic no. Part A 5/ Topic no. Part A 6 6. Topic no. Part A 9/ Topic no. Part A 10/ Topic no. Part A 11/ Topic no. Part A 12 7. Topic no. Part B 1/ Topic no. Part B 2/ Topic no. Part B 3 8. Topic no. Part B 4/ Topic no. Part B 5

Paper II

AyUG-KS		
A Question Sr. No	B Type of Question	C Question Paper Format
.Q1	Multiple choice Questions (MCQ) 20 Questions 1 mark each All compulsory Must know part - 15 MCQ Desirable to know - 3 MCQ Nice to know part - 2 MCQ	MCQ no. Topic no. 1. Topic number part A 1/2 2. Topic number part A 3 3. Topic number part A 4/5 4. Topic number part A 6 5. Topic number part A 7 6. Topic number part A 8 7. Topic number part A 9/10 8. Topic number part A 11 9. Topic number part A 12 10. Topic number part A 13/14/15/16 11. Topic number part B 1 12. Topic number part B 2 13. Topic number part B 3 14. Topic number part B 4 15. Topic number part B 5 16. Topic number part B 6 17. Topic number part B 6 18. Topic number part B 7 19. Topic number part B 7 20. Topic number part B 8
Q2	Short answer Questions (SAQ) Eight Questions 5 Marks Each	1. Topic no. Part A 1/ Topic no. Part A 2/ Topic no. Part A 3/ Topic no. Part A 4/ Topic no. Part A 5

	All compulsory Must know - 7 Desirable to know - 1 SAQ No question on Nice to know	2. Topic no. Part A 6/ Topic no. Part A 7/ Topic no. Part A 8/ Topic no. Part A 9/ Topic no. Part A 10 3. Topic no. Part A 11/ Topic no. Part A 12 4. Topic no. Part A 13/ Topic no. Part A 14/ Topic no. Part A 15 Topic no. Part A 16 5. Topic no. Part B 1/ Topic no. Part B 2/ Topic no. Part B 3/ 6. Topic no. Part B 4/ Topic no. Part B 5 7. Topic no. Part B 6/ Topic no. Part B 8 8. Topic no. Part B 7
Q3	Long answer Questions (LAQ) Four Questions 10 marks each All compulsory All questions on Must know. No Questions on Nice to know and Desirable to know	1. Topic no. Part A 2/ Topic no. Part A 3/ Topic no. Part A 4/ Topic no. Part A 5 2. Topic no. Part A 6/ Topic no. Part A 7/ Topic no. Part A 8/ Topic no. Part A 10 3. Topic no. Part A 11/ Topic no. Part A 12/ Topic no. Part A 13/ Topic no. Part A 14 4. Topic no. Part B 1/ Topic no. Part B 2/ Topic no. Part B 3

6 F Distribution of Practical Exam

(Practical 100 + Viva 70 + IA 30) = (Total 200 Marks)

AyUG-KS			
SN	Heads	Topic	Marks
A	Practical		

1	Spotting	Spotting (including two problem-based test) 1. Histology slide 2. ECG report (counting heart rate etc.) 3. Blood report (normal-abnormal values and significance) 4. Photograph of prakruti character. 5. Problem based sara/agni parikshan. 6. Case of vrudhhi kshay lakshan. 7. Aplicability of one spot used in haematological practical. 8. Identify the difference between two things & use. 9. Model based 10. Human experiment related	10 Marks
2	Ayu. Practical	Performance based components. (Take only one practical separately OR make combination of few components of more than one practical) Ayurveda practical - Prakritiparikshana(Self / volunteer / patients) Saraparikshana Agni &koshtha <i>parikshana</i> Dosha vrddhi-kshaya lakshana/ Dhatu vriddhi -kshaya Lakshana	40 Marks
3	Lab. Practical	Laboratory practical (Hb, BT, CT, Blood group, Urine exam) Human physiology practical (pulse examination, BP, heart sounds, reflexes)	30 Marks
4	Project work	Project work (Activity based)	10 Marks
5	Practical Record	Practical Record	10 Marks
		Total	100 Marks
B	Viva Voce	General viva voce based on Ayurveda (20), Viva on instruments (20), Structured viva on Part B (refer Table 2)(10), Recitation of verses (15), and Communication skill (5)	70 Marks
C	IA	Internal Assessment	30 Marks
		Total Marks	200 Marks

7. References / Resources

- Ayurvediya Kriyasharir - Ranjit Rai Desai
- Kayachikitsa Parichaya - C. Dwarikanath
- Prakrit Agni Vigyan - C. Dwarikanath
- Sharir Kriya Vigyan - Shiv Charan Dhyani
- Abhinava Sharir Kriya Vigyana - Acharya Priyavrata Sharma
- Dosha Dhatu Mala Vigyana - Shankar Gangadhar Vaidya
- Prakrita Dosha Vigyana - Acharya Niranjana Dev
- Tridosha Vigyana - Shri Upendranath Das
- Sharira Tatva Darshana - Hirlekar Shastri
- Prakrita Agni Vigyana - Niranjana Dev
- Deha Dhatvagni Vigyana - Vd. Pt. Haridatt Shastri
- Sharir Kriya Vigyana (Part 1-2) - Acharya Purnchandra Jain
- Abhinava Sharir Kriya Vigyana - Dr. Shiv Kumar Gaur
- Pragyogik Kriya Sharir - Acharya P.C. Jain
- Kaya Chikitsa- Ramraksha Pathak
- Kaya Chikitsa Parichaya - Dr. C. Dwarkanath
- Concept of Agni - Vd. Bhagwan Das
- Purush Vichaya - Acharya V.J. Thakar
- Kriya Sharir - Prof. Yogesh Chandra Mishra
- Sharira Kriya Vijnana (Part 1 and 2) – Nandini Dhargalkar
- Sharir Kriya Vigyana - Prof. Jayaram Yadav & Dr. Sunil Verma.
- Kriya Sharir mcq – Dr. Kiran Tawalare
- Basic Principles of Kriya-Sharir (A treatise on Ayurvedic Physiology) - Dr. Srikant Kumar Panda
- Sharir Kriya – Part I & Part II – Dr. Ranade, Dr. Deshpande & Dr. Chobhe
- Human Physiology in Ayurveda - Dr Kishor Patwardhan
- Textbook of Physiology - Gyton & Hall
- Review of medical physiology – William Ganong
- Essentials of Medical Physiology - Sembulingam, K.
- Concise Medical Physiology - Chaudhari, Sujit. K.
- Fundamental of Anatomy & Physiology - Martini
- Principals of Anatomy & Physiology - Tortora & Grabowski
- Human Physiology - Richards, Pocock
- Samson Wrights Applied Physiology, Keele, Neil, joels
- Ayurveda Kriya Sharira - Yogesh Chandra Mishra
- Textbook of Medical Physiology - Indu Khurana
- Tridosha Theory - Subrahmanya Shastri
- Dosha Dhatu Mala vigyan – S. G. Vartak
- Purush Vichaya – Jayanad Thakar
- All Samhitas.
- Ayurvediya Shabda kosha.
- Vachaspatyam
- Shabdakalpadrum

- Monir Williams Sanskrit dictionary.

Rachana sharira

Table 2: Contents of Course AyUG-RS

Paper I					
SN	A2 List of Topics AyUG-RS	B2 Term	C2 Marks	D2 Lecture hours	E2 Non- Lecture hours
1	ShariropkramaniyaShaarira - Sharir and Shaarir vyakhya (definitionsofshariraandsharira) - Shadangatvam (Six regions of the body) - Anga Pratyanga vibhaga (subdivisions) - Sharir shastra vibhag - Sharir gyan prayojan and its description in contemporary science with its clinical importance	I	6	4	2
2	ParibhashaShaarira - Kurcha, Kandara, Jala, Asthisamghata, Seemnta, Seevani, Rajju, and lasika - Terminologies related shadang sharir	I	4	3	1
3.	GarbhaShaarira - Garbha Vyakhya (Definition of Garbha) - Concept of Shukra and Artava - Garbhavkranti. Masanumasik grabhavruddhi - Role of panchamahabhoot in Garbhavruddhi - Concept of Beeja, Beejabhaga, Beejabhagavayava - Garbhposhana - Apara nirmiti, Garbhanabhinadi - Garbha Angapratyanga utpatti according to different Acharya - Garbha Vikruti	I	15	17	5
4.	AsthiShaarira Enumeration of Asthi, Types, asthi swaroopa, with its applied aspect	I	4	2	1
5.	SandhiShaarira - Description of Sandhi and its enumeration, - Types of Sandhi with its clinical importance - Introduction of diseases of Sandhi explained in Ayurveda	II	4	2	3
6.	Snayu sharir Concept of Snayu andits clinical importance	II	3	2	1

7.	PeshiShaarira - Description of Peshi, - Utpatti, types, Swaroop, function with its importance	II	3	2	1
8.	Kesha, Danta, Nakha Sharir - Description of Panchbhautik swaroop and its applied value - Explanation of its swabhava (Pitruja) and its applied value - Description of Prakrita (normal) and Vikruta (abnormal) Swaroop (appearance) of kesha, danta, nakha in concern with disease - Importance of examination of kesha, danta, nakha as diagnostic tool	II	4	2	1
9	Embryology - Definitions and branches of embryology. - Embryo and Fetus. Spermatogenesis, Oogenesis, Fertilization, Cleavage. - Germlayer formation and their derivatives. - Laws of heredity, Sex determination and differentiation, Month-wise development of embryo. - Fetal circulation, Placenta formation, Umbilical cord formation	I	5	7	2
10	Osteology - Bone: structure, types and ossification. - Description of each bone with clinical anatomy	I	12	9	6
11	Arthrology - Joints: structure, types and movements. - Description of joints of extremities, intervertebral joints and temporomandibular joint with their clinical anatomy.	II	10	10	6
12	Myology - Structure and types of muscles. Description of important muscles: origin, insertion, actions, nerve supply and clinical anatomy. - Muscle movements in Yogasana	II	4	6	2
13	Nervous System - Nervous system: Introduction and classification - Meninges - Description of Brain and Spinal cord. - Description of Peripheral Nervous System: Cranial and Spinal nerves, Brachial, Cervical, Lumbar and Sacral nerve plexus, - Anatomical consideration of Autonomic Nervous System, - Formation and circulation of cerebrospinal fluid - Blood supply of Brain and Spinal cord.	III	14	14	4

14	Endocrinology - Description of endocrine glands (Pituitary, Thyroid, Parathyroid, Thymus, Pineal and Suprarenal glands) with clinical aspects. - Histology of all glands.	III	8	8	3
15	Lymphatic system Introduction Structure included in lymphatic system: Lymph vessels, Lymph nodes, Lymph glands with their clinical importance.	III	4	2	2

Paper II AyUG-RS					
SN	A2 List of Topics AyUG-RS	B2 Term	C2 Marks	D2 Lecture hours	E2 Non- Lecture hours
1	Pramana Sharira: Angulipramana & Anjali praman with its applied importance	II	2	2	1
2	Koshtha Evam Ashaya Sharira - Definition of Koshtha with its applied importance and - Enumeration of Koshthanga and its description - Concept of Ashaya with its clinical importance	I	4	2	1
3.	Sira Sharir - Concept of Sira - Nirukti, types, enumeration of Sira and its applied aspect - Introduction to Sira vedha	II	4	3	1
4.	Dhamani Sharir - Concept of Dhamani - Nirukti, types, enumeration of Dhamani and its applied aspect	II	2	2	1
5.	Strotas Shaarira - Concept of Strotas - Nirukti, types, number of Strotas, Strotomool and its applied aspect - Types of Strotas and its description. - Applied aspect of Strotas	II	7	8	3
6.	Kala Shaarira - Definition and etymology of Kala - Enumeration and description of Kala	III	4	2	2

	Applied aspect of Kala				
7.	Indriya Shaarira - Definition of Indriya, Indriya artha and Indriya adhistan, - Number and importance of Indriya - Description of Gyanendriya, Karmendriya and Ubhayendriya (Manas). - Ayurved sharir of Indriya adhistan- Karna, Twacha, Netra, Jivha, Nasa - Applied aspect of Indriya	III	3	3	1
8.	Twacha Sharir Definition, types and characteristics of Twacha with its clinical importance, significance of Twacha adhithana in disease manifestation, its relation with Dhatu.	III	3	2	2
9	MarmaSharira - Marma: definition, enumeration, classification, location - Surface demarcation of Marma - Explanation of Trimarma - Detail description of Marma with its applied importance.	II	15	13	4
10	RespiratorySystem - Bronchial tree and Lungs with their clinicalaspects. - Respiratorytract:Nasalcavity,Pharynx,Larynx, Trachea - Pleura with its clinicalaspects - Diaphragm and its opening - Histology of all organs	II	10	6	4
11	Digestivesystem - Regions of abdomen - Organsofdigestivetract(alimentarytract)withthe irclinicalaspects. - Digestive glands: Liver, Spleen andPancreas. - Description of peritoneum with its clinicalaspects - Histology of all organs	I	12	10	6
12	Cardiovascular system - Description of Heart - Structure of artery & vein - Importance blood vessels with their course andbranches. - Pericardium with appliedaspect - Histology of Heart	II	8	8	3
13	UrinarySystem	II	10	8	3

	• Urinary tract: Kidney, Ureter, Urinary Bladder and Urethra with their clinical aspects • Histology of all organs				
14	Reproductivesystem • Male Reproductive system: Reproductive organs, Scrotum and glands (Testis, Prostate and Seminal vesicles) with their clinical aspects. • Female reproductive system: Introduction of external genital organ in brief and internal reproductive organs in detail, tract and glands with clinical importance. • Histology of all organs	III	6	7	3
15	Sensoryorgans Description of structures of Eye, Ear, Nose, Tongue and Skin with their clinical aspects.	III	10	14	5

Table 3: Learning objectives (Theory) of Course AyUG-RS

Paper IRACHANA SHARIR –									
A3 Course outcome	B3 Learning Objective (At the end of the session the students should be able to)	C3 Domain	D3 Must to know/de sire to know/Ni ce to know	E3 Level Does/Sho ws how/Show s/Knows how/Kno ws	F3 T-L method	G3 Assessment	H3 Formati ve /summa tive	I3 Te rm	J3 Integrat ion
Topic 1- Shariroupkramaniya [Time: Lecture: 04 hours, non-lecture 02 hours] Practical- 02 hours									
CO1	Define Sharir.	Cognitive / Recall	MK	Knows	Lecture	Written / viva-voce/ Open book test	F&S	I	
CO1	Describe the constitutional elements of Sharir	Cognitive/ Comprehen sion	MK	Knows	Lecture	Written/ viva-voce	F&S	I	
CO1	Analyze the Constitutional hierarchy of Sharir and its relevance	Cognitive/ analyze	DK	Knows how	Lecture/ GD	Written / viva-voce	F&S	I	
CO1	Enlist Anga -Pratyanga and specific terms for each Pratyanga	Cognitive/ Recall	MK	Knows	Lecture/ GD	Written/ viva-voce	F&S	I	
CO1	Describe the Importance of Pratyaksha (Demonstration & Dissection) method of learning Sharir	Cognitive - comprehen sion	MK	Knows how	Lecture/ demonstration/ TT/ GD	Written / viva-voce	F&S	I	

CO1	Explain the Mruta Samshodhana as mentioned in Sushruta Samhita and as per the modern science.	Cognitive / Comprehension Psychomotor	MK	Knows	Demonstration/ simulation/	Written / viva-voce	F&S	I	
CO1	Appraise the concept of body donation and its relevance in present scenario	Cognitive - analysis, Affective	NK	Knows	Lecture/ educational video/ SDL	Written / viva-voce	F&S	I	
Topic 2- Paribhasha Sharir [Time: Lecture: 03 hours, non-lecture 01 hours] Practical- 6 hours									
CO1	Explain the terms Kandara, Kurcha, Mamsa, Rajju, Sevani, Jala, Seemant, Asthi Sanghat in context to its enumeration, site and structure.	Cognitive / comprehension	MK	Knows	Lecture/ Demonstration	Written/ viva-voce/ Open book test	F&S	I	
CO1	Evaluate the clinical importance of Kandara, Kurcha, Mamsa, Rajju, Sevani, Jala Seemant, Asthi and Samghat	Cognitive/ Application	DK	Knows how	Lecture/ Demonstration/ SDL	Written/ viva-voce	S	I	
Topic 3- Garbha Sharir [Time: Lecture: 17 hours, non-lecture 05 hours]									
CO 2	Define Garbha and recall the related verse from samhitas.	Cognitive / knowledge	MK	Knows	Lecture/ Recitation	Written/ viva-voce	F & S	I	-
CO 2	Explain the concept of Shukra and recall the related verse from samhitas.	Cognitive / comprehension	MK	Knows	Lecture/ Recitation	Written/ viva-voce	F & S	I	-
CO 2	Explain the concept of Artava and recall the related verse from samhitas.	Cognitive / comprehension	MK	Knows	Lecture/ recitation	Written/ viva-voce	F & S	I	-

CO 2	Describe the role of tridosha and panchamahabhuta in the fetal development	Cognitive / comprehension	MK	Knows how	Lecture/ IT	Written/ viva-voce	F & S	I	Dept. of Streerog Prasuti tantra
CO 2	Explain the concept of Beeja, Beejbhaag, Beejabhagavayava	Cognitive / Comprehension	MK	Knows	Lecture/ GD/ TT	Written/ viva-voce	F & S	I	Dept. of Streerog Prasuti tantra
CO 2	Describe Masanumasik Garbha vridhhi kram and recall the related verse from samhitas.	Cognitive / comprehension	MK	Knows how	Lecture/ Recitation/ demonstration with 3D animated video	Written/ viva-voce/ Open book test	F & S	I	-
CO 2	Describe Garbhaposhana	Cognitive / comprehension	MK	Knows how	Lecture	Written/ viva-voce/ Open book test	F & S	I	-
CO 2	Describe the formation of Apra according to Ayurved	Cognitive / knowledge	MK	Knows, Knows how	Lecture/ demonstration with 3D animated video	Written/ viva-voce/ Open book test	F & S	I	-
CO 2	Describe Garbha nabhinadi	Cognitive / knowledge	MK	Knows	Lecture	Written/ viva-voce	F & S	I	-
CO 2	Explain Angapratyanga utpatti with the related verse from samhitas.	Cognitive / comprehension	MK	Knows how	Lecture/ demonstration with 3D animated video/	Written/ viva-voce/ Assignment s/ Open book test	F & S	I	Dept. of Streerog Prasuti tantra
Topic 4- Asthi Shaarira [Time: Lecture: 02 hours, non-lecture 01 hours]									

CO1	Enlist the number of Asthi according to different Acharyas	Cognitive/ Recall	MK	Knows how	Lecture	Written / viva-voce/ Open book test	F & S	I	
CO1	Describe the Asthi Sanghata and Asthi Simanta	Cognitive/ comprehension	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	I	
Topic 5- Sandhi Sharir [Time: Lecture: 02 hours, non-lecture 03 hours]									
CO 3	Define the term Sandhi	Cognitive – Recall	MK	Knows	Lecture	Written/ viva-voce	F&S	II	
CO 3	Classify Sandhi into different types.	Cognitive – Recall	MK	Knows	Lecture	Written/ viva-voce/ project work	F&S	II	
CO 3	Demonstrate the movements of Chala Sandhi and comprehend the structural appearance	Cognitive – Application Psychomotor	MK	shows	Lecture + Demonstration thorough model/ simulation	Written/ viva-voce	F&S	II	
CO 3	Illustrate the applied aspect of Sandhi and introduction of diseases of Sandhi explained in Ayurveda	Cognitive - Application	DK	Knows how	Lecture/ ECE/ SDL/ Seminar	Written/ viva-voce/ Assignment	F&S	II	Kayachikitsa
Topic 6- Snayu Sharir [Time: Lecture: 02 hours, non-lecture 01 hours]									
CO 6	Describe Snayu with respect to its definition, structure, types, number, importance with its clinical importance	Cognitive/ comprehension	MK	Knows how	Lecture with demonstration/ SDL/Seminar	Written/ Viva -voce/ Open book test	F&S	II	
Topic 7- Peshi Sharir [Time: Lecture: 02 hours, non-lecture 01 hours]									
CO 5	Describe Peshi Sharir and its classification as per	Cognitive – comprehension	MK	Knows	Lecture/ Demonstration/	Written/ Viva-voce/	F&S	II	

	Ayurveda	ion			SDL/ Seminar	Open book test			
Topic 8- Kesha, Danta, Nakha Sharir [Time: Lecture: 02 hours, non-lecture 01 hours]									
CO 6	Describe Panchabhautik Swaroop, Swabhav (Pitruja) with its applied value in Prakriti and also explain related diseases with importance of examination kesha, danta, nakha as diagnostic tool	Cognitive/ comprehension	MK	Knows how	Lecture with demonstration with 3D animated video/ SDL	Written/ Viva -voce/ Open book test/ Assignment	F&S	II	
Topic 9- Embryology [Time: Lecture: 07 hours, non-lecture 02 hours]									
CO 2	Define embryology and enlist its branches	Cognitive / knowledge / recall	DK	Knows	Lecture	Written/ viva-voce	F & S	I	
CO 2	Define Embryo and Foetus	Cognitive / knowledge / recall	MK	Knows	Lecture	Written/ viva-voce	F & S	I	
CO 2	Describe the anatomical structure of Sperm and Ovum and explain its clinical importance	Cognitive / comprehension	MK	Knows how	Lecture/ Demonstration	Written/ viva-voce/ Assignment	F & S	I	
CO 2	Define term of fertilization	Cognitive / knowledge / recall	MK	Knows	Lecture/ Seminar	Written/ viva-voce	F & S	I	
CO 2	Describe the process of cleavage	Cognitive / comprehension	MK	Knows how	Lecture/ Educational 3D Animated videos	Written/ viva-voce	F & S	I	--
CO 2	Explain the process of germ layer formation and its derivatives	Cognitive / comprehension	MK	Knows how	Lecture/ Educational 3D Animated videos	Written/ viva-voce	F & S	I	Dept. of Streerog Prasuti tantra

CO 2	Explain the laws of heredity	Cognitive / comprehension	MK	Knows how	Lecture/ Seminar	Written/ viva-voce	F & S	I	Dept. of Streerog Prasuti tantra
CO 2	Describe the process of sex determination and differentiation	Cognitive / comprehension	NK	Knows how	Lecture/ Seminar	Written/ viva-voce	F & S	I	--
CO 2	Explain the month wise development of Foetus	Cognitive / comprehension	MK	Knows how	Lecture/ Demonstration	Written/ viva-voce/ Open book test/ Project work	F & S	I	Dept. of Streerog Prasuti tantra
CO 2	Explain foetal circulation and the changes in the circulation after birth	Cognitive / comprehension	MK	Knows how	Lecture/Demonstration	Written/ viva-voce	F & S	I	--
CO 2	Describe Placenta formation & its structure with applied anatomy	Cognitive / application	MK	Knows how	Lecture/ Seminar/ ECE	Written/ viva-voce	F & S	I	Dept. of Streerog Prasuti tantra
CO 2	Describe Umbilical cord with clinical importance	Cognitive / knowledge / application	MK	Knows how	Lecture/ Seminar/ ECE	Written/ viva-voce	F & S	I	Dept. of Streerog Prasuti tantra
Topic 10- Osteology [Time: Lecture: 09 hours, non-lecture 06 hours] Practical- 20 hours									
CO3	Explain skeleton and its importance	Cognitive/ comprehension	MK	knows	Lecture/ Demonstration/ Seminar	Written / viva-voce	F & S	I	
CO3	Describe the uses of bones	Cognitive/ comprehension	MK	Knows	Lecture	Written / viva-voce	F & S	I	

		ion							
CO3	Describe and demonstrate the processes and depressions of various bones	Cognitive/ comprehension, Application	MK	Show how	Lecture / Demonstration	Written / viva-voce	F & S	I	
CO3	Describe the characteristics of the bones	Cognitive/ comprehension	MK	Knows	Lecture	Written / viva-voce	F & S	I	
CO3	Describe the development and ossification of bones	Cognitive/ comprehension	DK	Knows how	Lecture	Written / viva-voce	F & S	I	
CO3	Describe and demonstrate Cranial bones and its applied anatomy	Cognitive / comprehension, Application	MK	Shows how	Lecture/ Demonstration	Written / viva-voce	F & S	I	
CO3	Describe and demonstrate Facial bones and its applied anatomy	Cognitive / comprehension, Application	DK	Shows how	Lecture/ Demonstration	Written / viva-voce	F & S	I	
CO3	Describe and demonstrate pelvic bones and its applied anatomy	Cognitive / comprehension, Application	MK	Shows how	Lecture/ Demonstration	Written / viva-voce	F & S	I	
CO3	Describe and demonstrate vertebral column and its applied anatomy	Cognitive / comprehension, Application	MK	Shows	Lecture/ Demonstration	Written / viva-voce	F & S	I	
CO3	Describe and demonstrate thorax bones and its applied anatomy	Cognitive / comprehension, Application	MK	Shows how	Lecture/ Demonstration	Written / viva-voce	F & S	I	
CO3	Describe & demonstrate Clavicle and Scapula and	Cognitive / comprehension	MK	Shows how	Lecture/ Demonstration	Written / viva-voce	F & S	I	Kayachikitsa

	its applied anatomy	ion, Application							
CO3	Describe Phalanges, Carpal and Tarsal Bones and its applied anatomy	Cognitive / comprehension	DK	Knows	Lecture/ Demonstration	Written/ viva-voce	F & S	I	
CO3	Describe & demonstrate bones of the upper & lower extremity and its applied anatomy	Cognitive / comprehension, Application	MK	Shows how	Lecture/ Demonstration	Written / viva-voce/ Project work	F & S	I	
CO3	Describe & demonstrate Patella and its applied anatomy	Cognitive / comprehension, Application	DK	Shows	Lecture/ Demonstration	Written / viva-voce	F & S	I	
CO10	Recognize and describe the Radiological structures in radiograph	Cognitive / comprehension, Application	MK	Shows	Lecture/ Demonstration/ PBL/ ECE/ SDL	Written / viva-voce/ Project work/ Assignment	F & S	I	
Topic 11- Arthrology [Time: Lecture: 10 hours, non-lecture 06 hours] Practical- 8 hours									
CO 3	Recall the classification of Joints	Cognitive – Recall	MK	Knows	Lecture	Written/ viva-voce	F&S	II	
CO 3	Demonstrate movements of Synovial Joints and comprehend the structural aspect helping in movements.	Cognitive – Application Psychomotor	MK	Knows how	Lecture/ Demonstration/ Simulation	Written/ viva-voce	F&S	II	
CO 3	Describe constitutional anatomy of joint	Cognitive – Comprehension	MK	Knows	Lecture	Written/ viva-voce	F&S	II	
CO 3	Describe joints of upper limb and lower limb region, TM joint, and its related applied aspect	Cognitive – Application	MK	Knows how	Lecture/ PBL/ ECE	Written/ viva-voce/ Open book test/	F&S	II	Kaychikitsa

						Assignment			
CO 3	Demonstrate the examination of synovial joints	Psychomotor	MK	Knows + Shows	Demonstration with case presentation in relative aspect/ ECE/ SDL/ 3D Animated videos	Written/ viva-voce/ Practical performance	F&S	II	Rognidana
Topic 12- Myology [Time: Lecture: 06 hours, non-lecture 02 hours] Practical- 8 hours									
CO5	State the types of muscles.	Cognitive – application Psychomotor	MK	Knows	Lecture	Written/ Viva-voce	F & S	II	
CO5	Describe and demonstrate the muscles of upper and lower extremity with their origin, insertion, action & nerve supply and applied aspect and its role in Yogasana	Cognitive – application	MK	Shows	Lecture/ Demonstration/ GD/TT/ SDL/ 3D Animated videos	Written/ Viva-voce/ Open book test/ Project work	F & S	II	Swasthvritta
CO5	Describe and demonstrate muscles of thorax and abdomen with their origin, insertion, action & nerve supply and applied aspect and its role in Yogasana	Psychomotor	MK	Shows	Lecture/ Demonstration/ GD/TT/ SDL/ 3D Animated videos	Written/ Viva-voce/ Open book test/ Project work	F & S	II	Swasthvritta
CO5	Describe and demonstrate muscles of back with origin, insertion, action & nerve supply and applied aspect and role in Yogasana	Cognitive – application	DK	Shows	Lecture/ Demonstration/ GD/TT/ SDL/3D Animated videos	Written/ Viva-voce/ Open book test/ Project work	F & S	II	Swasthvritta
Topic 13- Nervous System [Time: Lecture: 14 hours, non-lecture 04 hours] Practical- 12 hours									

CO6	Explain the hierarchy of structural unit	Cognitive-/comprehension	MK	Knows	Lecture/ Demonstration	Written/ viva-voce	F&S	III	
CO6	Describe the functional and structural division of the nervous system	Cognitive-comprehension	MK	Knows how	Lecture/ Seminar	Written/ viva-voce	F&S	III	
CO6	Explain the parts of Brain (Cerebrum, Cerebellum)	Cognitive – comprehension	MK	Knows, Knows how	Lecture/ Demonstration	Written/ viva-voce/ Open book test	F&S	III	
CO6	Describe external and internal features of Spinal cord.	Cognitive – comprehension	MK	Knows, Knows how	Lecture/ Demonstration/ 3D animated videos	Written/ viva-voce/ Open book test	F&S	III	
CO6	Illustrate the Blood supply of Brain and Spinal cord.	Cognitive – comprehension	MK	Knows, Knows how	Lecture/ Demonstration/ 3D animated videos	Written/ viva-voce/ Open book test	F&S	III	
CO6	Describe the external features of diencephalon Mid brain, Pons, Medulla oblongata.	Cognitive-Comprehension	DK	Knows	Lecture/ Demonstration/ 3D animated videos	Written/ viva-voce/ Open book test	F&S	III	
CO6	Describe the limbic system	Cognitive-Comprehension	NK	Knows	Lecture/ Demonstration/ 3D animated videos	Written/ viva-voce/ Open book test	F&S	III	
CO6	Describe the general Sulci and gyri of cerebrum and determine the clinical importance of Broadman's classification	Cognitive – application	MK	Knows Knows how	Lecture/ Demonstration/ 3D animated videos	Written/ viva-voce/ Open book test	F&S	III	
CO6	Describe the ascending, descending pathways,	Cognitive/application	DK	Knows how	Lecture/ Demonstration/	Written/ viva-voce/	F&S	III	Kaya chikitsa

	upper motor neurons and lower motor neurons, its applied aspect in examination of nervous system	Affective /responding			CBL, ECE	Open book test			
CO6	Demonstrate the superficial and deep reflexes and its clinical importance	Cognitive /application Psychomotor /perception Affective /responding	DK	shows	Lecture + Demonstration though living object/ ECE/ PBL/ SDL/ CBL	Viva-Voce/ Practical performance	F&S	III	Kayachikitsa
CO6	Recall the general anatomical consideration of ANS	Cognitive/ Recall	MK	Knows	Lecture/ SDL	Written	F&S	III	
CO6	Describe the cranial and spinal nerves along with formation of nerve plexuses and applied anatomy	Cognitive / Application	DK	Knows how	Lecture/ PBL/ ECE/ SDL	Written / viva-voce/ Assignment	F &S	III	
CO6	Describe the Formation and circulation of cerebro-spinal fluid	Cognitive/ comprehension	MK	Knows how	Lecture	Written / viva-voce	F&S	III	
Topic 14- Endocrinology [Time: Lecture: 08 hours, non-lecture 03 hours] Practical- 02 hours									
CO 6	Define Endocrine Glands and enlist them	Cognitive/ Recall	MK	Knows	Lecture	Written / viva-voce	F & S	III	
CO 6	Describe Structure and Functions of Endocrine Glands	Cognitive-/ Comprehension	MK	Knows	Lecture	Written / viva-voce	F & S	III	
CO 6	State the location, Dimension & Shape of Pituitary	Cognitive/ Recall	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	III	
CO 6	Describe the Parts &	Cognitive /	MK	Knows	Lecture/	Written /	F & S	III	

	subdivisions of Pituitary	comprehension			Demonstration	viva-voce			
CO 6	Describe the Blood Supply, Nerve Supply & Lymphatic drainage of Pituitary	Cognitive /comprehension	MK	Knows	Lecture/ Demonstration/ CBL	Written / viva-voce	F & S	III	
CO 6	Enlist the hormones secreted by Pituitary, & histology and discuss its clinical anatomy.	Cognitive/ Application	MK	Knows	Lecture/ Demonstration/ GD	Written / viva-voce/ Open book test	F & S	III	
CO 6	State the location, Dimension & Shape of Thyroid gland	Cognitive/ Recall	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	III	
CO 6	Describe the lobes, border & surfaces of Thyroid gland with its relation.	Cognitive /comprehension	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	III	
CO 6	Describe the blood supply, nerve Supply & lymphatic drainage of Thyroid gland	Cognitive /comprehension	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	III	
CO 6	List the Hormones secreted by Thyroid gland and & histology, and discuss its clinical application	Cognitive - Application	MK	Knows	Lecture/ GD/ CBL	Written / viva-voce/ Open book test	F & S	III	
CO 6	Describe the location, Shape, Dimensions and structure of Parathyroid gland	Cognitive /comprehension	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	III	
CO 6	Describe the Blood Supply, Nerve Supply & Lymphatic drainage of Parathyroid gland	Cognitive /comprehension	DK	Knows	Lecture Demonstration	Written / viva-voce	F & S	III	
CO 6	List the hormones secreted by parathyroid, &	Cognitive /Application	DK	Knows	Lecture/ GD/ CBL	Written / viva-voce/	F & S	III	Kayachikitsa

	histology and discuss its Clinical anatomy					Open book test			
CO 6	State the location, Shape & dimension of Suprarenal gland	Cognitive / Recall	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	III	
CO 6	Describe the Surface, Borders of Suprarenal gland along with its relation.	Cognitive/comprehension	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	III	
CO 6	List the Functions and Secretions of Suprarenal gland	Cognitive / Recall	MK	Knows	Lecture	Written / viva-voce	F & S	III	Sharir Kriya
CO 6	Describe the Blood Supply, Nerve Supply & Lymphatic drainage of Suprarenal gland	Cognitive / comprehension	DK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	III	
CO 6	Describe the Internal structure of suprarenal gland	Cognitive / comprehension	DK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	III	
CO 6	Write the Clinical & applied anatomy & histology of Suprarenal gland	Cognitive / application	DK	Knows	Lecture/ CBL	Written / viva-voce/ Open book test	F & S	III	Kayachikitsa
Topic 7- Lymphatic System [Time: Lecture: 02 hours, non-lecture 02 hours]									
CO 6	Define Lymphatic System	Cognitive / Recall	MK	Knows	Lecture	Written / viva-voce	F & S	III	
CO 6	Describe components of Lymphatic System	Cognitive / comprehension	MK	Knows	Lecture	Written / viva-voce	F & S	III	
CO 6	Describe the anatomical structure of Various Lymph Vessels i.e. Lymphatic Trunks,	Cognitive / comprehension, Application	MK	Knows how	Lecture/ Demonstration/ CBL	Written / viva-voce	F & S	III	

	Thoracic Duct etc and explain its clinical importance								
CO 6	Describe the anatomical structure of Lymph Glands i.e. Lymph Nodes, Spleen, Thymus, Tonsils etc and explain its clinical importance	Cognitive / comprehension, Application	MK	Knows how	Lecture/ Demonstration/ ECE/ CBL	Written / viva-voce/ Open book test	F & S	III	Rognid n Evum Vikriti Vigyan
Paper II									
Topic 1- Praman sharir [Time: Lecture: 02 hours, non-lecture 01 hours]									
CO1	Describe Anguli and Anjali praman with its significance.	Cognitive Comprehension	MK	Knows	Lecture/ Demonstration/ GD	Written/ Viva-voce/ Open book test	F & S	II	
Topic 2- Koshtha Evam Ashaya Shaarira [Time: Lecture: 02 hours, non-lecture 01 hours]									
CO1	Define of Koshtha and Ashaya	Cognitive/ knowledge	MK	Knows	Lecture	Written/ viva-voce/ Open book test	F&S	I	
CO1	Describe the concept of various numbers of Koshthanga as per Samhitas	Cognitive/ Comprehensive	MK	Knows	Lecture	Written/ viva-voce/ Open book test	F&S	I	
CO1	Describe the concept of various Numbers of Ashaya as per Samhitas	Cognitive/ Comprehensive	MK	Knows	Lecture/ TT/ GD	Written/ viva-voce/ Open book test	F&S	I	
CO1	Describe and explain applied aspects of Koshtha and Ashaya.	Cognitive/ Comprehensive application	NK	Knows How	Lecture/ GD/ ECE	Written/ viva-voce/ Assignment s/ Open	F&S	I	Kayack itsa

						book test			
Topic 3- Sira sharir [Time: Lecture: 03 hours, non-lecture 01 hours]									
CO 4	Define Sira, Enumerate the sira & state its Nirukti	Cognitive /Recall	MK	Knows	Lecture/ Seminar	Written / viva-voce/ Open book test	F & S	II	
CO 4	Explain the classification of Sira	Cognitive / Comprehension	MK	Knows how	Lecture	Written / viva-voce/ Open book test	F & S	II	
CO 4	Define Vedhya Sira and Enumerate Vedhya Sira	Cognitive /Recall	MK	Knows	Lecture/ GD	viva-voce/ Open book test	F & S	II	
CO 4	Define Avedhya sira and Enumerate the Avedhya Sira	Cognitive / Recall	MK	Knows	Lecture	Written / viva-voce/ Open book test	F & S	II	
CO 4	Locate the Vedhya Sira in the body according to region	Cognitive / application Psychomotor	MK	Shows	Lecture/ Demonstration/ IT	viva-voce/ Practical performance	F & S	II	Shalyata ntra
CO 4	Describe the applied aspect of Siravedha	Cognitive - application	DK	Knows how	Lecture/ ECE/ IT/ CBL	Written / viva-voce/ Assignment / Open book test	F & S	II	Shalyata ntra
Topic 4- Dhamani Sharir [Time: Lecture: 02 hours, non-lecture 01 hours]									
CO 4	Define Dhamani, and state its Nirukti	Cognitive/ Recall	MK	Knows	Lecture/ Seminar	Written / viva-voce/ Open book test	F & S	II	
CO 4	Explain the classification	Cognitive/	MK	Knows	Lecture/ Seminar	Written /	F & S	II	

	of Dhamani	Comprehension		how		viva-voce/ Open book test			
CO 4	Locate the Dhamani in the body according to region	Cognitive / application Psychomotor	DK	Shows	Lecture/ Demonstration	Viva-voce/ Practical performance	F & S	II	
Topic 5- Srotasa Sharir [Time: Lecture: 08 hours, non-lecture 03 hours]									
CO 4	Define Srotasa and state its Nirukti and types	Cognitive/ Recall	MK	Knows	Lecture/ Seminar	Written / viva-voce/ Open book test	F & S	II	
CO 4	Explain the Classification of Srotasa	Cognitive / Comprehension	MK	Knows	Lecture/ Seminar	Written / viva-voce/ Open book test	F & S	II	
CO 4	State the Moolsthana of all Srotasa as per Acharya Sushrut and Charak and its clinical aspect	Cognitive / Recall	MK	Knows how	Lecture/ Seminar/ ECE	Written / viva-voce/ Assignment / Open book test	F & S	II	Kayachikitsa/ Pancha karma
Topic 6- Kala Sharir [Time: Lecture:02 hours, non-lecture 02 hours] Practical- 03 hours									
CO1	Define Kala and explain the formation & functions of seven Kala	Cognitive –/ comprehension	MK	Knows	Lecture/ Seminar	Written / viva-voce/ Open book test	F&S	III	
CO1	Describe Saptakalas with its applied aspect	Cognitive /comprehension +application	MK	Knows	Lecture/ demonstration/ ECE	Written / viva-voce/ Open book test	F&S	III	Agadtant ra
CO1	Relate the Sapta Kala with Sapta Dhatu	Cognitive – application +	NK	Knows how	Lecture/ Seminar/ IT	Written / viva-voce	F&S	III	

		affective - awareness							
Topic 7- Indriya Sharir [Time: Lecture: 03 hours, non-lecture 01 hours]									
CO 7	Define Indriya. Interpret derivation of Indriya and explain its importance.	Cognitive / comprehension	MK	Knows	Lecture/ Seminar	Written / viva-voce/ Open book test	F & S	III	
CO 7	State the meaning of Indriya- artha and Indriya-adhishtan	Cognitive / knowledge	MK	Knows	Lecture/ Seminar	Written / viva-voce/ Open book test	F & S	III	
CO 7	Enlist Dnyanendriyas, Karmendriyas and Ubhayendriya	Cognitive / knowledge	MK	Knows	Lecture/ Seminar	Written / viva-voce/ Open book test	F & S	III	
CO 7	Illustrate classical description of Dnyanendriya Adhishtan – Karna, Twak, Netra, Jivha, Nasa with its clinical perspective	Cognitive / application	MK	Knows how	Lecture/ IT/ ECE/ PBL	Written / viva-voce/ Open book test/ Assignment	F & S	III	Dept. of Shalak yatantra
Topic 8- Twacha Sharir [Time: Lecture: 02 hours, non-lecture 02 hours]									
CO 7	Define Twacha, its types and characteristics with its clinical importance, significance of twacha adhishtana in disease manifestation, its relation with dhatu	Cognitive/ comprehension	MK	Knows how	Lecture with demonstration with 3D animated video/ ECE/ SDL	Written/ Viva -voce/ Open book test	F&S	III	
Topic 9- Marma Sharir [Time: Lecture: 13 hours, non-lecture 04 hours] Practical- 12 hours									
CO 5	Define Marma and enumerate the Marmas	Cognitive – Recall	MK	Knows	Lecture/ Seminar	Written / viva-voce/	F&S	II	

						Open book test			
CO 5	Describe the Marma and Prana tatva with its Significance	Cognitive – Comprehension	MK	Knows	Lecture	Written / viva-voce/ Open book test	F&S	II	
CO 5	Discuss the classification of Marma	Cognitive – Comprehension	MK	Knows	Lecture/ ECE/ PBL	Written / viva-voce/ Open book test	F&S	II	
CO 5	Narrate the importance of marma in Sharir and Shalya vigyan	Cognitive – application	MK	Knows how	Lecture/ ECE/ PBL	Written/ Open book test	F&S	II	Shalyat antra
CO 5	Illustrate the specific location of Marma as per Sushruta Samhita	Cognitive – Comprehension	MK	Knows + Shows	Lecture/ Demonstration/ Workshop	Written / viva-voce/ Open book test	F&S	II	
CO 5	Demonstrate the Marma location as per modern anatomy	Cognitive – Application Psychomotor	MK	Knows + Shows	Lecture with 3D animated demonstration/ Seminar/ Workshop	Viva-voce/ Practical performance	F&S	II	Panchakarma
Topic 10- Respiratory system [Time: Lecture: 06 hours, non-lecture 04 hours] Practical- 10 hours									
CO6	Enlist the parts of the Bronchial tree	Cognitive / Recall	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	II	
CO6	State the location and dimension of Lungs	Cognitive - Knowledge	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	II	
CO6	Differentiate between Right and left Lungs	Cognitive -/ comprehension	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	II	
CO6	Describe the Borders, Surfaces and lobes of the Lungs	Cognitive/ comprehension	MK	Knows	Lecture/ Demonstration	Written / viva-voce/ Open book	F & S	II	

						test			
CO6	Explain the root of Lungs	Cognitive /comprehension	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	II	
CO6	Explain the Bronchopulmonary segments of the lungs	Cognitive /comprehension	DK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	II	
CO6	Describe the Blood supply, Nerve supply, Lymphatics of the Lungs	Cognitive /comprehension	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	II	
CO6	Describe histology and Clinical Anatomy of Lungs	Cognitive / application	MK	Knows how	Lecture/ ECE/ PBL	Written / viva-voce/ Assignment	F & S	II	Kaychi kita
CO6	State the extent and features of Trachea	Cognitive / Recall	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	II	
CO6	Explain the Relations of Trachea	Cognitive – /comprehension	MK	Knows how	Lecture/ Demonstration	Written / viva-voce/ Open book test	F & S	II	
CO6	Describe the Blood supply, Nerve supply and Lymphatics of Trachea	Cognitive /comprehension	MK	Knows how	Lecture/ Demonstration	Written / viva-voce	F & S	II	
CO6	Explain the histology and Clinical anatomy of Trachea	Cognitive /Application	MK	Knows how	Lecture/ ECE/ PBL	Written / viva-voce/ Assignment	F & S	II	Shalaky atantra
CO6	State the extent of Larynx and its external features	Cognitive / Recall	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	II	
CO6	Enlist the paired and unpaired cartilages of Larynx	Cognitive / Recall	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	II	
CO6	Explain the relations of Larynx	Cognitive /comprehension	DK	Knows how	Lecture/ Demonstration	Written / viva-voce/ Open book	F & S	II	

						test			
CO6	Write the blood supply, nerve supply and lymphatics of Larynx	Cognitive /comprehension	DK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	II	
CO6	Explain the histology and clinical anatomy of Larynx	Cognitive / application	DK	Knows how	Lecture/ Demonstration	Written / viva-voce/ Assignment	F & S	II	
CO6	State the location of Pleura and enlist its parts	Cognitive/ Recall	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	II	
CO6	Describe the parts of parietal Pleura	Cognitive/ comprehension	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	II	
CO6	Explain the Pulmonary ligaments and recesses of Pleura	Cognitive /comprehension	MK	Knows	Lecture/ Demonstration	Written / viva-voce/ Open book test	F & S	II	
CO6	Describe the blood supply, nerve supply, lymphatics of Pleura	Cognitive /comprehension	DK	Knows how	Lecture	Written / viva-voce	F & S	II	
CO6	Explain the clinical anatomy of Pleura	Cognitive – Application	DK	Knows how	Lecture/ ECE/ PBL	Written / viva-voce/ Assignment	F & S	II	Kayachikitsa
Topic 11- Digestive system [Time: Lecture: 10 hours, non-lecture 06 hours] Practical- 22 hours									
CO 6	Describe peritoneum and nine parts of abdomen	Cognitive – application	MK	Knows	Lecture/ Demonstration	Written/ Viva-voce/ Open book test/ Assignment	F & S	I	
CO 6	Describe the anatomy of the Oesophagus with relations, histology and clinical anatomy	Cognitive – application	MK	Knows	Lecture/ Demonstration	Written/ Viva-voce/ Open book test/ Assignment	F & S	I	

CO 6	Describe the structure of the Stomach, Stomach bed, the interior, histology, blood supply with relations and clinical anatomy	Cognitive – application	MK	Knows	Lecture/ Demonstration/ PBL/ ECE/ IT	Written/ Viva-voce/ Open book test/ Assignment	F & S	I	
CO 6	Describe the structure of the Duodenum with relations, histology and clinical anatomy.	Cognitive – application	MK	Knows	Lecture/ Demonstration/ ECE/ PBL/ IT	Written/ Viva-voce/ Open book test/ Assignment	F & S	I	
CO 6	Describe the parts, structure, histology and clinical anatomy of Large intestine.	Cognitive – application	MK	Knows how	Lecture/ Demonstration	Written/ Viva-voce/ Open book test/ Assignment	F & S	I	
CO 6	Describe the anatomy of the Rectum, Peritoneal & visceral relations and applied anatomy of the Rectum.	Cognitive – application	MK	Knows how	Lecture/ Demonstration/ ECE/ PBL/ IT	Written/ Viva-voce/ Open book test/ Assignment	F & S	I	
CO 6	Describe the anatomy and musculature of the anal canal, histology with its blood supply, venous drainage and applied anatomy	Cognitive – application	MK	Knows how	Lecture/ Demonstration	Written/ Viva-voce/ Open book test/ Assignment	F & S	I	
CO 6	Describe the structure of the Pancreas, Pancreatic ducts, applied anatomy, along with histology of endocrine & exocrine part.	Cognitive – application	MK	Knows how	Lecture/ Demonstration/ ECE/ PBL/ IT	Written/ Viva-voce/ Open book test/ Assignment	F & S	I	
CO 6	Describe external features, anatomy histology and	Cognitive – application	MK	Knows how	Lecture/ Demonstration/	Written/ Viva-voce/	F & S	I	

	clinical anatomy of Liver				ECE/ PBL/ IT	Open book test/ Assignment			
CO 6	Describe the structure, peritoneal & visceral relations histology and applied anatomy of the Spleen.	Cognitive – application	MK	Knows how	Lecture/ Demonstration/ ECE/ PBL/ IT	Written/ Viva-voce/ Open book test/ Assignment	F & S	I	
CO 6	Enlist the salivary glands and describe the anatomy of Parotid gland, Submandibular gland and Sublingual gland with its & Clinical anatomy	Cognitive – application	DK	Knows how	Lecture/ Demonstration	Written/ Viva-voce/ Open book test/ Assignment	F & S	I	
Topic 12- Cardiovascular System [Time: Lecture: 08 hours, non-lecture 03 hours]									
CO 6	Describe pericardium with its clinical anatomy	Cognitive – application	MK	Knows how	Lecture/ Demonstration	Written/ Viva-voce	F & S	II	
CO 6	Describe external features of the Heart.	Cognitive – recall	MK	Knows	Lecture/ Demonstration	Written/ Viva-voce/ Open book test/ Assignment	F & S	II	
CO 6	Describe internal features of the chambers, valve and auscultatory areas of Heart and its applied anatomy	Cognitive – application	MK	Knows how	Lecture/ Demonstration/ ECE/ PBL/ IT	Written/ Viva-voce/ Open book test/ Assignment	F & S	II	
CO 6	Describe the major arteries and veins of Heart.	Cognitive – Recall	MK	Knows	Lecture/ Demonstration	Written/ Viva-voce	F & S	II	
CO 6	Describe the histology and applied anatomy of Heart.	Cognitive – application	MK	Knows how	Lecture/ Demonstration/ ECE/ PBL/ IT	Written/ Viva-voce/ Open book test/ Assignment	F & S	II	

						Assignment			
Topic 13- Urinary System [Time: Lecture: 08 hours, non-lecture 03 hours] Practical- 04 hours									
CO 6	Enlist the components of Urinary System	Cognitive / Recall	MK	Knows	Lecture	Written / viva-voce	F & S	II	
CO 6	Describe the anatomical structure of Kidney, Ureter, Urinary bladder, Urethra	Cognitive / Comprehension	MK	Knows	Lecture/ Demonstration	Written / viva-voce/ Open book test/ Assignment	F & S	II	Kayachikitsa /Panchkarma/Shalaya-Tantra
CO 6	Explain histology and clinical anatomy of Kidney, Ureter, Urinary bladder, Urethra and its importance	Cognitive / Comprehension & Application	MK	Knows how	Lecture/ Demonstration/ ECE/ PBL/ IT	Written / viva-voce/ Open book test/ Assignment	F & S	II	
CO 6	Enlist developmental anomalies of Kidney, Ureter, Urinary bladder, Urethra	Cognitive / Recall	NK	Knows	Lecture	Written / viva-voce/ Open book test/ Assignment	F & S	II	
Topic 14- Reproductive System [Time: Lecture: 07 hours, non-lecture 03 hours] Practical-02 hour									
CO 6	Enlist the anatomical structures of male reproductive system and discuss its Ayurved Sharir	Cognitive / Comprehension	MK	knows how	Lecture	Written / viva-voce/ Open book test	F & S	III	
CO 6	Describe the male reproductive organs – Testes, Scrotum, Epididymis, Ductus deference, Ejaculatory duct, penis, Spermatic cord with histology and	Cognitive / application	MK	knows how	Lecture	Written / viva-voce/ Open book test	F & S	III	

	applied aspect								
CO 6	Enlist the anatomical structures of female reproductive system and discuss its Ayurved Sharir.	Cognitive / Comprehension	MK	knows how	Lecture/ Seminar	Written / viva-voce/ Open book test	F & S	III	
CO 6	Describe external female reproductive organs	Cognitive / Comprehension	MK	knows	Lecture/ Seminar	Written / viva-voce	F & S	III	
CO 6	Explain Internal reproductive organs in detail with histology and its applied anatomy (Uterus, Fallopian tube, Cervix, Vagina, Ovary)	Cognitive / application	MK	knows how	Lecture/ ECE/ PBL/ IT	Written / viva-voce/ Open book test/ Assignment	F & S	III	
CO 6	Explain histology of Uterus, Fallopian tube, Cervix, Vagina, Ovary	Cognitive / application	DK	knows how	Lecture/ Demonstration	Written / viva-voce/ Open book test/ Assignment	F & S	III	
Topic 15- Sensory organ [Time: Lecture: 14 hours, non-lecture 05 hours]									
CO7	Explain five sensory receptors, hierarchy of development of five senses and need of five senses	Cognitive - comprehension	MK	Knows how	Lecture with 3D animated demonstration	Written / viva-voce/ Open book test/ Assignment	F&S	III	
CO7	Describe structural aspect of five sensory organ	Cognitive – comprehension	MK	Knows	Lecture	Written / viva-voce/ Open book test/ Assignment	F&S	III	
CO7	Describe the pathways of each sense in understanding of its	Cognitive - comprehension	NK	Knows how	Lecture with 3D animated demonstration/	Written / viva-voce/ Open book	F&S	III	

	functional anatomy				ECE/ PBL/ IT	test/ Assignment			
CO7	Determine Method of examination, tool of examination and Importance of sensory organ in systemic examination	Cognitive - comprehension + Psychomotor	DK	Knows + Shows	Lecture with practical demonstration of tools/ ECE/ PBL/ IT	Written / viva-voce/ Open book test/ Assignment	F&S	III	Shalakyadept. Kaya chikitsa dept

***MK-Must Know, DK- Desirable to Know, NK- Nice to Know, TT- Tutorial, GD- Group Discussion, PBL- Problem Based Learning, IT- Integrated Teaching, ECE- Early Clinical Exposure, SDL- Self Directed Learning, CBL- Case Base Learning (P)- Practical**

List of Practicals**Marks: 200****Hours: 240**

SN	Name of Practical	Term	Hours
P1	- Branches of anatomy. History of Anatomy - Ethics in dissection hall	I	2
P2	<u>Anatomical Terminologies</u> Anatomical position, Planes, and explanation of anatomical terms related to skin, fasciae, bones, joints and the movements, muscles, ligaments, tendons, blood vessels, nerves.	I	4
P3	Preservation methods of the cadaver, Mrut sharir Samshodhan Different methods of preservation techniques. Brief introduction of chemical composition of preservative fluid.	I	2
P4	Introduction of Anatomy Act and Brief detailing about Bio medical waste management act 1960	I	2
P5	Shavavichhedana–detailed dissection of the whole body - Line of incision - Dissection technique - Identification of different tools and its Uses - Identification and characteristics of Different layers and its relation	I	32
	<u>In Extremities:</u> Dissection of extremities & Identification of related structures	II	40
	<u>In Trunk region:</u> Demonstration of visceral relation of thoracic, abdominal and pelvic organ	II	38
	<u>In Head Region:</u> Dissection of head, Identification of Meninges, Major Sulci and gyri, Superficial origin of Cranial Nerve and venous Sinus.	III	14
	Dissection of sensory organs	III	22
P6	- Practical study of vital organs, Histological slides - Identification of external features of thoracic, abdominal and pelvic viscera	II	06
P7	Practical study of bones Identification of external features of bones and different attachment	I	36

	Surface and Radiological anatomy <u>In Radiology Anatomy:</u> Characteristics of radio imaging film and detailing about its color contrasting Identification of Normal alignment of bodily structure – X ray film a. Chest X Ray – A.P And P.A view b. Detailing of A.P view of Shoulder joint, Elbow Joint, Wrist joint, Hip joint, knee joint, Ankle joint. c. Identification of basic clinical finding through X ray film related to long bones and joints	III	22
P8	<u>In Surface Anatomy Section:</u> • Identification of Underlying viscera of Nine region based upon Cadaveric and Living Anatomy • Surface marking of thoracic, abdominal and pelvic viscera	III	6
P9	Practical study of Marma Surface markings of all Marma points and its anatomical demarcation.	III	12
P10	Brief detailing about body donation, organ donation and its awareness (Communication skills)	III	2

***Note: one practical should not be less than 2 hrs.**

Table 4: Learning objectives (Practical)

A4 Course outcome	B4 Learning Objective (At the end of the session the students should be able to)	C4 Domain	D4 Must to know/desire to know/Nice to know	E4 Level Does/Shows how/Shows/ Knows how/ Know	F4 T-L method	G4 Assessment	H4 Formative/summative	I4 Term	J4 Integration
Practical 1- Definition and branches of anatomy. History of Anatomy [Time: Practical or other activity - 02 hours]									
CO1	Define and describe branches of anatomy and its history	Cognitive / knowledge	MK	Know	Lecture/ Tutorial	Written +viva-voce	F&S	I	

		e / recall							
CO9	Practice of ethics in the context of human dissection	Cognitive / knowledge / recall / Affective/ psychomotor	MK	Knows Shows	Tutorial/ Demonstration	viva-voce	F&S	I	
Practical 2- Anatomical Terminologies [Time: Practical- 2 hours and other activity 2 hours]									
CO1	Demonstrate anatomical position, Planes, and explanation of anatomical terms related to skin, fasciae, bones, joints and their movements, muscles, ligaments, tendons, blood vessels, nerves.	Cognitive / knowledge / recall	MK	Knows	Tutorial/ Demonstration / Simulation	Written +viva-voce/ Open book test/ Assignments	F&S	I	
Practical 3- Preservation methods of the cadaver, Mrut sharir Samshodhan [Time: Practical or other activity - 02 hours]									
CO9	Describe and demonstrate preservation methods of the cadaver and Mrut sharir Samshodhan	Cognitive / knowledge / recall	MK	Knows, Shows	Tutorial/ Demonstration	Written +viva-voce	F&S	I	
CO9	Describe the different methods of preservation techniques and give brief introduction of	Cognitive / knowledge / recall	MK	Knows	Tutorial/ Demonstration	Written +viva-voce, spotting, OSPE	F&S	I	

	chemical composition of preservative fluid.								
Practical 4- Introduction of Anatomy Act and Brief detailing about Bio medical waste management act 1960 [Time: Practical or other activity - 02 hours]									
CO9	Describe and follow the Anatomy Act and Bio medical waste management act 1960	Cognitive - comprehension, Affective/ psychomotor	NK	Knows, know how, Shows	Lecture/ Tutorial/ Demonstration	Written +viva-voce/ Practical performance/ Public awareness	F&S	I	
Practical 5- Shavavichhedana–detaileddissectionofthewholebody [Time: Practical- 126 hours and other activity 20 hours]									
CO9	Demonstrate the line of incision, dissection technique, different tools and their uses	Cognitive / knowledge / recall	MK	Knows/ Shows/ Shows How	Tutorial/ Demonstration / Cadaveric dissection	Written +viva-voce, spotting, OSPE	F&S	I	
CO9	Identify and characteristics of Different layers and its relation	Cognitive / knowledge / recall	DK	Knows	Tutorial/ Demonstration / Simulations / Cadaveric dissection	Written +viva-voce, spotting, OSPE	F&S	I	
CO9	Identify and demonstrate muscles of extremities and its related structures	Cognitive / knowledge / recall	DK	Knows, Shows	Tutorial/ Demonstration / Cadaveric dissection	Written +viva-voce	F&S	II	
CO6	Describe and demonstrate the visceral relation of thoracic and abdominal organ	Cognitive - comprehension + psychomotor	DK	Knows, Shows	Demonstration / Simulations / Cadaveric dissection	Written +viva-voce, spotting, OSPE/ Practical performance	F&S	II	

CO6	Describe and demonstratesurface identification of parts of brain, major sulci and gyri, superficial origin of cranial nerve and meninges and venous sinus.	Cognitive - comprehension + psychomotor	MK	Knows, Shows	Demonstration / Simulations/ Cadaveric dissection	Written +viva-voce, spotting, OSPE/ Practical performance	F&S	III	
CO6	Describe, dissect and demonstrate the sensory organs	Cognitive - comprehension + psychomotor	MK	Knows, Shows	Demonstration / Simulations/ Cadaveric dissection	Written +viva-voce, spotting, OSPE/ Practical performance	F&S	III	
Practical 6- Practical study of vital organs, Histological slides and identification of external features of thoracic and abdominal viscera [Time: Practical- 04 hours and other activity 02 hours]									
CO6	Focus the histological slides of identified organs	Cognitive / knowledge / recall	DK	Knows	Tutorial/ Demonstration	Written +viva-voce spotting, OSPE	F&S	II	
CO6	Describe and demonstrate the external features of thoracic and abdominal viscera	Cognitive - comprehension + psychomotor	MK	Knows Shows	Demonstration	Written +viva-voce, spotting, OSPE/ Practical performance	F&S	II	
Practical 7- Practical study of bones [Time: Practical- 30 hours or other activity 06 hours]									
CO3	Describe and demonstrate external features of bones and muscle attachments	Cognitive - comprehension +	MK	Knows, Shows	Demonstration / Simulations	Written +viva-voce, spotting, OSPE/	F&S	I	

		psychomotor				Practical performance			
CO10	Describe the characteristics of radio imaging film and difference in color contrasting	Cognitive / knowledge / recall	DK	Knows	Tutorial/ Demonstration / Simulations	Written +viva-voce spotting, OSPE	F&S	I	
Practical 8- Surface and Radiological anatomy [Time: Practical- 20 hours and other activity 08 hours]									
CO10	Describe and demonstrate the normal alignment of chest X Ray – A.P And P.A view	Cognitive - comprehension + psychomotor	MK	Knows, Shows	Tutorial/ Demonstration	Written +viva-voce, spotting, OSPE/ Practical performance	F&S	III	
CO10	Describe and demonstrate the normal alignment of A.P view of Shoulder joint, Elbow Joint, Wrist joint, Hip joint, knee joint, Ankle joint	Cognitive - comprehension + psychomotor	MK	Knows, Shows	Tutorial/ Demonstration	Written +viva-voce, spotting, OSPE/ Practical performance	F&S	III	
CO10	Identify the basic clinical finding through X ray film related to long bones and joints	Cognitive - comprehension + Psychomotor	NK	Knows, Shows	Tutorial/ Demonstration	Written +viva-voce, spotting, OSPE/ Practical performance	F&S	III	Kaychikita s, Shalyatantra
CO8	Describe and demonstrate	Cognitive - comprehension	DK	Knows, Shows	Tutorial/ Demonstration	Written +viva-voce, spotting,	F&S	III	

	underlying viscera of Nine region based upon cadaveric and Living Anatomy	nsion + psychomotor				OSPE/ Practical performance			
CO8	Describe and demonstrate surface marking of thoracic and abdominal viscera	Cognitive - comprehension + psychomotor	DK	Knows, Shows	Tutorial/ Demonstration	Written +viva-voce, spotting, OSPE/ Practical performance	F&S	III	
Practical 9- Practical study of Marma [Time: Practical or other activity - 12 hours]									
CO5, CO8	Describe and demonstrate surface markings of Marma points and its anatomical demarcation of all Marma as per Shadang sharir	Cognitive - comprehension + psychomotor	MK	Knows + Shows	Tutorial/ Demonstration / Cadaveric dissection	Written +viva-voce, spotting, OSPE/ Practical performance	F&S	III	Panchakarma
Practical 10- Body donation, organ donation and its awareness [Time: Practical or other activity - 02 hours]									
CO9	Describe body donation and organ donation process with respect to specific organ and its awareness Demonstrate process of communication process in awareness speech or counselling for Body donation.	Affective/ psychomotor	DK	Knows, know how, Shows	Tutorial/ Demonstration	Written +viva-voce/ Public awareness/ social work	F&S	III	Shalyatantra and Shalakyatantra
		Psychomotor	MK		Role Play			III	

Table 5: Non-Lecture Activities Course AyUG-RS

1	List non lecture Teaching-Learning methods	No of Activities (Values in hours)
a	Seminar / Workshop	14
b	Tutorial (TT) / Group Discussion (GD)	14
c	Problem based learning (PBL)	8
d	Integrated teaching (IT)	8
e	Early Clinical Exposure (ECE)/ Case Base Learning (CBL)	18
f	Self-Directed Learning (SDL) / Summary writing	12
g	Field visit	6
		80
2	Practical (refer Table 4)	240
	Total	320

Other Educational Activities (Additional):

- Field visit (community/anatomy museum) - II & III term
- Practical journal – II & III term
- Summary/ Essay writing (Research papers/Samhitas literature review)- II or III term

Table 6: Assessment Summary**6 A - Number of Papers and Marks Distribution**

S.No.	Subject Code	Papers	Theory	Practical/Clinical Assessment					Grand Total
				Practical /Clinical	Viva	Electives	IA	Sub Total	
4.	AyUG-RS	2	200	100	70	-	30	200	400

6 B - Scheme of Assessment (formative and Summative) AyUG-RS

SR.NO.	PROFESSIONAL COURSE	DURATION OF PROFESSIONAL COURSE		
		First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)
1	First	3 PA & First TT	3 PA & Second TT	3 PA & UE

PA: Periodical Assessment; TT: Term Test; UE: University Examinations

6 C - Calculation Method for Internal assessment Marks (30 Marks) AyUG-RS

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A	B	C	D	E		G	H

	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/3)	Converted to 30 Marks (D/15*30)	Term Test (Marks converted to 30)	Sub Total _/60 Marks	Term Assessment (.../30)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Methods which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks) [MCQ (20*1 Marks), SAQ (8*5), LAQ (4*10)] and Practical (100 Marks) Then convert to 30 marks.							

6 D - Evaluation Methods for Periodical Assessment

S. No.	Evaluation Methods for Periodical Assessment
11.	Practical / Clinical Performance
12.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
13.	Open Book Test (Problem Based)
14.	Summary Writing (Research Papers/ Samhitas)
15.	Class Presentations; Work Book Maintenance
16.	Problem Based Assignment
17.	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
18.	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
19.	Small Project
20.	Other activities explained in Table 3 Column G3 as per indicated term and objective of the topic.

6 E - Paper Layout

I PROFESSIONAL BAMS EXAMINATIONS

PAPER-1

Time: 3 Hours Maximum Marks: 100

INSTRUCTIONS: All questions compulsory

TOTAL MARKS 100

		Number of Questions	Marks per question	Total Marks

Q 1	Multiple Choice Questions (MCQ)	20	1	20
Q 2	Short answer questions (SAQ)	8	5	40
Q 3	Long answer questions (LAQ)	4	10	40
				100

I PROFESSIONAL BAMS EXAMINATIONS

PAPER-1I

Time: 3 Hours Maximum Marks: 100

INSTRUCTIONS: All questions compulsory

TOTAL MARKS 100

		Number of Questions	Marks per question	Total Marks
Q 1	Multiple Choice Questions (MCQ)	20	1	20
Q 2	Short answer questions (SAQ)	8	5	40
Q 3	Long answer questions (LAQ)	4	10	40
				100

6 F – I - Distribution of Theory exam AyUG- RS

	Paper I				D Type of Questions “Yes” can be asked. “No” should not be asked.		
	A List of Topics		B Term	C Marks	MCQ (1 Mark)	SAQ (5 Marks)	LAQ (10 Marks)
1	ShariopkramaniyaShaarira		I	Refer Next table	Yes	Yes	No
2	ParibhashaShaarira		I		Yes	Yes	No
3.	GarbhaShaarira		I		Yes	Yes	Yes
4.	AsthiShaarira		I		Yes	Yes	Yes
5.	SandhiShaarira		II		Yes	Yes	Yes
6.	Snayu sharir		II		Yes	Yes	No
7.	PeshiShaarira		II		Yes	Yes	No
8.	Kesha, Danta, Nakha Sharir		II		Yes	Yes	No
9	Embryology		I		Yes	Yes	Yes
10	Osteology		I		Yes	Yes	Yes
11	Arthrology.		II		Yes	Yes	Yes

12	Myology		II		Yes	Yes	No
13	NervousSystem.		III		Yes	Yes	Yes
14	Endocrinology		III		Yes	Yes	No
15	Lymphaticsystem		III		Yes	No	No

	Paper II			D Type of Questions “Yes” can be asked. “No” should not be asked.		
	A List of Topics	B Term	C Marks	MCQ (1 Mark)	SAQ (5 Marks)	LAQ (10 Marks)
1	Pramana Shaarira:	II	Refer Next Table	Yes	No	No
2	Koshtha Evam AshayaShaarira	I		Yes	Yes	Yes
3.	Sira Sharir	II		Yes	Yes	Yes
4.	Dhamani Sharir	II		Yes	Yes	Yes
5.	StrotasShaarira	II		Yes	Yes	Yes
6.	KalaaShaarira	III		Yes	Yes	Yes
7.	Indriya Shaarira	III		Yes	Yes	Yes
8.	Twacha Sharir	III		Yes	Yes	Yes
9	MarmaShaarira	II		Yes	Yes	Yes
10	RespiratorySystem	II		Yes	Yes	No
11	Digestivesystem	I		Yes	Yes	Yes
12	Cardiovascularsystem	II		Yes	Yes	Yes
13	UrinarySystem	II		Yes	Yes	No
14	Reproductivesystem	III		Yes	Yes	No
15	Sensoryorgans	III		Yes	Yes	Yes

6 F – II - Theme table

Paper-I:

Theme*	Topics	Term	Marks	MCQ	SAQ	LAQ
A	1) Shariropakramaniya 2) Paribhasha Sharir	I	10	YES	YES	NO
B	3) Garbha Sharir 9) Embryology	I	20	YES	YES	YES
C	4) Asthi Sharir 10) Osteology	I	16	YES	YES	YES
D	8) Kesh, Dant, Nakha Sharir 7) Peshi Sharir 12) Myology	II	11	YES	YES	NO
E	5) Sandhi Sharir 6) Shayu Sharir 11) Arthrology	II	17	YES	YES	YES
F	13) Nervous System	III	14	YES	YES	YES

G	14) Endocrinology 15) Lymphatic	III	12	YES	YES	YES
*Theme: is group of similar topics in Ayurved Sharir and Anatomy. Used in 6G question paper blue print						

Paper-II

Theme	Topics	Term	Marks	MCQ	SAQ	LAQ
A	2) Koshta Evam Ashay Sharir 11) Digestive system	I	16	YES	YES	YES
B	1) Praman Sharir 9) Marma Sharir	II	17	YES	YES	YES
C	3) Sira Sharir 4) Dhamani Sharir 5) Strotas Sharir 12) Cardiovascular System	II	21	YES	YES	YES
D	10) Respiratory System	II	10	YES	YES	NO
E	13) Urinary System	II	10	YES	YES	NO
F	14) Reproductive System	III	6	YES	YES	NO
G	6) Kala Shair 7) Indriya Sharir 8) Twacha Sharir 15) Sensory organs	III	20	YES	YES	YES

**6 G Question paper Blue print for AyU-RS:
PAPER-I**

A Question Sr. No	B Type of Question	C Question Paper Format (Refer table 6 F 2 Theme table for themes)
Q1	Multiple choice Questions (MCQ) 20 Questions 1 mark each All compulsory Must know part: 15 MCQ Desirable to know: 3 MCQ. Nice to know: 2 MCQ	1. Theme a 2. Theme a 3. Theme a 4. Theme a 5. Theme a 6. Theme b 7. Theme b 8. Theme b 9. Theme b 10. Theme b 11. Theme c 12. Theme d 13. Theme e 14. Theme e 15. Theme f 16. Theme f 17. Theme f 18. Theme f 19. Theme g 20. Theme g
Q2	Short answer Questions (SAQ) Eight Questions 5 Marks Each All compulsory Must know part: 7 SAQ Desirable to know: 1 SAQ Nice to know: Nil	1. Theme a 2. Theme b 3. Theme c 4. Theme d 5. Theme d 6. Theme e 7. Theme g/f 8. Theme g/f
Q3	Long answer Questions (LAQ) Four Questions 10 marks each All compulsory All questions on must know No Questions on Nice to know and Desirable to know	1. Theme b 2. Theme c 3. Theme e 4. Theme f/g

PAPER-II

Question Sr. No		SET
Q1	Multiple choice Questions (MCQ) 20 Questions 1 mark each All compulsory Must know part: 15 MCQ Desirable to know: 3 MCQ. Nice to know: 2 MCQ	1. Theme a 2. Theme b 3. Theme b 4. Theme c 5. Theme c 6. Theme c 7. Theme c 8. Theme c 9. Theme c 10. Theme d/e 11. Theme d/e 12. Theme d/e 13. Theme e/d 14. Theme e/d 15. Theme f 16. Theme g 17. Theme g 18. Theme g 19. Theme g 20. Theme g
Q2	Short answer Questions (SAQ) Eight Questions 5 Marks Each All compulsory Must know part: 7 SAQ Desirable to know: 1 SAQ Nice to know: Nil	1. Theme a 2. Theme b 3. Theme c 4. Theme d/e 5. Theme e/d 6. Theme e/d 7. Theme f 8. Theme g
Q3	Long answer Questions (LAQ) Four Questions 10 marks each All compulsory All questions on Must to know No Questions on Nice to know and Desirable to know	1. Theme a 2. Theme b 3. Theme c 4. Theme g

6 H - I - Distribution of Practical Exam

Practical 100 Marks + (Viva 70 + IA 30) Marks

SN	Heads	Marks
1	Spotting (Refer Table 6 H II below)	20
3	Kostha Ashay Sharir, Dissected organs and histology slides	20
4	Ashti, Sandhi, Peshi, Bones and Joints,	20
5	Marma Sharir, Surface & Radiological anatomy	20

6	Practical record (15 Marks) and Communication Skill (5 Marks)	20
7	Viva-Voce (Objective Structured)(Refer table 6 H – III)	70
8	Internal assessment	30
	Total Marks	200

6 H - II Practical Spot examination Questions – (20 marks)

SN	Question	Mark allotment
Topic- Garbha/Sira/Kala		
1	Identify the structure & give the Drushtant/ Metaphor related with it. e.g.- Gunja Phala- Artava, Spatik-Shukra, etc	Identification- 1 Drushtant- 1
Topic- Marma		
1	Identify the Marma & write its type as per Parinama & Rachana	Identification- 1 Type-1
2	Identify the Marma & write its Pariman & any two anatomical structures related to the Marma	Identification- 0.5 Pariman – 0.5 Anatomical structure - 1
3	Identify the Marma & write its applied aspect	Identification- 1 Viddha-1
Topic- Bones, Muscles		
1	Identify the bone & write its peculiarities (Any 2) e.g.- Atlas vertebra	Identification- 0.5 Peculiarities- 1.5
2	Identify the indicated part on the bone & write its attachment (Any 2) e.g., Scapula spine	Identification- 0.5 Attachment- 1.5
3	Identify the side of the given bone & write side determination points	Side identification- 0.5 Points- 1.5
4	Identify the side of the given bone & write its applied anatomy (Any 2 points)	Identification-0.5 Applied -1.5
5	Write the type of the given bone as per Ayurved & Modern science e.g., Tibia- Nalakasthi, long bone	Ayu. Type- 1 Modern type- 1
6	Identify the indicated muscle on the bone & write whether it originates or inserts there	Muscle identification- 1 Origin/insertion- 1
7	Identify the indicated muscle & write its action (Any 2)	Identification- 0.5 Action-1.5
8	Identify the indicated muscle& write its blood supply/nerve supply	Identification-1 Supply-1
9	Identify the indicated muscle& write its applied anatomy	Identification-1 Applied -1
10	Identify the bone and write any two processes	Identification-1 Processes -1
11	Identify the bone and write any two angles	Identification-1

		Angle -1
12	Identify the bone and write any one peculiarity related to gender e.g., Hip bone, Clavicle, Sacrum	Identification-1 Peculiarities- 1.5
Topic- Joints		
1	Identify the joint & write its ligaments (Any 3)	Identification- 0.5 Ligaments- 1.5
2	Identify the joint & write names of actions occurring there (Any 3)	Identification- 0.5 Actions- 1.5
3	Identify the joint & write the type of joint as per Ayurved & Modern science	Identification- 1 Ayu. Type- 0.5 Modern type- 0.5
4	Identify the joint & write its clinical anatomy (Any two)	Identification- 1 Clinical anatomy-1
5	Identify the joint & write its relation (Any two)	Identification- 1 Relation -1
6	Identify the joint & write the movements along with the muscle	Identification- 1 Movement -0.5 Muscle – 0.5
Topic- Organs		
1	Identify the organ & write name of the Srotas related to it	Identification- 1 Srotas-1
2	Identify the organ & write name of the kala related to it	Identification- 1 Kala-1
3	Identify the organ & write its Utpatti as per Ayurved	Identification- 1 Utpatti-1
4	Identify the organ & write its visceral impressions (Any 3)	Identification- 0.5 Impressions-1.5
5	Identify the organ & write its blood/nerve supply	Identification- 0.5 Supply-1.5
6	Identify the organ & write its borders (Any two)	Identification- 1 Borders -1
7	Identify the organ & write its surfaces (Any two)	Identification- 1 Borders -1
8	Identify the organ & write its applied anatomy (Any 3 points)	Identification-0.5 Applied -1.5
Topic- Radiology		
1	Identify the X-ray & write the structures seen in it (Any 3)	Identification- 0.5 Structures-1.5
2	Identify the view of the X-ray & write the marked structures (Any two)	Identification- 1 Structures-1
Topic- Central Nervous System/ Sense organs		
1	Name the lobes of the given organ e.g., cerebrum	Each lobe – 0.5 Total -2
2	Identify the sense organ & write its nerve supply e.g., tongue	Identification- 1 Supply-1
3	Identify the marked structure and write its applied aspect (Any two)	Identification- 1 Applied aspect-1

6 H - III Viva Voce (70 Marks)

Recall Questions	Comprehension Questions	Application Questions
40 Marks	20 Marks	10 Marks
1. Sira-Dhamani-Strotas 2. Shariropakramaniya Sharir 3. Paribhasha Shaarir 4. Praman Shaarira 5. Anatomical terminologies 6. Kalaa Sharir 7. Indriya Sharir & Sensory organ 8. Reproductive system	1. Nervous system 2. Endocrine system 3. Lymphatic system 4. Cardiovascular system 5. Urinary system	1. Garbha Sharir, 2. Embryology 3. Respiratory system 4. Digestive system
e.g., Definition, types, numbers, planes, parts, Shlokas, etc.	e.g., Relations, Blood supply, Nerve Supply, Venous & Lymphatic drainage, etc.	e.g., Applied anatomy, Clinical anatomy, Surgical anatomy, Congenital anomalies etc.

7. Reference and Resources

1. Parishadhya Shabdarth Sharir
2. Pratyaksha shaririram
3. Sharisthana of all Samhita
4. Sushrut Samhita Sharirshatana- Dr. Bhaskar Govind Ghanekar
5. Brihat Shariram Vaidyaratna- P.S. Varrier
6. Abhinava Shariram- Acharya Damodar Sharma Gaur
7. Manava Sharir (Revised Edition)- Prof. Dinkar Govind Thatte
8. Sharir Rachana Vigyan (English)- Vaidya P.G. Athawale
9. Manual of Practical Anatomy Cunnigham Practical Manual Vol-1, Vol-2, Vol-3
10. Clinical Anatomy in Ayurveda - Prof. D.G. Thatte & Prof. Suresh Chandra
11. Ayurvedic Human Anatomy - Prof. Dr. Giridhar M. Kanthi
12. Sharir Rachana Vigyan Vol I & II– Dr. Sunil Kumar Yadav
13. Regional Anatomy - B. D. Chaurasia
14. Rachana Sharir Vigyana - Dr. Mahendra Sing
15. Relevant chapters of Brihtrayee and Laghuthrayee
16. Gray's Anatomy
17. Text Book of Human Anatomy- Inderbir Singh
18. Clinical Anatomy- Richard S Snell
19. Fundamentals of Human Anatomy- Dr. Chakraborty
20. Human Osteology - Poddar
21. A Handbook of Anatomical Terminology, Dr. Nidhi Shrivastava, Dr. Ravi Kumar Shrivastava, Dr. Rakesh Kumar Sharma.

SAMHITA ADHYAYAN-1**Table 2 : Contents of Course AyUG-SA1**

Sr No	A2 List of Topics AyUG-SA1	B2 Term	C2 Marks	D2 Lecture	E2 Non-Lecture
1.	Introduction to Samhita- i. Definition of Samhita and its types and nomenclature. (Samhita- forms, nomenclature, commentary, types etc.) ii. Brief Introduction of Samhitas (Bruhatrayee), their commentaries and commentators (Preceptors, aut hours, redactors, commentators) iii. Tantrayukti, Tantraguna and Tantradosha iv. RachanaShaili & BhashaShaili (Composition and Language style) of Bruhatrayee. v. Anubandha Chatushtya vi. Ashta-Prashna vii. Trividha Jnyanopaya	1	(Indicated in Viva)	15	09
Ashtang Hriday Samhita - Sutrasthan (1-15 Adhyaya) -			50 marks		
2.	1. Ayushkamiya Adhyaya- i. Ashtang Hridaya parichaya (Introduction to Ashtang Hridaya) ii. Dosha-dhatu-mala parichaya (Introduction to dosha, dhatus and mala) iii. Agni- koshta swarup (Concept of digestive fire and bowel habits) iv. Rasa, virya, vipaka prabhav guna parichaya (Introduction to rasa, virya, vipaka, prabhav and guna) v. Rog-aarogya swarup (Concept of health and disease) vi. Roga-aatur parikshan (Assessment of disease and diseased) vii. Desha and kaala parichaya (Introduction to habitat and time) viii. Chikitsa bheda (Types of treatment) ix. Pada chatushtaya Swarupam (Concepts of four factors of treatment) x. Vyadhi sadhyasadyatva (Types of prognosis) xi. Recitation of important shlokas	1		08	03
3.	2. Dinacharya Adhyaya- i. Dincharya vihaar (Importance of various regimen in Dincharya)	1		05	04

	ii. Shuddhi Niyam (Personal hygiene) iii. Dharmapalan evam sadvrutta palan iv. Recitation of important shloka				
4.	3. Rutucarya Adhyaya- i. Shadrutu (Classification of seasons according to Uttarayan and Dakshinayan) ii. Rutucharya (detailed regimen of the six seasons) iii. Rutusandhi (inter-seasonal period) iv. Recitation of important shlokas	1		05	04
5.	4. Roganutpadaniya Adhyaya- i. Adharaneeya vega and chikitsa (symptoms arising due to suppression of natural urges and their treatment) ii. Dharneeya vega (Concept of urges which hav eto be suppressed) iii. Shodhan chikitsa (Importance of purification treatments) iv. Hita-aahar-vihar sevan (Importance of following healthy lifestyle) v. Recitation of important shlokas	I		05	04
6.	5. Dravadravya Vijnaniya Adhyaya- i. Jala Varga (Water from different sources, various states of water) ii. Dugdha Varga (Milk and milk products) iii. Ikshu Varga (Sugarcane and its products) iv. Madhu varnana (Properties of honey) v. Tail Varga (Oils of various sources) vi. Madya Varga (Types of alcoholic beverages) vii. Mutra Varnana (Types of urine) viii. Recitation of important shlokas	I		05	04
7.	6. Annaswaroop Vijnaneeya Adhyaya- i. Shuka- Dhanyanam Samanya Gunah (Properties of various types of cereals) ii. Shimbi- Dhanyananam Samanya Gunah (Properties of various types of Pulses) iii. Mamsasya Samanya Gunah (Properties of meat of various animals) iv. Shakayoh Samanya Gunah (Properties of various types of vegetables) v. Phalayoh Samanya Gunah (Properties of various types of Fruits)	II		05	03

	vi. Kritanna varganam Samanya Gunah (Properties of various types of cooked food) vii. Aushadhanam Samanya Gunah (Properties of various types of medicinal herbs)				
8.	7. Annaraksha Adhyaya- i. Rajnikate- Vaidyasthiti (Important place of Vaidya in Kings palace) ii. Savishanna Lakshanam (Properties of poisoned food) iii. Savishanna Pariksha (Examination of food contaminated with poison) iv. Savishanna-Lakshana- Aushadha (Signs of food poisoning and its treatment) v. Viruddha Aahar (Incompatible food and food practices) vi. Satmikaran Krama (Method of adaptation of wholesome food habits and to taper unwholesome food habits) vii. Aahar-Shayan-Abrahmacharya – Trayopasthambha (Three accessory pillars of Health) viii. Recitation of important shlokas	II		04	03
9.	8. Matrashitiya Adhyaya- i. AaharMatra (appropriate quantity of food) ii. Heen-matra, ati-matra bhojan dosha (Demerits of excess and less quantity of food) iii. Alasak, Visuchika (Etiopathogenesis and management principles of Vishuchika and Alasak) iv. Apararpan chikitsa v. Types of Ajeerna (indigestion) and its causes vi. Bhojan-samyak yog (Ideal regimen and time for taking food) vii. KukshiVibhag (Imaginary parts of the stomach) viii. Details of Anupan (Liquid consumed along with or after food) ix. Recitation of important shlokas	II		05	04
10.	9. Dravyaadi Vijnaniya Adhyaya- i. Dravya shreshthtva(Predominance of Dravya) ii. Dravyasya panchbhautikatvam	II		04	04

	(Prevalence of Panchamahabhutas in dravyas) iii. Panchbhautik dravyanaam guna(Characteristics of PanchabhautikDravyas) iv. Principles of dravyas viz Veerya- Vipaka- Prabhava v. Recitation of important shlokas				
11.	10. Rasabhediya Adhyaya- i. Shadrasanaam utpatti (Origin of Shadrasa) ii. Shadrasa parichaya (Identity of Six Rasas) iii. Shadrasa karma, guna, atiyoga lakshana (Functions, properties and presentation of excessive intake of Six Rasas.) iv. Recitation of important shlokas	II		05	04
12.	11. Doshadi Vijnaniya Adhyaya- i. Importance of dosha dhatu mala ii. Dosha dhatu mala prakruta and vaikruta karma (normal and abnormal functions) iii. Dosha dhatu mala ashraya- ashrayi bhava (relation between dosha and dhatus) iv. Samanya chikitsa siddhanta for dosha dhatu mala vriddhi kshaya (treatment principles) v. Agni (Digestive fire) vi. General pathophysiology for origin of diseases vii. Ojus (Essence of dhatus) viii. Vriddhi-kshaya bhesaja ix. Recitation of important shlokas	III		08	05
13.	12. Doshabhediya Adhyaya- i. Dosha and dosha bheda (Dosha and their types) ii. Dosha chaya, prakopa, prasham karanani (Causes of dosha accumulation, aggregation and alleviation) iii. Trividhakarana (three causative factors of disease) iv. Trividha Roga marga (three pathways of disease) v. Aatura parikshbhaav (assessment methods)	III		08	05

	vi. Recitation of important shlokas				
14.	13. Doshopakramaniya Adhyaya- i. Tridosha- upakrama (Treatment principles of vitiated doshas) ii. Shuddha-ashuddha chikitsa lakshana (Accurate and inaccurate treatment) iii. Dosha gati (movement of doshas inside the body) iv. Concept of aama v. Dasha aushadha-kaala (ten types of times for administering medicines) vi. Recitation of important shlokas vii. Research Updates – Langhan : Fasting and autophagy induction – how cell recycle and renew their content, a process called autophagy.	III		07	06
15.	14. Dvididhopakramaniya Adhyaya- i. Concept of Langhan and Brihan therapies (Treatment procedures for making the body thin and for nourishment) ii. Concept of Shodhan and shaman therapies (Purification and palliative treatments) iii. Concept of Atistaulya and atikarshya (Obesity and emaciation) iv. Recitation of important shlokas	III		05	05
16.	15. Shodhanadigana Sangraha Adhyaya- i. Groups of dravyas according to specific action ii. Groups of dravyas according to major ingredient as well as action	III		02	04
Charak Samhita – Sutrasthan (1-12 Adhyaya):			50 marks		
17.	1. Deerghanjiviteeya Adhyaya- i. Ayurvedavataranam (Genealogy of Ayurveda) ii. Arogsya chaturvarge pradhanam karanam iii. Trisutra Ayurveda iv. Details of Shat padartha v. Ayurvedasya lakshanam tatha prayojan vi. Ayusho lakshanam paryayashcha vii. Samanyavisheshayorlakshanam	1		07	02

	viii. Tridanda ix. Vyadhinam trividho hetusamgrah x. Vyadhinam ashraya tatha Arogasya karanam xi. Atmano lakshanam xii. Details about Sharira and manas dosha xiii. Sadhyaasadhyata vikara chikitsa xiv. Rasa varnanam xv. Dravya bheda xvi. Aushadhinam nama-rupa-upyog gyan xvii. Bhishagbubhushoh kartavyam xviii. Yuktasya bhaishajyasya lakshanam xix. Bhishaktamasya lakshanam xx. Recitation of important shlokas				
18.	2. Apamarga Tanduliya Adhyaya- i. Shiro Virechana Dravya & Main Indications ii. Vamana Dravya & Main Indications iii. Virechana Dravya & Main Indications iv. Asthapana Dravya & Main Indications v. Anuvasana Dravya & Main Indications vi. Ashtavimshathi Yavagu vii. Panchakarma Mahatwa & Vaidya Guna viii. Recitation of important shlokas	II		02	03
19.	3. Aragvadhiya Adhyaya- i. Dwa Trimshath Churna Pradeha & Main Indications	II		01	03
20.	4. Shadvirechana-shatahritiya Adhyaya- i. Shadvirechan aashrya ii. Panchkashaya yoni iii. Panchvidh kashaya kalpana iv. Panch kashaya shatani	II		03	04
21.	5. Matrashiteeya Adhyaya- i. MatravatAhara ii. Nature of Ahara (Guru, Laghu) iii. AharaMatra iv. MatravatAharaPhala v. AharaSevanaVidhana on the bases of its nature vi. Swasthavrutta vii. Anjana viii. Dhumapana ix. Nasya	II		03	05

	x. Dantadhavana xi. Jivhanirlekhana xii. Gandusha xiii. Abyanga xiv. Parimarjana xv. VastraGandhaMalyadiDharana xvi. Shouchavidhi xvii. Kshoura Karma - xviii. PadatraDharana xix. ChatraDharana xx. Important Shlokas for recitation xxi. Research Updates: Role of Dinacharya to maintain circadian rhythm Role of therapeutic message for cell rejuvenation Mechanism of satiation and proper quantity of food (Sauhitya Matra)				
22	6. Tasyashiteeya Adhyaya- i. Classification Samvastara ii. Visarga Kala iii. Adana kal;a iv. Shadrutuvivechana and Charya v. Hamsodaka vi. Saatmya vii. Important shlokas for recitation viii. Research Updates: What causes the season: Summer and winter solistice- Equinoxes- Rotation of earth around sun.	II		04	04
23	7. Naveganadharaniya Adhyaya- i. Adharneeya-Dharneeya vega lakshan, chikitsa ii. Vyayam (Details regarding exercise) iii. Ahita sevan evam varjya vidhi iv. Deha prakruti (Body constitution) v. Agantuja evam Pradnyaapradh janya vyadhi evam chikitsa vi. Impotant Shlokas for recitation vii. Research Updates: Corelation of genomic variation with the classification of Prakriti	II		04	04
24	8. Indriyopakramaniya Adhyaya- i. Enumeration of Indriya, Dravya, Adhishtana, Artha, Buddhi ii. Manas Lakshana	II		04	03

	iii. Ekatvam of Manas iv. Sattvikatva, Rajasatva and Tamasatva of Manas v. Indriya PanchaPanchaka vi. Adhyatma Dravya Guna Sangraha vii. Mahabhuta – Indriya sambandh viii. Prakriti – Vikriti hetu ix. SadvrittaAnushthana x. Hetuchatushtaya xi. AnuktaSadvritta xii. Important Shlokas for Recitation xiii. Research updates: Mental health and gut microbiota.				
25.	09. Khuddakachatushpada Adhyaya- i. Chikitsa Chatushpada ii. Roga-Arogya Lakshana iii. Chikitsa Lakshana iv. Vaidya, Dravya (Bheshaja), Paricharaka, Aatura guna v. Vaidya pradhanatva vi. Adnya chikitsak dosha vii. Sadvaidya lakshana viii. Vaidya kartavya ix. Vaidya Vritti x. Recitation of important Shlokas xi. Research Updates: Medical ethics-principles Soft Skill development for medical students Emotional Intelligence as a crucial component in medical education	II		03	03
26.	10. Mahachatushpada Adhyaya- i. Catuspaada-bheshajam alam aarogyaayeti (aatreya-kṛta) ii. Bheshaja-abheshajayo tulyatva pratipaadana – (maitreya-kṛta) iii. Its conclusion by Atreya iv. Pareekshya-kaarino hi kusala bhavanthi v. Cikitsaa sootram vi. Cikitsaayaam yasolaabhe kaaranam vii. Asaadhyaroga-cikitsaayaam haani viii. Further division of saadhya-asaadhyata ix. Sukha-saadhya lakshanam x. Krcchra-saadhya lakshanam xi. Yaapya lakshanam xii. Pratyakhyeya lakshanam xiii. Benefit of knowledge of prognosis xiv. The versatile usage of the term	II		03	03

	‘mithyaa-buddhi’ xv. Recitation of important shlokas				
27	11. Tisraishaniya Adhyaya- i. TrividhaEshana (Three Desires of life) ii. Paralokaeshana iii. Chaturvidhapariksha iv. Punarjanma siddhi by Chaturvidhapramanas v. Trayopasthambha vi. Trividhabala vii. Trividhaayatana viii. Atiyoga, Heenayoga and Mithya yoga of artha, karma and kaala ix. Trividharoga x. Treatment for manasavyadhi xi. Trividharogamarga xii. Trividhavaidya xiii. Trividhaoushadha xiv. Ashtatrika xv. Important Shloka for Recitation	III		06	04
28	12. Vatakalakaliya Adhyaya- i. Vata guna ii. Views of various Acharyas on Vata dosha Guna avum Karma iii. Vayu prakop-prasham karan iv. Akupita, kupita vayu karma v. Vata Dosha – Clinical application vi. Akupita-kupita pitta karma vii. Akupita- kupita kapha karma viii. Atreya’s exploration on Tridosha ix. Important shloka for recitation	III		04	05 + 15 (for yearly competitions)
Note- In this column distribution of 130 activity is given. Remaining 130 is for Samhita Pathan.					

Table 3: Learning objectives (Theory) of Course AyUG-SA1

AyUG-SA1 Learning Objective									
A3 Course outcome	B3 Learning Objective (At the end of the session the Students should be able to)	C3 Domain	D3 Must to know/de sire to know/Ni ce to know	E3 Level Does/ Shows how/Sh ows/ Knows how/ Knows	F3 T-L method	G3 Assessment	H3 Formati ve /summat ive	I3 Te rm	J3 Integra tion
<u>Topic 1- Introduction To Samhitas: Time</u> (Lecture:-15 ; Non lecture:-09 hours)									
CO1	Explain the term Samhita	Cognitive/ Comprehe nsion	Must know	Knows	Lecture	Written or Viva	F & S	I	
CO1	Identify Bruhatrayee	Cognitive/ Recall	Must know	Knows	Lecturer	Written or Viva	F & S	I	
CO1	Discuss the various Samhitas and Commentaries in brief	Cognitive/ Comprehe nsion	Must know	Knows	Lecturer / Group Discussion	Written or Viva	F & S	I	
CO1	Discuss the various preceptors, aut hours, redactors and commentators in brief	Cognitive/ Comprehe nsion	Must know	Knows	Lecturer	Written or Viva	F & S	I	
CO1	Apply various Tantrayukties like Adhikaran, Yoga, Padarth, Uddesh, Niradesh, Vaakyashesh,	Cognitive/ Applicatio n	Must know	Knows how	Lecturer/ Group discussion	Viva	Formativ e	I	

	Prayojan, Upadesh, arthapatti, Ekant, Anumat, Vyakhyan, Samshay, Atitavekshan, Anagatavekshan, Swasadnya, Samucchaya, Nidarshan, Nirvachan, Niyog.								
CO1	Describe various Tantraguna	Cognitive/ Comprehe nsion	Must now	Knows how	Lecturer	Written or Viva	Formativ e and Summati ve	I	
CO1	Describe various Tantradasha	Cognitive/ Comprehe nsion	Must know	Knows	Lecturer	Written or Viva	Formativ e and Summati ve	I	
CO1	Describe rachanashaili (composition style) and bhashashaili (language style) of Samhitas	Cognitive/ Comprehe nsion	Must know	Knows how	Lecturer / Discussion	Written or Viva	F & S	I	<u>Ayurv ed Itih as</u>
CO1	Discuss about pattern (method) of writing of classical texts	Cognitive / Comprehe nsion	Must know	Knows how	Lecturer	Puzzle	Formativ e	I	<u>Ayurv ed Itih as</u>
CO1	State different types of styles of language of classical text	Cognitive/ Recall	Must know	Knows	Lecturer Audio-Visual aids	Viva	Formativ e and summati ve	I	

CO1	Interpret Anubandha chatushtya with examples	Cognitive/ Problem solving	Must know	Knows how	Lecturer / Class discussion	Enquiry Based Learning	Formative	I	
CO1	Interpret Ashta Prashna with example	Cognitive/ Problem solving	Must know	Knows how	Lecturer/ Demonstration	Enquiry Based Learning	Formative	I	
<u>Topic 2- Ashtang Hridaya Samhita Sutrasthan Chapter-1-</u> Ayushkamiya Adhyaya: Time (Lecture:- 08 ; Non lecture- 03 hours)									
CO1	Discuss the hierarchy of Ayurvedotpatti (descend of Ayurveda)	Cognitive /Recall	Must know	Know	Lecture	Written or Viva	F & S	I	
CO1	Explain the significance of Ashtanga Hrudaya	Cognitive /Recall	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO1	Enlist the eight branches of Ayurveda	Cognitive/ Recall	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO3	Discuss the concept of dosha with respect to qualities (guna), location in body and time period (kaala)	Cognitive/ comprehensions	Must know	Knows how	Lecture and Group Discussion	Written & Viva	F & S	I	
CO3	Discuss role and superiority of dosha in manifestation of diseases	Cognitive/ comprehensions	Must know	Knows how	Lecture/ Group discussion	Written & Viva	F & S	I	
CO3	Identify the dosha sthanas	Cognitive/ comprehensions	Must know	Knows how	Discussion	Model Making (Working Model)	Formative	I	
CO3	Enlist the saptadhatu and mala.	Cognitive/ Recall	Must know	Know	Lecture	Written & Viva	F & S	I	
CO4	Explain the concept of Samsarga	Cognitive/ Comprehe	Must know	Knows how	Lecture	Written & Viva	F & S	I	

	(combination of 2 dosha) & Sannipata (combination of 3 dosha)	nsion							
CO4	Elucidate concept of Prakruti (body constitution)	Cognitive/ Comprehe nsion	Must know	Knows how	Lecture/Discussion	Written & Viva	F & S	I	
CO6	Explain the three types of digestive fire (agni)	Cognitive/ Comprehe nsion	Must know	know How	Lecture/Demonstratio n in healthy volunteers.	Written or Viva	F & S	I	
CO6	Describe the three types of Koshtha	Cognitive/ Comprehe nsion	Must know	Knows how	Lecture/Demonstratio n in healthy volunteers.	Written or Viva	F & S	I	
CO5	Explain the effect of rasas on tridosha	Cognitive/ Comprehe nsion	Must know	Knows how	Lecture/ Group discussion	Written & Viva	F & S	I	
CO5	Describe the two types of potencies (Dwividha Virya)	Cognitive/ Comprehe nsion	Must know	Knows how	Lecture/ Group discussion	Written & Viva	F & S	I	
CO5	Describe the three types of Vipaka	Cognitive/ Comprehe nsion	Must know	Knows how	Lecture/ Group discussion	Written & Viva	F & S	I	
CO5	Explain the three types of dravya on the basis of Prabhav	Cognitive/ Comprehe nsion	Must know	Knows how	Lecture/ Group discussion	Written & Viva	F & S	I	
CO5	Explain the concept of Vruddhi &Kshaya (increase and	Cognitive/ Comprehe nsion	Must know	Knows how	Lecture/ Group discussion	Written & Viva	F & S	I	

	decrease)								
CO6	Discuss the causative factors of health and disease	Cognitive/ comprehension	Must know	Know how	Lecture/group discussion	Puzzle / Viva	Formative and summative	I	
CO6	Define health (aarogya) and disease stage(roga)	Cognitive/ Recall	Must know	Know	Lecture	Written & Viva	Formative and summative	I	
CO6	Explain prakruta (normal) and vikruta (abnormal) conditions	Cognitive/ comprehension	Must know	Knows how	Lecture /	Written & Viva	Formative and summative	I	
CO6	Explain the types of diseases (Roga)	Cognitive/ Comprehension	Must know	knows How	Lecture	Written or Viva	F & S	I	
CO6	Explain the concept of Roga Adhishtana (abode of diseases)	Cognitive/ Cognitive/ Comprehension	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO6	Enumerate Manas dosha	Cognitive/ Recall	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO6, CO8	Discuss the methods of assessment of patient	Cognitive/ Comprehension	Must know	Knows How	Lecture	Written or Viva	F & S	I	
CO8	Explain the methods of examination of disease	Cognitive/ Comprehension	Must know	Knows how	Lecture/OPD clinics	Written & Viva	F & S	I	
CO6	Explain the three types of	Cognitive/ Comprehe	Must know	Knows how	Lecture/Multimedia aids	Written or Viva	F & S	I	

	habitats(desha)	nsion							
CO6	Explain the two types of Bhesaja Kala	Cognitive / Comprehe nsion	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO6	Explain the Classification the treatment modules (Aushadha)	Cognitive / Comprehe nsion	Must know	Know How	Lecture	Written or Viva	F & S	I	
CO6	Explain the treatment module for mental diseases (Mano Dosha Aushadham)	Cognitive / Comprehe nsion	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO6, CO8	Elaborate chikitsa chatuspada (4 factors in treatment)	Cognitive /Compreh ension	Must know	Know How	Lecture/ Demonstration in hospital	Written or Viva	F & S	I	
CO6	Explain the types of prognosis of disease	Cognitive/ Comprehe nsion	Must know	Know How	Lecture/ Demonstration on patients / Multimedia aids	Written or Viva	F & S	I	
CO6	Explain Concept of anupakramaneeya Atura Lakshana	Cognitive/ Comprehe nsion	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO1	Enlist the chapters of Sutra Sthana	Cognitive/ Comprehe nsion	Must Know	Knows	Self-learning	Written or Viva	F & S	I	
CO1	Enlist all Sthana and Adhyayas of Ashtang Hridaya and Uttara Tantra	Cognitive/ Recall	Nice to Know	Knows	Self-learning	Written or Viva	F & S	I	
CO2	Recite the shloka from 1 to 35	Cognitive/ Recall	Must Know	Show	Self-learning	Viva	F & S	I	

CO1	Identify Adhikaran, Yoga, Padarth, Uddesh, Anagatavekshan Tantrayukti in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	I	
Topic -3. Ashtang Hriday Samhita Sutrasthan Chapter-2- Dinacharya Adhyaya Time (Lecture:- 05 Non lecture- 04 hours)									
CO4	Explain the need of waking up before sunrise	Cognitive/ Comprehension	Must know	Know how	Lecture	Written & Viva	F & S	I	
CO4	Explain the importance of Shaucha Vidhi	Cognitive/ Comprehension	Must know	Knows how	Lecture	Written & Viva	F & S	I	
CO4	Explain the importance and contraindications of brushing (Dantadhavana)	Cognitive/ Comprehension	Must know	Knows how	Lecture/ Multimedia aids	Written & Viva	F & S	I	
CO4	Identify the herbs used for Dantadhavan	Cognitive/ Application	Must know	Shows how	Herbal garden visit	Written or Viva Group Activity (For identifications of Currently using tooth paste. Herbal pastes. Types of pastes)	F & S	I	Dravya guna dept
CO4	Distinguish Sauveeranjana and Rasanjan	Cognitive/ Comprehension	Must know	Know how	Lecture/Demonstration	Written or Viva Debate (Students will search benefits and harms supported by current literature.	F & S	I	Visit to Rasashastra dept for Identification of

						Dabate in class)			drugs
CO4	Discuss contraindications of betel leaf consumption (Tambula)	Cognitive/ Application	Must know	Know how	Lecture/ Debate on benefits and harms of Betel leaf consumption. supported by current literature.	Written or Viva	F & S	I	
CO4	Elaborate the concept of Abhyanga along with contraindications	Cognitive/ Comprehension	Must know	Know How	Lecture/ /Multimedia aids	Written & Viva	F & S	I	Panchk arma dept
CO4	Discuss the importance, contraindications of exercise	Cognitive/ Application	Must know	Knows How	Lecture/ Multimedia aids	Written & Viva	F & S	I	
CO4	Discuss the rules regarding exercise and adverse effects of excessive exercise	Cognitive/ Application	Must know	Knows how	Group Discussion Debate: Types of Exercise. e.g Arobiuc and anaerobic etc. supported by current literature discussions on Concept.	Written & Viva	F & S	I	
CO4	Explain the benefits of powder massage (udvartan)	Cognitive/ Comprehension	Must know	Know how	Lecture/demonstration ECE	Written & Viva	F & S	I	Panchk arma dept
CO4	Elucidate the benefits and contraindications of bathing (snana)	Cognitive/ Comprehension	Must know	Knows how	Lecture/group discussion Literature search and Discussion by students.	Written & Viva	F & S	I	
CO4	Explain the time of having food.	Cognitive/ Comprehension	Must know	Know how	Lecture	Written or Viva	F & S	I	

CO4	Explain rules regarding natural urges.	Cognitive/Comprehension	Must know	Know how	Lecture	Written or Viva	F & S	I	
CO4	Explain the importance of righteousness (Dharmapalan)	Cognitive/Comprehension	Must know	Know how	Flipped Classroom Group Activity: self identification of Mistake they are doing Plan to rectify and reassessment after duration.(6 months)	Written or Viva	F & S	I	
CO4	Enumerate the types of bad deeds(Dasha Vidha Papakarma)	Cognitive/Recall	Must know	Know How	Flipped Classroom	Written or Viva	F & S	I	
CO4, CO8	Explain the concept of good principles and conduct (Sadvrutta)	Cognitive	Must know	Knows how	Flipped Classroom	Written or Viva	F & S	I	
CO4	Explain the principles of personal hygiene (shuddhi)	Cognitive/Comprehension	Must know	Knows how	Flipped Classroom	Written or Viva	F & S	I	
CO2	Recite the shlokas from 1 to 48	Cognitive/Recall	Must know	Show	Self-learning	MCQ/viva/quiz	F & S	I	
CO8	Assess and observe the Dincharya Principles.	Skill	Must know	Does	Proforma based assessment in healthy volunteers/ patients.	Work book- Viva	F & S	I	
CO8	Justify the importance of Dincharya	Cognitive/ Application	Must know	Does	Application of Principles in own life	Viva	F & S	I	
CO1	Identify Upadesha, Ekant, Prayojan Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	I	

Topic – 4. Ashtang Hriday Samhita – Sutrasthan Chapter 3- Rutucarya Adhyaya-Time (Lecture:- 05 ; Non lecture 04 hours)

CO4	Explain the six seasons and the months in which they fall	Cognitive/Comprehension	Must know	Knows	L Lecture/group discussions/Multimedia aids	L Written & Viva	F & S	I	
CO4	Elicudate the status of strength (bala) in Uttarayana and Dakshinayana	Cognitive/Recall	Must know	Knows How	Lecture/group discussions/Multimedia aids	Written & Viva	F & S	I	
CO4	Explain the relation between strength (bala)& seasons	Cognitive/Comprehension	Must know	Knows How	M Lecture	Written & Viva	F & S	I	
CO4	Discuss the climatic conditions, health status(bala, agni, dosha), appropriate food and regimen for Hemant rutu.	Cognitive/Application	Must know	Knows How	Lecture/group discussions/Multimedia aids	Written or Viva	F & S	I	
CO4	Discuss the climatic conditions, health status (bala, agni, dosha), appropriate food and regimen for Shishira rutu.	Cognitive/Application	Must know	Knows How	Lecture/group discussions/Multimedia aids	Written & Viva	F & S	I	
CO4	Discuss the climatic conditions, health status (bala, agni, dosha), appropriate food and regimen for Shishira rutu.	Cognitive/Application	Must know	Knows How	Lecture/group discussions/Multimedia aids	Written or Viva	F & S	I	
	Discuss the climatic conditions, health status (bala, agni,	Cognitive/Application	Must know	Knows How	Lecture/group discussions/Multimedia aids	Written & Viva	F & S	I	

	dosha), appropriate food and regimen for Greeshma rutu.								
CO4	Discuss the climatic conditions, health status (bala, agni, dosha), appropriate food and regimen for Varsha rutu.	Cognitive/ Application	Must know	Knows How	Lecture/group discussions/Multimedia aids	Written & Viva	F & S	I	
CO4	Discuss the climatic conditions, health status (bala, agni, dosha), appropriate food and regimen for Sharad rutu.	Cognitive/ Application	Must know	Knows How	Lecture/group discussions/Multimedia aids	Written & Viva	F & S	I	
CO8	Justify the importance of Rutucharya	Affective	Must Know	Does	Group discussions	Viva	F & S	I	
CO4	Describe the special instructions pertaining diet (rasa, guna) and seasons	Cognitive/ Comprehension	Must know	Knows How	Lecture/group discussions/Multimedia aids	Written & Viva	F & S	I	
CO4	Identify the significance of Rutusandhi	Cognitive/ Comprehension	Must know	Knows How	Lecture	Written or Viva	F & S	I	
CO2	Recite the shloks - 1 to 6, 55-58	Cognitive/ Recall	Must Know	Show	Self learning	Written/viva/quiz	F & S	I	
CO4	Apply the Principles of Rutucharya in practice	Skill	Must Know	Does	Proforma based assessment of healthy individuals or patients	Viva	F & S	I	
CO1	Identify Prayojan, Swasdnaya, Apadesh Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	I	

Topic -5 Ashtang Hriday Samhita – Sutrasthan- Chapter 4. Roganutpadaniya Adhyaya--Time (Lecture:- 05 ; Non lecture 04 hours)

CO6	Enlist the adharaneeya vega (natural urges not to be suppressed by force)	Cognitive/ Recall	Must know	Knows How	Lecture	Written & Viva	F & S	I	
CO6	Specify the diseases due to suppression of adhovata (flatus) and its treatment	Cognitive/ Recall	Must know	Knows How	Lecture	Written & Viva	F & S	I	
CO6	Specify the diseases due to suppression of purisha (fecal matter/ defecation) and its treatment	Cognitive/ Recall	Must know	Knows How	Lecture	Written & Viva	F & S	I	
CO6	Specify the diseases due to suppression of mootra (urine) and its treatment	Cognitive/ Recall	Must know	Knows How	Lecture	Written & Viva	F & S	I	
CO6	Specify the diseases due to suppression of udgaar (belching) and its treatment	Cognitive/ Recall	Must know	Knows How	Lecture	Written & Viva	F & S	I	
CO6	Specify the diseases due to suppression of kshvathu (sneezing) and its treatment	Cognitive/ Recall	Must know	Knows How	Lecture	Written & Viva	F & S	I	
CO6	Specify the diseases due to suppression of trushna (thirst) and its treatment	Cognitive/ Recall	Must know	Knows How	Lecture	Written & Viva	F & S	I	

CO6	Specify the diseases due to suppression of kshudha (hunger) and its treatment	Cognitive/ Recall	Must know	Knows How	Lecture	Written/viva	F & S	I	
CO6	Specify the diseases due to suppression of nidra (sleep) and its treatment	Cognitive/ Recall	Must know	Knows How	Lecture	Written & Viva	F & S	I	
CO6	Specify the diseases due to suppression of kaasa (cough) and its treatment	Cognitive/ Recall	Must know	Knows	Lecture	Written & Viva	F & S	I	
CO6	Enumerate the diseases due to suppression of shrama shwasa and its treatment	Cognitive/ Recall	Must know	Knows	Lecture	Written & Viva	F & S	I	
CO6	Specify the diseases due to suppression of jrumbha (yawning) and its treatment	Cognitive/ Recall	Must know	Knows	Lecture	Written & Viva	F & S	I	
CO6	Specify the diseases due to suppression of ashru (tears) and its treatment	Cognitive/ Recall	Must know	Knows	Lecture	Written & Viva	F & S	I	
CO6	Specify the diseases due to suppression of vaman(vomiting) and its treatment	Cognitive/ Recall	Must know	Knows How	Lecture	Written & Viva	F & S	I	
CO6	Specify the diseases due to suppression of shukra (semen) and its treatment	Cognitive/ Recall	Must know	Knows How	Lecture	Written & Viva	F & S	I	

CO6	Describe the incurable condition of Vegadharan	Cognitive/ Comprehe nsion	Must know	Knows How	Lecture	Written or Viva	F & S	I	
CO6	Explain vegdharan as the root cause for many diseases and its common treatment	Cognitive/ Comprehe nsion	Must know	Knows How	Lecture	Written & Viva	F & S	I	
CO6	Explain the dharaneeya vega (urges to be controlled)	Cognitive/ Comprehe nsion	Must know	Knows How	Lecture/ Group discussion	Written or Viva	F & S	I	
CO8	Justify the importance of adharneeya and dharneeya vega to maintain health	Cognitive/ Applicatio n	Must know	Does	Group discussions	Group discussions/ Class activities	F & S	I	
CO6	Explain importance of Shodhana chikitsa (purification techniques)	Cognitive/ Comprehe nsion	Must know	Knows How	Lecture	Written & Viva	F & S	I	
CO6	Explain the importance of Brumhana after Shodhana chikitsa	Cognitive/ Comprehe nsion	Must know	Knows How	Lecture	Written & Viva	F & S	I	
CO6	Explain the concept of Aagantu roga (traumatic diseases) and its treatment	Cognitive/ Comprehe nsion	Must know	Knows How	Lecture	Written or Viva	F & S	I	
CO6	Discuss the concept of rutu-shodhana (elimination of doshas according to seasons)	Cognitive/ Applicatio n	Must know	Knows How	Lecture/Group Discussion	Written & Viva	F & S	I	

CO6 CO8	Describe the importance of healthy diet and regimen.	Cognitive/ Comprehe nsion	Must know	Knows How	Lecture/Group discussion	Written & Viva	F & S	I	
CO6	Comply with health rules regarding vegdharan and hita-aahar-vihar.	Cognitive/ Comprehe nsion	Must know	Shows		Group discussion/ Class activities	F & S	I	
CO2	Recite the shlokas from number 1 to 22, 24-31, 35	Cognitive/ Recall	Must know	Show	Self-learning	Written/viva/quiz	F & S	I	
CO3, CO6	Assess the sign and symptoms caused due to suppression of Adharaneeya Vegas.	Skill	Must Know	Show how	Proforma based assessment in healthy volunteers/patients.	Problem based assessment	Formative	I	
CO1	Identify Uddesh, Niradesh, Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	I	
<u>Topic -6 Ashtang Hriday Samhita – Sutrasthan- Chapter 05 Dravadravya Vijnaniya Adhyaya--Time (Lecture:- 05 ; Non lecture 04 hours)</u>									

CO5	Differentiate between Gangambu (rain water) and Samudrambu (sea water)	Cognitive/ Comprehe nsion	Desirable	Knows	Lecture discussion	Written or Viva	Formative	I	
CO5	Describe attributes of water from different sources	Cognitive/ Comprehe nsion	Nice to know	Knows	Lecture discussion	Written or Viva	Formative	I	
CO5	Explain the utilities of different states of water (avoiding of drinking water, hot water (ushnambu), cold water	Cognitive/ Comprehe nsion	Must know	Knows how	Lecture discussion	Written or Viva	F & S	I	

	(sheetambu), Boiled and cold water (kwathita-sheetambu)								
CO5	Write the qualities of Narikelodakam (coconut water)	Cognitive/ Recall	Must know	Knows	Discussion	Written or Viva	F & S	I	
CO5	Discuss the properties of ksheeram (milk), Dadhi (curd), Takra (mastu), navaneetam (white butter), Ghritam	Cognitive/ Comprehension	Must know	Knows how	Lecture discussion	Written or Viva	F & S	I	
CO5	List Properties of milk (ksheeras) of different sources.	Cognitive/ Recall	Nice to know	Knows	Lecture	Written or Viva	Formative	I	
CO5	Differentiate the properties of ama (unboiled) and shruta (boiled) ksheeram (milk)	Cognitive/ Comprehension	Must know	Knows	Lecture	Written or Viva	F & S	I	
CO5	Explain the rules for curd consumption	Cognitive/ Comprehension	Must know	Know how	Lecture discussion	Written or Viva	F & S	I	
CO5	Write the properties of various milk preparations	Cognitive/ Recall	Nice to know	Know	Lecture discussion	Written or Viva	Formative	I	
CO5	Identify the properties and uses of sugarcane and its products	Cognitive/ Recall	Nice to know	Know	Lecture discussion	Written or Viva	F & S	I	
CO5	Enlist the properties of honey and Identify the various guidelines related to use of honey	Cognitive/ Recall	Must know	Knows how	Lecture discussion	Written or Viva	F & S	I	
CO5	Write the properties of tilaitailam (Sesame oil)	Cognitive/ Recall	Must know	Know	Lecture discussion	Written or Viva	F & S	I	
CO5	Identify the characteristics of different oils	Cognitive/ Comprehension	Nice to know	Know	Lecture discussion	Written or Viva	Formative	I	

		nsion							
CO5	Classify various types of madyas (wines)	Cognitive/ Comprehe nsion	Nice to know	Know	Lecture discussion	Written or Viva	Formative	I	
	explain the properties of Shukta, Dhanyamlam, sauveeraka, tushodaka etc.,	Cognitive/ Comprehe nsion	Nice to know	Know	Lecture discussion	Written or Viva	Formative	I	
CO5	Describe the properties and uses of various types of urine	Cognitive/ Comprehe nsion	Nice to know	Know	Lecture discussion	Written or Viva	Formative	I	
CO2	Recite the shlokas- 1,16-17, 20,29-32, 51,52,56	Cognitive/ Recall	Must know	Show	Self-learning	Written or Viva	F & S	I	
CO5	Classify some common dravyas like milk, ghee, sugar, jaggery etc according to their varga (group) and qualities	Skill	Must know	Show how	class Discussion	Viva/ class activities	F & S	I	
CO1	Identify Vaakyashesh, Samucchaya, Yog Tantrayukties in this chapter.	Cognitive/ Applicatio n	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	I	
<u>Topic -7 Ashtang Hriday Samhita – Sutrasthan- Chapter 6. Annaswaroop Vijnaneeya Adhyaya- Time (Lecture:- 05 ; Non lecture 03 hours)</u>									
CO5	To classify the shukadhanya (cereals)	Cognitive/ Recall	Must know	Know	Lecture	Written or Viva	F & S	II	Dravyagu na
CO5	Enumerate the qualities of each shukadhanya (cereals)	Cognitive/ Recall	Desire to know	Know	Lecture	Written or Viva	Formative	II	Dravyagu na
CO5	Classify the shimbidhanya (pulses)	Cognitive/ Recall	Must know	Know	Lecture	Written or Viva	F & S	II	Dravyagu na

CO5	Enumerate the qualities of each shimbi dhanya (pulses)	Cognitive/ Recall	Desire to know	Know	Lecture discussion	Written or Viva	Formative	II	Dravyagu na
CO5	Enumerate the qualities of various types of mamsa (meat)	Cognitive/ Recall	Nice to know	Knows	Lecture discussion	Written or Viva	Formative	II	
CO5	Enumerate the qualities of various types of shaka	Cognitive/ Recall	Must know	Knows	Lecture discussion	Written or Viva	Formative and summative	II	Dravyagu na
CO5	Enumerate the qualities of various types of fruits	Cognitive/ Recall	Desire to know	Knows	Lecture discussion	Written or Viva	Formative	II	Dravyagu na
CO5	Enumerate the qualities of various types of krtannavarga (cooked food)	Cognitive/ Recall	Must to know	Know	Lecture discussion	Written or Viva	Formative and summative	II	Bhaishajy akalpana
CO5	Enumerate the qualities of various types of medicinal dravyas (herbs)	Cognitive/ Recall	Must know	Knows	Lecture discussion	Written or Viva	F & S	II	Dravyagu na
CO5	Classify certain common dravyas according to varga and functions	Skill	Must know	Show how	Group activities	Viva	F & S	II	
CO1	Identify Samucchaya, Prayojan, Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	II	
Topic -8 Ashtang Hriday Samhita – Sutrasthan- Chapter 7. Annaraksha Adhyaya- Time (Lecture:- 04 ; Non lecture 03 hours)									
CO8	Describe the role of Rajavaidya (Noble Physiian)	Cognitive/ Comprehe nsion	Nice to know	Know	Discussion	Written or Viva	Formative	II	
CO6	Identify the characteristics adulterated food stuffs	Cognitive/ Comprehe nsion	Nice to know	Knows	Discussion	Written or Viva	Formative	II	Agadatant ra

CO6	Describe the symptoms caused by poisoned or adulterated food	Cognitive/Comprehension	Desire to know	Know	Discussion	Written or Viva	Formative	II	Agadatant ra
CO6	Discuss the treatment module for poisoning	Cognitive/Comprehension	Desire to know	Know how	Discussion	Written or Viva	Formative	II	Agadatant ra
CO6	Define virudhahara (incompatible foods) with examples	Cognitive/Recall	Must know	Know	Lecture discussion	Written & Viva	F & S	II	
CO6	Discuss the treatment methods for virudhahara (incompatible foods)	Cognitive/Comprehension	Must know	Know how	Lecture discussion	Written & Viva	F & S	II	
CO6	Follow the principles regarding viruddh aahar	Cognitive/Application	Must know	Know how	Discussion	Class Activities	Formative	II	
CO4	Explain the process of satmikaran (accustomization)	Cognitive/Comprehension	Must know	Know how	Lecture discussion	Written & Viva	F & S	II	
CO4	Explain the three accessory pillars of life (diet, sleep and non-celibacy)	Cognitive/Comprehension	Must know	Know how	Lecture discussion	Written & Viva	Formative	II	
CO4	Explicate the significance of judicious sleep	Cognitive/Comprehension	Must know	Know how	Discussion	Written & Viva	F & S	II	
CO2	Recite the shloka- 45, 48, 50, 53-55	Cognitive/Recall	Must know	Shows	Self-learning	Written or Viva	F & S	II	
CO1	Identify Nidarshan, Samucchay, Prayojan, swasadnya Tantrayukties in this chapter.	Cognitive/Application	Must know	Knows how	Lecturer/Group discussion	Viva	F & S	II	
<u>Topic -9 Ashtang Hriday Samhita – Sutrasthan- Chapter 8. Annaraksha Adhyaya- Time (Lecture:- 05 ; Non lecture 04 hours)</u>									

CO4	Explain the importance of matra (proper quantity of food) for maintenance of health	Cognitive/ Comprehe nsion	Must know	Knows how	Lecture	Written or Viva	F & S	II	
CO4	Describe how to quantify food	Cognitive/ Comprehe nsion	Must know	Knows	Lecture	Written or Viva	F & S	II	
CO4	Determine the adverse effects of heena matra (inadequate quantity of food) and atimatra (excess quantity of food) ahara	Cognitive/ Comprehe nsion	Must know	Knows how	Lecture	Written or Viva	F & S	II	
CO6	Discuss the etiopathogenesis, symptoms and treatment principles of Alasaka and Visuchika.	Cognitive/ Applicatio n	Must know	Knows how	Lecture/PB L	Written or Viva	F & S	II	
CO6	Classify between various types of Apatarpan therapies	Cognitive/ Comprehe nsion	Must know	Knows how	Lecture	Written or Viva	F & S	II	
CO6	Classify various types of ajeerna	Cognitive/ Comprehe nsion	Must know	Knows how	Lecture	Written or Viva	F & S	II	
CO6 , CO4	Enlist unwholesome food items	Cognitive/ Recall	Must know	Knows	Group discussion	Written or Viva	F & S	II	
CO4	Identify various unhealthy food habits	Cognitive/ Comprehe nsion	Must know	Knows	Group discussion	Written or Viva	F & S	II	
CO4	Recommend ideal regimen for consumption of food (aaharvidhi)	Cognitive/ Comprehe nsion	Must know	Knows how	Discussion	Written or Viva	F & S	II	
CO4	Differentiate between the food items recommended	Cognitive/ Comprehe	Must know	Knows	Lecture Group	Written or Viva	F & S	II	

	and non-recommended for daily use	nsion			Activity.				
CO4	Advise the right order of food items in a meal	Cognitive/ Application	Must know	Does	Discussion/ activities	Viva/ proforma activity	F & S	II	
CO4	Select anupanas (after drink) based on ahara and aushadha	Cognitive/ Comprehe nsion	Must know	Knows how	Lecture/Dis cussion	Written or Viva	F & S	II	
CO4	Identify the conditions where Anupan is contraindicated	Cognitive/ Comprehe nsion	Desire to know	Knows	Lecture/Dis cussion	Written or Viva	F & S	II	
CO4	Advise the right time of food consumption (Aahar Kala)	Cognitive/ Applicatio n	Must know	Shows	Lecture/Dis cussion/acti vities	Written or Viva	F & S	II	
CO2	Recite the shlokas-1-3, 6,7, 17, 19, 20,21, 25-30, 33-34	Cognitive/ Recall	Must know	Shows	Self - learning	Written or Viva	F & S	II	
CO4	Justify the various principles of diet regarding quantity and time	Cognitive/ Applicatio n	Must know	Does	Discussion/ activities	Viva/activities	Formaive/Sum mative	II	
CO1	Identify Prayojan, Upadesha, Padartha, Yog, Swasdnaya Tantrayukties in this chapter.	Cognitive/ Applicatio n	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	II	
Topic -10 Ashtang Hriday Samhita – Sutrasthan- Chapter 9. Dravyaadi Vijnaniya Adhyaya-<u>Time</u> (Lecture:- 04 ; Non lecture 04 hours)									
CO5	Justify the predominance of Dravya	Cognitive/ Comprehe nsion	Must know	Knows how	Lecture	Written or Viva	F & S	II	
CO5	Elaborate the prevalence of Panchamahabhutas in	Cognitive/ Comprehe	Must know	Knows how		Written or Viva	F & S	II	

	Dravyas	nsion							
CO5	Differentiate between Rasa and Anurasa (primary taste and secondary taste)	Cognitive/ Comprehe nsion	Must know	Knows	Lecture	Written or Viva	F & S	II	
CO5	Analyse the characteristics of Panchabhautik dravyas	Cognitive/ Applicatio n	Must know	Shows	Lecture	Written or Viva	F & S	II	
CO5	Recognise the aushadatva (medicinal value) of all substances	Cognitive/ Comprehe nsion	Must know	Knows how	Lecture	Written or Viva	F & S	II	
CO5	Demonstrate the importance of Panchabhautikdravyas in restoration and continuation of health.	Cognitive/ Comprehe nsion	Must know	Knows how	Lecture	Written or Viva	F & S	II	
CO5	Explain the importance of Mahabhutas and drug action	Cognitive/ Comprehe nsion	Must know	Knows how	Lecture	Written or Viva	F & S	II	
CO5	Define Veerya and Vipaka	Cognitive/ Recall	Must know	Knows	Lecture	Written or Viva	F & S	II	
CO5	Discuss the types and the various opinions related with Veerya.	Cognitive/ Comprehe nsion	Must know	Knows how	Lecture	Written or Viva	F & S	II	
CO5	Explain Vipaka and its types.	Cognitive/ Comprehe nsion	Must know	Knows	Lecture	Written or Viva	F & S	II	
CO5	Discuss the hierarchy of active principles of Dravya (matter)	Cognitive/ Comprehe nsion	Must know	Knows how	Lecture	Written or Viva	F & S	II	
CO5	Define Prabhava	Cognitive/ Recall	Must know	Knows	Lecture	Written or Viva	F & S	II	
CO5	Recall the exemplified functions of various active	Cognitive/ Recall	Must know	Knows	Lecture	Written or Viva	F & S	II	

	principles								
CO5	Describe the Saman pratyayarabdha and Vichitra-pratya-arabdha Dravyas.	Cognitive/ Comprehe nsion	Must know	Knows how	Lecture	Written or Viva	F & S	II	
CO2	Recite the shlokas – 1,2,3, 4,10, 12, 13, 20,26,27,28	Cognitive/ Recall	Must know	Knows	Self-learning	Written , Viva/quiz	F & S	II	
CO1	Identify Swasdnya, Nirvachan Tantrayukties in this chapter.	Cognitive/ Applicatio n	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	II	

Topic -11 Ashtang Hriday Samhita – Sutrasthan- Chapter 10. Rasabhedhiya Adhyaya- Time (Lecture:- 05 ; Non lecture 04 hours)

CO2	Describe the formation of rasa from mahabhoota	Cognitive/ Comprehe nsion	Must know	Know	Lecturer Audio- Visual aids	Written or Viva	Formative or Summative	II	Dravyagu na
CO2	Identify the examples and exceptions of the six rasa	Cognitive/ Comprehe nsion	Must know	Know	Lecturer Audio- Visual aids	Written or Viva	Formative or Summative	II	Dravyagu na
CO2	Explain the features of six rasa with examples and exceptions	Cognitive/ Comprehe nsion	Must know	Knows how	Lecturer Audio- Visual aids	Written or Viva	Formative or Summative	II	
CO2	Explain the functions of six rasa	Cognitive/ Comprehe nsion	Must know	Knows how	Lecturer Audio- Visual aids	Written or Viva	Formative or Summative	II	
CO2	Describe the symptoms due to excess use (atiyog) of the six rasa	Cognitive/ Comprehe nsion	Must know	Knows how	Lecturer Audio- Visual aids	Written or Viva	Formative or Summative	II	
CO2	Analyze the tartamatva of	Cognitive/	Must	Knows	Lecturer	Written or Viva	Formative or	II	Dravyagu

	rasas (hierarchy of rasa on the basis of characteristics)	Application	know	how	Audio-Visual aids		Summative		na
CO2	Enlist the 63 types of permutation and combination of rasa	Cognitive/Recall	Nice to know	Know how	Lecturer Audio-Visual aids	Written or Viva	F & S	II	Dravyaguna
CO2	Classify the dravyas according to the rasa skand (group)	Skill	Must know	Know how	Discussion/activities based proformas	Viva/Activities	F & S	II	
CO2	Recite the shloks-1-21, 33-38	Cognitive/Recall	Must know	Knows	Self-learning	Written or Viva	F & S	II	
CO1	Identify Uddesh, Niradesh, Apavarga Tantrayukties in this chapter.	Cognitive/Application	Must know	Knows how	Lecturer/Group discussion	Viva	F & S	II	
Topic -12 Ashtang Hriday Samhita – Sutrasthan- Chapter 11. Doshadi Vijnaniya Adhyaya- Time (Lecture:- 08 ; Non lecture 05 hours)									
CO3	Discuss the importance of dosha dhatu mala	Cognitive/Application	Must know	Know how	Lecturer Audio-Visual aids	Written & Viva	Formative or Summative	III	
CO3	Explain dosha dhatu mala prakruta karma (normal functions)	Cognitive/Comprehension	Must know	Knows how	Lecturer Audio-Visual aids	Written & Viva	Formative or Summative	III	
CO3	Identify the normal functions of dosha, dhatu and mala	Skill	Must know	Show How	Activity based proformas	Viva/ through various Activities	Formative or Summative	III	
CO3	Explain dosha dhatu mala	Cognitive/	Must	Knows	Lecturer	Written & Viva	Formative or	III	

.	vaikruta (vrudha and ksheena) karma (abnormal functions)	Comprehension	know	how	Audio-Visual aids		Summative		
CO3	Identify the effects due to vrudhi (increase) or kshaya (decrease) of dosha,dhatu and mala	Skill	Must know	Show How	Activity based proformas	Viva/ through various Activities	Formative or Summative	III	
CO3 .	Explain the relation between dosha and dhatu.	Cognitive/ Comprehension	Must know	Know how	Lecturer Audio-Visual aids	Written & Viva	Formative or Summative	III	
CO5	Explain the treatment principles for vitiated dosha, dhatu and mala	Cognitive/ Comprehension	Must know	Know how	Lecturer Audio-Visual aids	Written & Viva	Formative or Summative	III	
CO3 .	Elucidate the concept of agni	Cognitive/ Comprehension	Must know	Know how	Lecturer Audio-Visual aids	Written & Viva	Formative or Summative	III	
CO3	Discuss Superiority of Jatharagni	Cognitive/ Application	Must know	Know how	Lecture, Discussion	Written & Viva	Formative or Summative	III	
CO3	Assess the status of Agni.	Skill	Must know	Shows	Activities	Viva/Activites	Formative or Summative	III	
CO6 .	Explain the general pathophysiology for origin of Diseases	Cognitive/ Comprehension	Must know	Know how	Lecturer Audio-Visual aids	Written or Viva	Formative or Summative	III	
CO3 CO6	Explain the concept of Ojas	Cognitive/ Comprehension	Must know	Know how	Lecture, Discussion	Written or Viva	Formative or Summative	III	
CO3 CO6	Explain aetiological factors for Ojakshaya	Cognitive/ Comprehension	Must know	Know how	Lecturer	Written or Viva	Formative or Summative	III	

CO3 CO6	Explain Ojakshaya Lakshana	Cognitive/ Comprehe nsion	Must know	Know how	Lecture, Discussion	Written or Viva	Formative or Summative	III	
CO3 CO6	Identify Ojakshaya Lakshana	Skill	Must know	Show how	Lecturer Audio- Visual aids	Viva/activities	Formative or Summative	III	
CO5	Discuss general diet principles for vridhhi and kshaya (vitiated doshas)	Cognitive/ Applicatio n	Must know	Show How	Activity based proformas	Viva/ planned activities	Formative or Summative	III	
CO2	Recite shlokas from 1 to 45	Cognitive	Must Know	Knows	Self-learning	Written or Viva	Formative or Summative	III	
CO1	Identify Samucchaya, Adhikaran, Vakyashesh Tantrayukties in this chapter.	Cognitive/ Applicatio n	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	III	
Topic -13 Ashtang Hriday Samhita – Sutrasthan- Chapter 12. Doshabhediya Adhyaya- Time (Lecture:- 08 ; Non lecture 05 hours)									
CO3	Enumerate the seats of vata, pitta and kapha doshas	Cognitive/ Recall	Must know	Knows	Lecturer Audio- Visual aids	Written or Viva	Formative or Summative	III	
CO3	Enlist types of vata, pitta and kapha dosha.	Cognitive/ Recall	Must know	Knows	Lecturer Audio- Visual aids	Written or Viva	Formative or Summative	III	
CO3	Describe the specific seats and functions of types of vata, pitta and kapha doshas.	Cognitive/ Recall	Must know	Knows	Lecturer Audio- Visual aids	Written or Viva	Formative or Summative	III	
CO3	Discuss the importance of types of vata, pitta and kapha doshas.	Cognitive/ Applicatio n	Must know	Knows how	Lecturer Audio- Visual aids	Written or Viva	Formative or Summative	III	
CO3	Identify the different types of dosha according to location and functions	Skill	Must know	Knows how	Proforma based activities	Written or Viva	Formative or Summative	III	

CO3	Elucidate the concept of Chaya (accumulation), Prakopa (aggravation) and Prashama (alleviation) of vata, pitta and kapha doshas.	Cognitive/Comprehension	Must know	Knows how	Lecturer Audio-Visual aids	Written or Viva	Formative or Summative	III	
CO3	Discuss the impact of seasonal variation in accumulation and aggravation of vata, pitta and kapha doshas.	Cognitive/Application	Must know	Knows how	Lecturer Audio-Visual aids/Discussion	Written or Viva	Formative or Summative	III	
CO3	Discuss the superiority of dosha in manifestation of diseases	Cognitive/Application	Must know	Know how	Lecturer Audio-Visual aids/Discussion	Written or Viva	Formative or Summative	III	
CO3	Identify general aetiological factors responsible for manifestation of diseases	Cognitive/Application	Must know	Know how	Lecturer/ Discussion	Written or Viva	Formative or Summative	III	
CO3	Describe Trividha Roga marga (pathways of diseases)	Cognitive/Comprehension	Must know	Knows	Lecturer	Written or Viva	Formative or Summative	III	
CO3	Enlist various disorders of Trividha Roga marga (pathways of diseases)	Cognitive/Recall	Must know	Knows	Lecturer/	Written or Viva	Formative or Summative	III	
CO3	Recognise the importance of concept of Trividha Roga marga in diagnosis and prognosis of diseases.	Cognitive/Application	Must know	Knows how	Discussion	Written or Viva	Formative or Summative	III	
CO3	Enumerate the symptoms of aggravated Vata-Pitta – Kapha dosha	Cognitive/Recall	Must know	knows	Lecture, Discussion	Written or Viva	Formative or Summative	III	
CO3	Identify the prakopa lakshana of dosha in	Skill	Must know	Show How	Discussion, Group	Written or Viva	Formative or Summative	III	

	various diseases				activities				
CO3	Explain the concept of unnamed diseases	Cognitive/ Comprehe nsion	Must know	Knows how	Lecture, Discussion	Written or Viva	Formative or Summative	III	
CO3	Define svatantra and partantra vyadhi (primary and secondary diseases)	Cognitive/ Recall	Must know	Know	Lecture	Written or Viva	Formative or Summative	III	
CO3	Enumerate the types of assessment methods	Cognitive/ Recall	Must know	Know	Lecture, Discussion	Written or Viva	Formative or Summative	III	
CO3	Demonstrate the types of assessment methods.	Skill	Must know	Shows how.	Group Activities	Viva	Formative	III	
CO3	Explain the concept of Guru Vyadhit and LaghuVyadhit (gravity of disease and contrary presentation)	Cognitive/ Comprehe nsion	Must know	Knows how	Lecture, Discussion	Written or Viva	Formative or Summative	III	
CO3	Enlist the 63 types of Permutation and combination of dosha	Cognitive/ Recall	Nice to know	Knows	Lecture	Written or Viva	Formative or Summative	III	
CO2	Recite the shlokas 1-72	Cognitive/ Recall	Must know	Shows	Self-learning	Written, Viva/Quiz	F & S	III	
CO1	Identify Apadesh, Samucchaya Tantrayukties in this chapter Tantrayukties in this chapter.	Cognitive/ Applicatio n	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	III	
Topic -14 Ashtang Hriday Samhita – Sutrasthan- Chapter 13 Doshopakramaniya Adhyaya-Time (Lecture:- 07 ; Non lecture 06 hours)									
CO3	Explain the therapeutic procedures and specific management of vata, pitta and kapha dosha	Cognitive/ Comprehe nsion	Must know	Knows how	Lecture	Written or Viva	F & S	III	

CO6	Explain the seasonal regimen to be adopted in various combinations of vitiated Doshas	Cognitive/Comprehension	Must know	Knows	Lecture/Group Discussions	Written or Viva	F & S	III	
CO6	Discuss the importance of treatment of doshas in accumulation stage	Cognitive/Application	Must know	Knows how	Lecture/Group Discussions	Written or Viva	F & S	III	
CO6	Differentiate the accurate and inaccurate therapeutic procedures.	Cognitive/Comprehension	Must know	Knows how	Lecture/Group Discussions	Written or Viva	F & S	III	
CO6	Elaborate the factors responsible for movement of doshas from koshta to shakha and shakha to koshta.	Cognitive/Comprehension	Must to know	Knows how	Lecture	Written or Viva	F & S	III	
CO6	Elaborate the concept of tiryag-gatadosha (migration to other abodes) and its treatment principle.	Cognitive/Comprehension	Must to know	Knows how	Lecture	Written or Viva	F & S	III	
CO6	Describe the line of treatment for Sthanidosha (native) and Aagantudosha (immigrant)	Cognitive/Comprehension	Must to know	Knows how	Lecture	Written or Viva	F & S	III	
CO6	Explain the concept of Ama.	Cognitive/Comprehension	Must to know	Knows how	Lecture	Written or Viva	F & S	III	
CO6	Enumerate the symptoms of saam and niraam doshas.	Cognitive	Must to know	Knows	Lecture	Written or Viva	F & S	III	
CO6	Elaborate the symptoms of saamadosha and their treatment	Cognitive	Must to know	Knows	Lecture	Written or Viva	F & S	III	
CO6	Analyze the 10 types of	Cognitive/	Must to	Knows	Lecture/Dis	Written or Viva	F & S	III	

	aushadha sevan kaal (Time, Method and indications of administration of medicine).	Application	know	how	discussion				
CO2	Recite the shlokas-1-41	Cognitive/ Recall	Must know	Shows	Self-learning	Written or Viva	F & S	III	
CO1	Identify Swasadnya, Nidarshan, Uddesh, Niradesh Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	III	
Topic -15 Ashtang Hridaya Samhita – Sutrasthan- Chapter 14 Dvividhopakramaniya Adhyaya-Time (Lecture:- 05 ; Non lecture 05 hours)									
CO6	Elaborate the concept of two types of therapies - Langhan and Brihan	Cognitive/ Comprehension	Must know	Know how	Lecture	Written or Viva	F & S	III	
CO6	Describe the indications, methods, benefits of Brihan and symptoms of excess Brihan	Cognitive/ Comprehension	Must know	Know how	Lecture/Discussion	Written or Viva	F & S	III	
CO6	Explain the indications, methods, benefits of Langhan and symptoms of excess Langhan	Cognitive/ Comprehension	Must know	Know how	Lecture/ Discussion	Written or Viva	F & S	III	
CO6	Describe the indications of shodhan and shaman therapies	Cognitive/ Comprehension	Must know	Know how	Lecture	Written or Viva	F & S	III	
CO6	Elaborate the concept of Atisthaulya with the treatment module	Cognitive/ Comprehension	Must know	Know how	Lecture	Written or Viva	F & S	III	
CO6	Elaborate the concept of Atikarshya with the treatment module	Cognitive/ Comprehension	Must know	Know how	Lecture	Written or Viva	F & S	III	
CO2	Recite the shlokas – 1 to 7, 31to 36	Cognitive/ Recall	Must know	Shows	Self-learning	Written or Viva	F & S	III	

CO1	Identify Nirvachan, Samucchay, Nidarshan Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	III	
Topic -16 Ashtang Hriday Samhita – Sutrasthan- Chapter 15, Shodhanadigana Sangraha Adhyaya- Time (Lecture:- 02 ; Non lecture 04 hours)									
CO7	SElect the vaman, virechan, niruha, nasya gana according to their functions	Cognitive/ Comprehe nsion	Nice to know	Knows how	Lecture/Mu ltimedia aids	Viva	Formative	III	Dravyagu na
CO7	Define the dravyas with their ingredients and actions.	Cognitive/ Recall	Nice to know	Know	Lecture/Mu ltimedia aids	Viva	Formative	III	
CO7	Identify the dravyas frequently used in treatments	Skill	Nice to know	Shows	Herbal garden visit	Viva	Formative	III	
Topic-17. Charak Samhita Sutrasthan Chapter 1. Dirghamjivitiyam Adhyaya; Time (Lecture:- 07 ; Non lecture 02 hours)									
CO1	Discuss the Ayurvedavataranam (Genealogy of Ayurveda)	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO8	Discuss the chaturvarga and its main factor for achieving it	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO6	Discuss about the trisutra of Ayurveda (three principles of health and disease)	Cognitive	Must know	Know how	Lecture	Written or Viva	F & S	I	
CO2	Discuss the about the six padarthas (six basic principles)	Cognitive	Must know	Know how	Lecture	Written or Viva	F & S	I	
CO1	Discuss the characteristics of Ayurveda	Cognitive	Must know	Know how	Lecture	Written or Viva	F & S	I	
CO2	Discuss the characteristics	Skill	Must	Knows	Lecture	Written or Viva	F & S	I	

	of Ayu (life) and its synonyms		know	how					
CO2	Discuss the characteristics of samanya (similarity) and visha (difference/uniqueness)	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO2	Discuss about the Tridanda (tripod of life)	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO2	Discuss the classification and characteristics of the dravyas (basic elements)	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO2	Discuss the classification and characteristics of the gunas	Cognitive	Must know	Show How	Lecture	Written or Viva	F & S	I	
CO2	Define karma (actions)	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO2	Explain samavaya (inseparable concomitance)	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO1	Explain the aims of Ayurveda	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO6	Explain the three causative factors of disease	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO6	Explain the abode of vyadhi and arogya	Cognitive	Must know	Show how	Lecture	Written or Viva	F & S	I	
CO2	Discuss the characteristics of Atma	Cognitive	Must know	Know how	Lecture	Written or Viva	F & S	I	
CO6	Explain the sharira and manasa doshas	Cognitive	Must know	Know how	Lecture	Written or Viva	F & S	I	
CO6	Discuss the treatment of sharira and manasa doshas	Cognitive	Must know	knows How	Lecture	Written or Viva	F & S	I	

CO3	Discuss the gunas of vayu and its treatment	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO3	Discuss the gunas of pitta and its treatment	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO3	Discuss the gunas of shleshma and its treatment	Cognitive	Must know	Knows How	Lecture	Written or Viva	F & S	I	
CO6	Discuss about the treatment for sadhya and asadhya vikara (curable and incurable disease)	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO2	Explain the rasa	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO2	Classify the dravya based on their effects on body and their origin	Cognitive	Must know	Know how	Lecture	Written or Viva	F & S	I	
CO7	Enumerate the dravya based on the useful parts (upayuktanga)	Cognitive	Desirable to know	Know how	Lecture/Mul media aids	Written or Viva	F & S	I	
CO7	Discuss about the identification of drugs by name, form and its action	Cognitive	Must know	Know how	Lecture/Mul media aids	Written or Viva	F & S	I	
CO8	Discuss about the duties for one aspires to be a physician.	Cognitive	Must know	Know how	Lecture	Written or Viva	F & S	I	
CO7	Discuss about the best drug	Cognitive	Must know	Know how	Lecture	Written or Viva	F & S	I	
CO8	Discuss about the best physician endowed with all good qualities	Cognitive	Must know	Know how	Lecture	Written or Viva	F & S	I	
CO2	Recite the shlokas 15, 24,28,29, 31, 41, 42, 44-67, 134,135	Cognitive/ Recall	Must know	Shows	Swadhyaya (self learning)	Written or Viva	F & S	I	

CO1	Identify Uddesha, Nirdesh Tantrayukties in this chapter	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	I	
Topic-18. Charak Samhita Sutrasthan Chapter 2. Apamarga Tanduliya Adhyaya; Time (Lecture:- 02 ; Non lecture 03 hours)									
CO7	Enumerate few Shiro Virechana Dravya & Main Indications	Cognitive	Desirable to know	Knows	Lecture/Audiovisual aids/ Herbal garden visit	Written or Viva	F & S	II	Dravyaguna
CO7	Enumerate few Vamana Dravya & Main Indications	Cognitive	Desirable to know	Knows	Lecture/Audiovisual aids/ Herbal garden visit	Written or Viva	F & S	II	Dravyaguna
CO7	Enumerate few Virechana Dravya & Main Indications	Cognitive	Desirable know	Knows	Lecture/Audiovisual aids/ Herbal garden visit	Written or Viva	F & S	II	Dravyaguna
CO7	Enumerate few Asthapana Basti Dravya & Main Indications	Cognitive	Desirable to know	Knows	Lecture/Audiovisual aids/ Herbal garden visit	Written or Viva	F & S	II	Dravyaguna
CO7	Enumerate few Anuvasana Basti Dravya & Main Indications	Cognitive	Desirable to know	Knows	Lecture/Audiovisual aids/ Herbal garden visit	Written or Viva	F & S	II	Dravyaguna
CO7	Enumerate the names & Main Indications of 28 Types of Yavagu	Cognitive	Desirable to Know	Knows	Lecture/Audiovisual aids	Written or Viva	F & S	II	Rasshastra -bhaishjya dept
CO7	Explain the Importance Of Panchakarma	Cognitive	Must know	Knows	Lectures	Written or Viva	F & S	II	Panchkarma
CO7	Explain the features of Vaidya	Cognitive	Must know	Knows	Lecture/Group Discussion	Written or Viva	F & S	II	

CO7	Recite Shlokas 15,16,36	Cognitive/ Recall	Must know	Shows	Self-learning	Written or Viva	F & S	II	
CO7	Identify the dravyas on the basis of actions	Psychomotor	Must know	Shows	Herbal garden visit	Viva	Summative	II	Dravyaguna
CO1	Identify Upadesh, Samucchaya Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	II	
Topic-19. Charak Samhita Sutrasthan Chapter 3. Aragvadihya Adhyaya-<u>Time</u> (Lecture:- 01 ; Non lecture 03 hours)									
<u>CO7</u>	Mention Thirty Two Churna Pradeha & Main Indications	<u>Cognitive</u>	Desirable to know	Knows	Lectures/Multimedia aids	Written or Viva	Formative	II	Ras-bhaishjya/ Kayachikitsa
Topic-20. Charak Samhita Sutrasthan Chapter 4. Shadvirechana-shatashritiya Adhyaya-<u>Time</u> (Lecture:- 03 ; Non lecture 04 hours)									
CO7	List the six abodes of purgatives	Cognitive/ Recall	Must know	Know	Discussion	Written or Viva	F & S	II	Dravyaguna
CO7	Enlist the five tastes for medicinal preparation	Cognitive/ Recall	Must know	Know	Lecture, discussion	Written or Viva	F & S	II	Rasashastra & bhaishajya Kalpana
CO7	Define the five types of medicinal preparations/ forms	Cognitive/ Recall	Must know	Know	Lecture / Multimedia aids	Written or Viva	F & S	II	Ras-bhaishjya
CO7	Enlist the 50 groups of medicines as per their actions	Cognitive/ Recall	Desirable to know	Know	Lecture	Written or Viva	F & S	II	Dravyaguna
CO7	Limitations for description of medicinal drugs in Samhita	Cognitive/ Comprehension	Nice to know	Know how	Lecture	Written or Viva	Formative	II	
CO1	Identify Swasadnya , Samucchaya, Yog	Cognitive/ Application	Must know	Knows how	Lecturer/ Group	Viva	F & S	II	

	Tantrayukties in this chapter.	n			discussion				
Topic-21. Charak Samhita Sutrasthan Chapter-05 Matrashiteeya Adhyaya- Time (Lecture:- 03 ; Non lecture 05 hours)									
CO5	Explain Matravat Ahara	Cognitive/ Recall	Must know	Know	Lecturer, Audio-Visual aids, Group Discussion	Written or Viva	Formative and Summative	II	Swastarutta
CO5	Define and enlist Nature of Ahara (Guru, Laghu)	Cognitive/ Recall	Must know	Knows how	Lecturer Audio-Visual aids Group Discussion	Written or Viva	Formative and Summative	II	Swastarutta
CO5	Explain the significance of MatravatAharaPhala	Cognitive/ Recall	Must know	Know how	Lecturer, Audio-Visual aids, Group Discussion	Written or Viva	Formative and Summative	II	Swastarutta
CO5	Discuss role of AharaSevanaVidhana on the bases of its nature	Cognitive/ Comprehe nsion	Must know	Know how	Lecturer Audio-Visual aids Group Discussion	Written or Viva	Formative and Summative	II	Swastarutta
CO2	Define Swasthavrutta	Cognitive/ Recall	Must know	Knows	Lecturer Audio-Visual aids Group Discussion	.Viva	Formative and Summative	II	Swastarutta
CO6	Explain Anjana	Cognitive/ Comprehe nsion	Must know	Know	Lecturer Audio-Visual aids Group Discussion	Written or Viva	Formative and Summative	II	Swastarutta
CO6	Explain Dhumapana	Cognitive/	Must	Knows	Lecturer	Written or Viva	Formative	II	Swastarutta

		Comprehe nsion	know	how	Audio- Visual aids Group Discussion		and Summative		a, Shalakya , Panchakar ma
CO6	Explain Nasya	Cognitive/ Comprehe nsion	Must know	Knows how	Lecturer Audio- Visual aids Group Discussion	Written or Viva	Formative and Summative	II	Swastarutt a, Shalakya , Panchakar ma
CO6	Explain Dantadhavana	Cognitive/ Comprehe nsion	Must know	know How	Lecturer Audio- Visual aids Group Discussion	Written or Viva	Formative and Summative	II	Swastarutt a,
CO6	Explain Jivhanirlekhana	Cognitive/ Comprehe nsion	Must know	know How	Lecturer Audio- Visual aids Group Discussion	Written or Viva	Formative and Summative	II	Swastarutt a,
CO6	Explain Gandusha	Cognitive/ Comprehe nsion	Must know	Knows how	Lecturer Audio- Visual aids Group Discussion	Written or Viva	Formative and Summative	II	Swastarutt a,
CO6	Explain Abhyanga with types	Cognitive/ Comprehe nsion	Must know	Knows how	Lecturer Audio- Visual aids Group Discussion	Written or Viva	Formative and Summative	II	Swastarutt a,Panchak arma
CO6	Describe Parimarjana	Cognitive/ Comprehe nsion	Must know	Knows how	Lecturer Audio- Visual aids Group Discussion	Written or Viva	Formative and Summative	II	Swastarutt a,
CO4	Describe the	Cognitive/	Must	Knows	Lecturer	Written or Viva	Formative	II	Swastarutt

	VastraGandhaMalyadiDharana	Comprehension	know	how	Audio-Visual aids Group Discussion		and Summative		a,
CO4	Explain the concept of Shouchavidhi	Cognitive/Comprehension	Must know	Knows how	Lecturer Audio-Visual aids Group Discussion	Written or Viva	Formative and Summative	II	Swastarutta,
CO4	Discuss the Kshoura Karma	Cognitive/Comprehension	Must know	Know how	Lecturer Audio-Visual aids Group Discussion	Written or Viva	Formative and Summative	II	Swastarutta,
CO4	Define PadatraDharan with importance	Cognitive/Recall	Must know	Know how	Lecturer Audio-Visual aids Group Discussion	Written or Viva	Formative and Summative	II	Swastarutta,
CO4	Explain the ChatraDharana	Cognitive/Recall	Must know	knows How	Lecturer Audio-Visual aids Group Discussion	Written or Viva	Formative and Summative	II	Swastarutta,
CO4	Justify the importance of the procedures mentioned as dincharya	Cognitive/Application	Must know	Shows how	Group Discussion	Group Discussion/ Project work	Formative and Summative	II	
CO2	Recite the shlokas 4, 12-13, 34-35, 56-57,68-69, 81-83, 103	Cognitive/Recall	Must know	Shows	Swadhyaya (self learning)	Viva	F & S	II	
CO1	Identify Upadesha, Padartha, Nidarshan Tantrayuktis in this chapter.	Cognitive/Application	Must know	Knows how	Lecturer/Group discussion	Viva	F & S	II	

CO4	Research Updates: Role of Dinacharya to maintain circadian rhythm Role of therapeutic message for cell rejuvenation Mechanism of satiation and proper quantity of food (Sauhitya Matra)	Cognitive	Nice to know	Knows how	Lecture; Audio-visual aids	Group discussion	-	II	
Topic-22. Charak Samhita Sutrasthan Chapter-6. Tasyashiteeya Adhyaya-Time (Lecture:- 04 ; Non lecture 04 hours)									
CO2	Discuss the importance of Classification of Samvastara	Cognitive/Comprehension	Must know	Knows how	Lecture Audio-Visual aids Group Discussion	Written or Viva	Formative and Summative	II	
CO2	Explain the significance of Visarga Kala	Cognitive/Comprehension	Must know	Know how	Lecture Audio-Visual aids Group Discussion	Written or Viva	Formative and Summative	II	
CO2	Explain the significance of Adana kala	Cognitive/Recall	Must know	Know how	Lecture Audio-Visual aids Group Discussion	Written or Viva	Formative and Summative	II	
CO4	Explain the nature of climate in Shadrutu	Cognitive/Recall	Must know	Know how	Lecture Audio-Visual aids Group Discussion	Written or Viva	Formative and Summative	II	
CO4	Explain Sevaniya and Nishiddh Ahara Vihara in Shadrutu	Cognitive/Recall	Must know	Know how	Lecture Audio-Visual aids	Written or Viva	Formative and Summative	II	

					Group Discussion				
CO4	Define and explain the properties of Hamsodaka	Cognitive/ Recall	Must know	Knows	Lecture Audio-Visual aids Group Discussion	Written or Viva	Formative and Summative	II	
CO4	Justify the regimen mentioned as per seasons	Cognitive/ Application	Must know	Show how	Group Discussion	Group Discussion/ Project work/viva	Formative and Summative	II	
CO2	Describe Saatmya and its types	Cognitive/ Recall	Must know	Knows	Lecture Audio-Visual aids Group Discussion	Written or Viva	Formative and Summative	II	
CO2	Recite Shloka number 18, 21, 29, 35, 45, 49, 50	Cognitive/ Recall	Must know	Knows	Swadhyaya –Self learning	Written or Viva	Formative and Summative	II	
CO1	Identify Uddesh- Niradesh , swasadnya Tantrayukties in this chapter..	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	II	
CO4	Research Updates: What causes the season: Summer and winter solistice- Equinoxes- Rotation of earth around sun.	Cognitive/ Application	Nice to know	Knows	Lecture, Audio-vidual aids	Group discussion	-	II	
Topic-23. Charak Samhita Sutrasthan Chapter-7. Naveganadharaniya Adhyaya-Time (Lecture:- 04 ; Non lecture 04 hours)									
CO4	Enumerate Adharaniya and Dharaniya Vega	Cognitive/ Recall	Must to know	know	lecture/ Group discussion/	Written or Viva	F & S	II	
CO4 CO6	Describe symptoms and treatment pattern of	Cognitive	Must to know	Know how	lecture/ Group	Written or Viva	F & S	II	

	Adharaniya Vega				discussion /quiz				
CO4	Cite symptoms and treatment pattern of Dharaniya Vega	Cognitive	Must to know	Know how	lecture/ quiz/Group discussion	Written or Viva	F & S	II	
CO4	Quote the contraindicated actions of mind, speech and body.	Cognitive	Must to know	Know	lecture/ quiz/Group discussion	Written or Viva	F & S	II	
CO4	Describe concept, effects and benefits of exercise	Cognitive	Must to know	Know how	lecture/ recitation/ quiz/Audiovisual aids	Written or Viva	F & S	II	Swasthavritta
CO4	describe symptoms due to excessive exercise	Cognitive	Must to know	Know	lecture/ Group discussion/ quiz/Audiovisual aids	Written or Viva	F & S	II	Swasthavritta
CO4	Describe the action which should be avoided in excess	Cognitive	Must to know	Know how	lecture/ Group discussion /quiz	Written or Viva	F & S	II	
CO4	Describe pattern of Ahita Krama tyaga	Cognitive	Must to know	Know how	lecture/ Group discussion/ quiz	Written or Viva	F & S	II	
CO4	Classify deha prakruti	Cognitive	Must to know	Know	lecture/ Group discussion/ quiz	Written or Viva	F & S	II	
CO6	Describe Aagantuj vyadhis (exogenous diseases)	Cognitive	Must to know	Know	lecture/ Group discussion/ quiz	Written or Viva	F & S	II	Nidan
CO6	Describe Pradnyaparadhaj vyadhi	Cognitive	Must to know	Know	lecture/ Group	Written or Viva	F & S	II	Nidan

					discussion/ quiz				
CO4	State Vikar Anutpatti Vidhi (Preventive measures of diseases)	Cognitive	Must to know	Know how	lecture/ Group discussion/ quiz	Written or Viva	F & S	II	
CO6	describe treatment of Aagantuj (exogenous) and Manas (psychological)diseases	Cognitive	Must to know	Know how	lecture/ Group discussion/ quiz	Written or Viva	F & S	II	
CO4	Describe shodhan treatment as per season	Cognitive	Must to know	Know how	lecture/ Group discussion/ quiz	Written or Viva	F & S	II	Panchkar ma
CO4	Describe Aapta and anapta purush	Cognitive	Must to know	Know	lecture/ Group discussion/ quiz	Written or Viva	F & S	II	
CO4	Describe the rules of eating curd	Cognitive	Must to know	Know how	lecture/ Group discussion/ quiz	Written or Viva	F & S	II	
CO2	Recite shloka number 27, 28, 29, 30, 31, 39, 40, 55, 60.	Cognitive	Must to know	Know how	lecture/ Group discussion/ quiz	Written or Viva	F & S	II	
CO1	Identify Arthapatti , Nirvachan, Vyakhyan Tantrayukties in this chapter.	Cognitive/ Applicatio n	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	II	
CO4	Research Updates: Corelation of genomic variation with the classification of Prakriti	Cognitive/ Recall	Desire to know	Know	lecture/ Audio- vidual aids	Group discussion	-	II	

Topic-24. Charak Samhita Sutrasthan Chapter-8. Indriyopakramaniya Adhyaya- Time (Lecture:- 04 ; Non lecture 03 hours)									
CO2	Enumerate Indriya/ Dravya/Adhishthana/ Artha/ Buddhi	Cognitive/ Recall	Must know	Know	Lectures/ Audio- Visual Aids	Written or Viva	Formative & Summative	II	
CO4	Write the characteristics of Mana	Cognitive/ Recall	Must know	Know	Lectures/ Audio- Visual Aids	Written or Viva	Formative & Summative	II	
CO4	Justify the ektvam of Manas	Cognitive/ Comprehe nsion	Must know	Know	Lectures/ Audio- Visual Aids	Written or Viva	Formative & Summative	II	
CO4	State that Sattvikatva, Rajasatva and Tamasatva of Manas	Cognitive/ Recall	Must know	Know	Lectures/ Audio- Visual Aids	Written or Viva	Formative & Summative	II	
CO4	Tabulate Indriya PanchaPanchaka	Cognitive/ Recall	Must know	Know	Lectures/ Audio- Visual Aids	Written or Viva	Formative & Summative	II	
CO4	Quote Adhyatma Dravya Guna Sangraha	Cognitive/ Recall	Must know	Know	Lectures/ Audio- Visual Aids	Written or Viva	Formative &Summative	II	
CO4	State the predominant Mahabhuta in each Indriya	Cognitive/ Recall	Must know	Know	Lectures/ Audio- Visual Aids	Written or Viva	Formative & Summative	II	
CO4	Know the role of Indriya and Mana in Prakriti and Vikriti	Cognitive/ Recall	Must know	Know	Lectures/ Audio- Visual Aids	Written or Viva	Formative & Summative	II	
CO4	Discuss the Causes and Benefits of Sadvritta Anushthana	Cognitive/ Comprehe nsion	Must know	Know	Lectures/ Audio- Visual Aids	Written or Viva	Formative & Summative	II	
CO4	Elaborate the Do's and Don'ts in Sadvritta	Cognitive/ Recall	Must know	Know	Lectures/ Audio- Visual Aids/ Group Discussion	Written or Viva	Formative & Summative	II	
CO4	Explain Hetuchatushtaya	Cognitive/ Recall	Must	Know	Lectures/ Audio-	Written or Viva	Formative & Summative	II	

			know		Visual Aids				
CO4	State the guideline for Anukta Sadvritta	Cognitive/ Recall	Must know	Know	Lectures/ Audio- Visual Aids	Written or Viva	Formative & Summative	II	
CO2	Recite the shloka number 7-13, 34	Cognitive/ Recall	Must know	Shows	Lectures/ Audio- Visual Aids	Written or Viva	Formative & Summative	II	
CO1	Identify Upadesha, Samucchaya, Yog Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	Formative & Summative	II	
CO4	Research updates: Mental health and gut microbiota.	Cognitive/ Application	Nice to know	Know	Lectures/ Audio- Visual Aids	Group discussion	-	II	

Topic-2CO Charak Samhita Sutrasthan Chapter-9. Khuddakachatushpada Adhyaya- Time (Lecture:- 03 ; Non lecture 03 hours)

CO8	Cite Chikitsa Chatushpada (four components of healthcare)	Cognitive	Must know	Know	Lectures/ Audio- Visual Aids	Written or Viva	Formative & Summative	II	
CO8	Define Roga-Arogya (disease-health)	Cognitive/ Recall	Must know	Know	Lectures/ Audio- Visual Aids	Written or Viva	Formative & Summative	II	
CO8	Define Chikitsa (treatment)	Cognitive/ Recall	Must know	Know	Lectures/ Audio- Visual Aids	Written or Viva	Formative & Summative	II	
CO8	List the Qualities of Vaidya (physician)	Cognitive/ Recall	Must know	Know	Lectures/ Audio- Visual Aids	Written or Viva	Formative & Summative	II	
CO8	List the Qualities of Dravya (medicine)	Cognitive/ Recall	Must know	Know	Lectures/ Audio- Visual Aids	Written or Viva	Formative & Summative	II	
CO8	List the Qualities of Paricharaka (nursing staff)	Cognitive/ Recall	Must know	Know	Lectures/ Audio-	Written or Viva	Formative & Summative	II	

					Visual Aids				
CO8	List the Qualities of Aatura (patient)	Cognitive/ Recall	Must know	Know	Lectures/ Audio- Visual Aids	Written or Viva	Formative & Summative	II	
CO8	State the importance of Vaidya in the 4 components of healthcare	Cognitive/ Recall	Must know	Know	Lectures/ Audio- Visual Aids	Written or Viva	Formative & Summative	II	
CO8	Write the Complications due to ignorant physician	Cognitive/ Recall	Must know	Know	Lectures/ Audio- Visual Aids	Written or Viva	Formative & Summative	II	
CO8	Describe the Sadvaidya Qualities (good physician)	Cognitive/ Comprehension	Must know	Know	Lectures/ Audio- Visual Aids	Written or Viva	Formative & Summative	II	
CO8	Write the duties of the physician	Cognitive/ Comprehension	Must know	Know	Lectures/ Audio- Visual Aids	Written or Viva	Formative & Summative	II	
CO8	List Four types of Vaidya vritti (attitude of the physician)	Cognitive/ Recall	Must know	Know	Lectures/ Audio- Visual Aids	Written or Viva	Formative & Summative	II	
CO8	Recite the shloka number 3,4,5,18,20,21, 24,25,26	Cognitive/ Recall	Must know	Shows	Lectures/ Audio- Visual Aids	Written or Viva	Formative & Summative	II	
CO8	Discuss the qualities and duties of a good physician	Cognitive/ Application	Must know	Shows how		Written or Viva	Formative	II	
CO1	Identify Uddesh, Nirdesh, Nidarshan Tantrayuktis in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	II	
CO8	Research Updates: Medical ethics-principles Soft Skill development for medical students Emotional Intelligence as	Cognitive	Nice to know	Knows	Lecture / Audio- Visual aids	Group discussion	-	II	

	a crucial component in medical education								
Topic-26. Charak Samhita Sutrashtan Chapter-10. Mahachatushpada Adhyaya- Time (Lecture:- 03 ; Non lecture 03 hours)									
CO6	Substantiation of Chatushpada- bhashajam alam aarogyaayeti (aatreya-kṛta), Bhashajabhashajayo tulyatva pratipaadana – (maitreya-kṛta), Its conclusion by Atreya,	Cognitive/ Recall	Desirable to know	Knows	Lecture with substantiation of the point by mentioning contemporary examples	Written & Viva	F & S	II	
CO6	Explain the Cikitsa sootram- Cikitsaayaam yasolaabhe kaaranam,	Cognitive/ Recall	Desirable to know	Knows	Lecture with substantiation of the point by mentioning contemporary examples	Written or Viva	F & S	II	
CO6	Asaadhyaroga-cikitsaayaam haani,	Cognitive/ Recall	Desirable to know	Knows	Lecture with substantiation of the point by mentioning contemporary examples	Written or Viva	F & S	II	
CO6	Describe the upamaana pramaana	Cognitive/ Recall	Desirable to know	Knows	Lecture with substantiation of the point by mentioning contemporary	Written or Viva	F & S	II	

					y examples				
CO6	Enumerate and analyse the further classification of saadhya-asaadhyata	Cognitive/ Recall	Must know	Knows	Lecture with live demonstration in OP	Written or Viva	F & S	II	
CO6	Identify, judge and discuss Sukha-saadhya lakshanam, Krcchra-saadhya lakshanam, Yaapya lakshanam and Pratyakhyeya lakshanam	Cognitive/ Recall	Must know	Knows how	Lectures and clinical demonstration	Viva / written Problem based assessment	F & S	II	
CO6	Apply and interpret the benefit of knowledge of prognosis	Cognitive/ Recall	Must know	Knows	Lectures	Written or Viva	F & S	II	
CO6	Analyse the term mithyaa-buddhi and accept responsibility to not end up as a mithyaa-buddhi at any point of time of the profession	Cognitive/ Recall	Must know	Knows	Lectures	Written or Viva Discussions	F	II	
CO6	Recite Shloka number 14 to 20	Cognitive/ Recall	Must know	Knows	Lecture, swaadhyaya	Viva	F & S	II	
CO1	Identify Nirnaya, Swasdnaya, Sanshaya, Ekant Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	II	
Topic-27. Charak Samhita Sutrasthan Chapter-11. Tisraishaniya Adhyaya- <u>Time</u> (Lecture:- 06 ; Non lecture 05 hours)									
CO4	Explain the significance of the three desires for prana (life) and dhana(means of life).	Cognitive/ Recall	Must know	Know how	Lectures/ Audio-Visual Aids	Written & Viva	Formative & Summative	III	

CO4	Discuss the concept of paraloka	Cognitive/ Recall	Must know	Know how	Lectures/ Audio- Visual Aids	Written or Viva	Formative & Summative	III	
CO4	Discuss different opinions on the concept of punarjanma (re-birth)	Cognitive/ Recall	Must know	Know how	Lectures/ Audio- Visual Aids	Written or Viva	Formative & Summative	III	
CO2	Define characteristics of Aapta	Cognitive/ Recall	Must know	Know	Lectures/ Audio- Visual Aids	Written or Viva	Formative & Summative	III	
CO2	Define pratyaksha, anumana and yuktipramana with example	Cognitive/ Recall	Must know	Know how	Lectures/ Audio- Visual Aids	Lectures/ Audio- Visual Aids	Formative & Summative	III	
CO2	Justify punarjanma by using aaptopadesha, pratyaksha, Anumana and yuktipramana	Cognitive/ Application	Must know	Know how	Lectures/ Audio- Visual Aids	Written or Viva	Formative & Summative	III	
CO4	Explain the importance of thrayopasthamba (sub-pillars of life).	Cognitive/ Application	Must know	Know how	Lectures/ Audio- Visual Aids	Written-MCQ/ SAQ/ LAQ & Viva	Formative & Summative	III	
CO4	Discuss the three types of bala (strength) and its importance.	Cognitive/ Application	Must know	Know how	Lectures/ Audio- Visual Aids	Written & Viva	Formative & Summative	III	

CO6	Describe the three causes of disease.	Cognitive/ Application	Must know	Know	Lectures/ Audio-Visual Aids	Written & Viva	Formative & Summative	III	
CO6	Identify the symptoms due to excessive, less and improper use of sense organs	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO6	Identify the symptoms due to excessive, less and improper verbal, psychic and physical actions.	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO6	Define Prajnaparadha	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO6	Identify the signs of excess, less and improper kaala (season)	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO6	Define nija, agantu and manasa roga.	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO6	Discuss general treatment protocol for manasavyadhi (psychological disorders)	Cognitive/ Comprehension	Must know	Know how	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO6	Discuss the three disease pathways	Cognitive/ Comprehension	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	

CO8	Classify the three types of physicians	Cognitive/ Comprehe nsion	Must know	Know	Lectures/ Audio- Visual Aids	Written or Viva	Formative & Summative	III	
CO6	Describe daivavyapashraya, yuktivyapashraya and satvavajayachikitsa	Cognitive/ Comprehe nsion	Must know	Know how	Lectures/ Audio- Visual Aids	Written or Viva	Formative & Summative	III	
CO6	Describe antahaparimarjana, bahiparimarjana,shastrapr anidhanachikitsa.	Cognitive/ Comprehe nsion	Must know	Know how	Lectures/ Audio- Visual Aids	Written or Viva	Formative & Summative	III	
CO2	Discuss importance of ashta trika.	Cognitive/ Applicatio n	Must know	Know	Lectures/ Audio- Visual Aids	Written or Viva	Formative & Summative	III	
CO2	Recitation of Shloka number 18,19,20,21,22,23,24, 25, 47.	Skill	Must know	Know	Lectures/ Audio- Visual Aids	Written or Viva	Formative & Summative	III	
CO1	Identify Swasadnyaa, samucchaya , Samshaya, Nirvachan Tantrayukties in this chapter.	Cognitive/ Applicatio n	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	III	
Topic-28. Charak Samhita Sutrasthan Chapter-12. Vatakalakaliya Adhyaya-<u>Time</u> (Lecture:- 04; Non lecture 05 hours)									
CO4	explore the various properties of vata	Cognitive/ Recall	Must know	Knows how	Lectures/ Audio- Visual Aids	Written or Viva	Formative & Summative	III	
CO4	Discuss the opinions of	Cognitive/	Must	Knows	Lectures/	Written or Viva	Formative &	III	

	various aacharyas on different aspects of Vata dosha	Recall	Know		Audio-Visual Aids		Summative		
CO4	Explore various factors responsible for aggravation and and pacification of vata dosha	Cognitive/ Recall	Must know	Knows how	Lectures/ Audio-Visual Aids/Group Discussion	Written or Viva	Formative & Summative	III	
CO4	enumerate prakrita and vikrita karma of vata	Cognitive/ Recall	Must know	Knows how	Lectures/ Audio-Visual Aids/ Group Discussion	Written or Viva	Formative & Summative	III	
CO4	Explain the clinical application of Vata Guna	Cognitive/ Recall	Desirable to know	Knows how	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO4	Describe the action of normal and aggravated Pitta	Cognitive/ Comprehe nsion	Must know	Knows how	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO4	Describe the action of normal and aggravated Kapha	Cognitive/ Comprehe nsion	Must know	Knows how	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO4	Describe atreya's exploration on Tridosha and its importance	Cognitive/ Comprehe nsion	Must know	Knows how	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO4	Recite the shlokas- 8,11,12	Cognitive/ Recall	Must know	Shows	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO1	Identify Padartha, Vyakhyan , Anumat Tantrayukties in this chapter	Cognitive/ Applicatio n	Must know	Knows how	Lecturer/ Group discussion	Viva	Formative & Summative	III	

Table No 4 : Practical/ Activities for AyUG - SA 1

Term wise distribution of allotted time				
Term	Total teaching (400 hrs)	Lecture (140 hrs)	Non Lecture (260hrs)	
			Samhita Pathan (130 hrs)	Activities- In class/ Hospital (130 hrs)
I	130 hrs.	50 hrs.	50	30
II	140 hrs.	50 hrs.	40	50
III	130 hrs.	40 hrs.	40	50

Table 5: Non Lecture Activities Course AyUG-SA1

Non Lecture activities- (Samhita Pathan / In Class Activities & Hospital Based activities)
: 260 hrs

SN	Name of Practical	Term	
1.	Samhita Pathan	I, II, III	Total 130 in all three terms. (Term I-50 hrs; Term II - 40hrs; Term III - 40hrs)
	In Class Activities/ Case Based Activities/ Field Activities		
2.	1. Introduction to Samhita Problem based learning : Application of Tantrayukti for chapter number 1, 2 of Ashtang Hridaya and chapter 1 st of charak Samhita.	I	5 hrs.
	Group Activity Interpret Anubandha Chatushtya with examples Interpret Ashta Prashna with example	I	4 hrs
	Ashtang Hriday Samhita - Sutrasthan (1-5Adhyaya)		
3.	AH Su 1. Ayushkamiya Adhyaya Commentary Based activity- Fetch the meaning of important terms on the basis of commentary. (Any 30 important words). Make your own dictionary.	I	3 hrs
4.	AH Su 2. Dinacharya Adhyaya- Survey Activity: Application of concepts- Dinacharya and its application: Proforma based assessment in healthy volunteers/ patients. Daily routine shall be recorded on the basis of predesigned proforma and then shall discuss. Communication Skill introduction. Survey Role play.	I	4 hrs
5.	AH Su 3. Rutucarya Adhyaya- Application of concepts- Ritucharya and application - Proforma based assessment in healthy individuals or patients.	I	4 hrs
6.	AH Su 4. Roganutpadaniya Adhyaya- Case Based Activity/Learning- Assess the sign and symptoms of given case on the basis of learning of Adharaneeya Vegas and find out the probable causative	I	4 hrs

	factors on the basis of principles taught.		
7.	AH Su 5. Dravadravya Vijnaniya Adhyaya Group Activity-(Group presentation)- Utility of Dravyas:- Allocate the Dravadravya Vargas among student groups. Every group will Justify (represent) the practical utility of dravyas allotted to them.	I	4 hrs
8.	6. Annaswaroopo Vijnaneeya Adhyaya- Group presentation- Justify the utility of this chapter in present era- Every group will illustrate the utility of their assigned Aahara Dravya Varga (Discuss practically available dravyas)	II	3 hrs
9.	7. Annaraksha Adhyaya- Discussion- Explore the present dietary habits- Explore the Various diet combinations used in present society (by four family/ Relatives/ neighborhood) on the basis of principles learned for viruddhahar. Discuss them in class. Trayopastambha -Importance of Nidra- Flipped classroom- Share the prerecorded videos/ other material with students before class. On the basis of these have discussion.	II	4 hrs
10.	8. Matrashitiya Adhyaya- Case Based learning- Determine adverse effects of heena matra (inadequate quantity of food) and atimatra (excess quantity of food) ahara:- (Video clip of patient suffering from a type of Ajeerna can be shared in class and then group wise discussion on the concept.) Group Activity- Differentiate between the food items recommended and non-recommended for daily use:- Cross refer the previous chapters and demonstrate the rationale behind the wholesome or unwholesome nature of these enlisted Dravyas referring their qualities.	II	4 hrs
11.	9. Dravyaadi Vijnaniya Adhyaya- Application of concepts- Enlist the dravyas according to Rasa, Veerya, Vipaka, Prabhav. (Can refer chapter 5,6,10 of Ashtang Hriday and Chapter 2, 3, 4 of Charak Samhita). Apply the concepts learned in present chapter to understand the action of Dravyas.	II	4 hrs

12.	10. Rasabhedhiya Adhyaya- Case based learning- Prepare proforma enlisting the sign and symptoms of excess consumption of six Rasas and regular diet pattern. Assess the predominance of Rasa consumption in patients or healthy volunteers. Then Correlate with the case findings.	II	4 hrs
13.	11. Doshadi Vijnaniya Adhyaya- Case Based learning-(CBL)- Assess the patient for Vriddhi and Kshaya Lakshanas of Dosha-Dhatu-Mala, based on predesigned proforma. Discuss these case findings later in class.	III	5 hrs
14.	12. Doshabhedhiya Adhyaya- Model making Activity- Working models on Dosha Sthanas or Subtypes of Doshas, Chaya, Prakop and Prashama of Doshas: PBL/CBL Give one problem/case based on Samanya Dosha Nidan. Student will identify possible causative factors responsible for vitiation of Doshas in given problem.	III	5 hrs
15.	13. Doshopakramaniya Adhyaya- Case Based learning-(CBL)- Group activity- Observe the signs and symptoms of Ama in any five patients (Group wise) and present and discuss it in class. Seminar Presentation- a. Understand Aushadha Kaal in relation with suntypes of Vata Dosha. b. Recognize the principles applicable during treatment of Saam Dosha and Dushyas.	III	6 hrs
16.	14. Dvividhopakramaniya Adhyaya- Case based learning- Find out the causative factors of Atishulya in present era (On the basis of predesigned proforma) CBL Share video clip of any patient suffering from Atikarshya- On the basis of previous learning discuss the contributing factors responsible for malnourishment. (Explore Dhatu Sneha Parampara in present context).	III	5 hrs
17.	15. Shodhanadigana Sangraha Adhyaya-	III	4 hrs

	Group Presentation- Divide the various Aushadha Vargas among students and a group will represent each varga and related practical information.		
	Charak Samhita – Sutrasthan (1-12 Adhyaya)		
18.	CS Su 1. Deerghanjiviteeya Adhyaya- Compilation work: (based on commentry) ● Student has to write 20 terminologies with meanings referring Chakrapani commentary. Then after these terms shall be discussed in class.	I	2
19.	CS Su 2. Apamarga Tanduliya Adhyaya- Visit to Dravyaguna Department- Identify the dravyas on the basis of different karmas	II	3 hrs
20.	CS Su 3. Aragvadhiya Adhyaya- Group Discussion- Probable mode of action of drugs applied externally? In which form they will more absorbable? (May take help of published literature; discuss linking with Ayurveda fundamentals.) Practical demonstrations in Panchakarma unit on patients. Workshop/ demonstration of preparation of different lepas useful in different conditions.	II	3 hrs
21.	CS Su 4. Shadvirechana-shatashritiya Adhyaya- Practical Demonstration: Visit to Dravyaguna Department and demonstration of various Mahakashay and its uses (Integration with Dravyaguna department)	II	4 hrs
22.	CS Su 5. Matrashiteeya Adhyaya- Visit to Panchakarma Unit of Hospital – Demonstration of abhyanga, mardana, udvartana and other procedures to be followed in daily routine (Integration with Panchakarma Department) Group Project : Gather information about nutritive values of Nitya Sevaniya Dravyas. Assess their classical properties. Discuss why these dravyas are specially advised for regular consumption.	II	5 hrs
23.	CS Su 6. Tasyashiteeya Adhyaya-	II	4 hrs

	Documentation- Festival and rutu- Documenting the changes in the food habits and lifestyle as per the rutu with the parents and elders and also discussing on relevance of rutucharya concept with Indian festivals. Short Essay writing /Poster making- Does and don'ts to be followed according to various seasons (Refer both the Samhitas for this activity)		
24.	CS Su 7. Naveganadharaniya Adhyaya:- Vedio clip making Activity- Educating people about harms of vega dharana by social media campaigns Group Discussion- Finding reasons for vega dharana in present day lifestyle.	II	4 hrs
25.	CS Su 8. Indriyopakramaniya Adhyaya- Group Presentation- Sadvrutta – Interpreting relevance of different sadvrutta in present scenario. Developing new sadvruttas as per todays' lifestyle referring classics.	II	3 hrs
26.	CS Su 9. Khuddakachatuspada Adhyaya- Doctor Patient communication introduction, Role play. Feedback collection of chikitsa chatushpada Group activity- Collect Feedback on qualities of Vaidya from rogi and upasthata. Collect Feedback on qualities of rogi from vaidya and upasthatha Collect Feedback on qualities of upasthatha from rogi and Vaidya Collect feedback on qualities of dravya from the experts of dravyaguna and rasa shastra	II	3 hrs
27.	CS Su 10. Mahachatuspada Adhyaya- Developing proforma for sadhya asadhya vyadhi lakshanas- Guide students on how to prepare a proforma to assess any available parameters.	II	3 hrs
28.	CS Su 11. Tisraishaniya Adhyaya- Debate :- Punarjanma siddhant as per different thoughts. Debate on punarjanma with different references as per classics and contemporary understanding.	III	5 hrs
29.	CS Su 12. Vatakalakaliya Adhyaya-	III	5 hrs

	Role Play (Enact sambhasha parishad) – Distribute the characters of the rishis given in chapter. And guide them with the script. Arrange a forum where these students will be doing sambhasha parishad on vata kala-akala. Decode the sutras- Students in groups will use different tools like infographics/ animation/ ppts to illustrate the normal functions of Vata Dosha explained in present chapter. (Refer Chakrapani commentary thoroughly to understand the meaning of Sanskrit shlokas). Introduction to Group Dynamics. Communication skills for Group Discussions.		
30.	Shloka Recitation Competition- At the end of the year/ every term such competition shall organized by department.	III	5 hrs
31.	Ayurveda Quiz- On the basis of assigned syllabus.	III	5 hrs
32.	Poster making Competition / SA writing completion / Making video clips for general people to make awareness about Ayurved living.	III	5 hrs

Table 6: Assessment Summary**6 A- Number of Papers and Marks Distribution**

S.No.	Subject Code	Papers	Theory	Practical/Clinical Assessment					Grand Total
				Practical /Clinical	Viva	Electives	IA	Sub Total	
5.	AyUG-SA1	1	100	-	75	10 (Set-FC)	15	100	200

6 B - Scheme of Assessment (formative and Summative)

SR.NO.		PROFESSIONAL COURSE	DURATION OF PROFESSIONAL COURSE		
			First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)
1	AyUG-SA1	First	3 PA & First TT	3 PA & Second TT	3 PA & UE
PA: Periodical Assessment; TT: Term Test; UE: University Examinations					

6 C - Calculation Method for Internal assessment Marks (15 Marks)

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/3)	Converted to 15 Marks (D/15*15)	Term Test (Marks converted to 15) (15 Marks)	Sub Total _/30 Marks	Term Assessment (..../15)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Methods which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks)(MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert to 15 marks.							

6 D - Evaluation Methods for Periodical Assessment

S. No.	Evaluation Methods
23.	Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3.
24.	Practical / Clinical Performance

25.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
26.	Open Book Test (Problem Based)
27.	Summary Writing (Research Papers/ Samhitas)
28.	Class Presentations; Work Book Maintenance
29.	Problem Based Assignment
30.	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
31.	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
32.	Small Project

6 E - Paper Layout

I PROFESSIONAL BAMS EXAMINATIONS

AyUG-SA1

Time: 3 Maximum Marks: 100

INSTRUCTIONS: All questions compulsory

TOTAL MARKS 100

		Number of Questions	Marks per question	Total Marks
Q 1	Multiple Choice Questions (MCQ)	20	1	20
Q 2	Short answer questions (SAQ)	8	5	40
Q 3	Long answer questions (LAQ)	4	10	40
				100

6 F - Distribution of Theory Exam

	AyUG-SA1			D Type of Questions “Yes” can be asked. “No” should not be asked.		
	A List of Topics	B Term	C Mark s	MCQ (1 Mark)	SAQ (5 Marks)	LAQ (10 Marks)
1.	Introduction to Samhita-	1		No	/NO	NO
Ashtang Hriday Samhita - Sutrasthan (1-15 Adhyaya) 50 marks						
2.	AH Su.1. Ayushkamiya Adhyaya	1	50	YES	YES	YES
3.	AH Su.2. Dinacharya Adhyaya	1		YES	YES	YES

4.	AH Su.3. Rutucarya Adhyaya	I	50	YES	YES	YES
5.	AH Su.4. Roganutpadaniya Adhyaya	I		YES	YES	YES
6.	AH Su.5. Dravadravya Vijnaniya Adhyaya	I		NO	YES	NO
7.	AH Su.6. Annaswaroopo Vijnaneeya Adhyaya	II		NO	YES	NO
8.	AH Su.7. Annaraksha Adhyaya	II		NO	YES	NO
9.	AH Su.8. Matrashitiya Adhyaya	II		YES	YES	YES
10.	AH Su.9. Dravyaadi Vijnaniya Adhyaya	II		YES	YES	YES
11.	AH Su.10.Rasabhediya Adhyaya	II		YES	YES	YES
12.	AH Su.11.Doshadi Vijnaniya Adhyaya	III		YES	YES	YES
13.	AH Su.12.Doshabhediya Adhyaya	III		YES	YES	YES
14.	AH Su.13.Doshopakramaniya Adhyaya	III		YES	YES	YES
15.	AH Su.14.Dvididhopakramaniya Adhyaya	III		YES	YES	YES
16.	AH Su.15.Shodhanadigana Sangraha Adhyaya	III		NO	NO	NO
Charak Samhita – Sutrasthan (1-12 Adhyaya):						
17.	CS S 1. Deerghanjiviteeya Adhyaya-	1	50	YES	YES	YES
18.	CS S 2. Apamarga Tanduliya Adhyaya-	II		NO	YES	NO
19.	CS S 3. Aragvadiya Adhyaya-	II		NO	YES	NO
20.	CS S 4. Shadvirechana-shatashrutiya Adhyaya-	II		NO	YES	NO
21.	CS S 5. Matrashiteeya Adhyaya-	II		YES	YES	YES
22.	CS S 6. Tasyashiteeya Adhyaya-	II		YES	YES	YES
23.	CS S 7. Naveganadharaniya Adhyaya-	II		YES	YES	YES
24.	CS S 8. Indriyopakramaniya Adhyaya-	II		YES	YES	YES
25.	CS S 9. Khuddakachatushpada Adhyaya-	II		YES	YES	YES
26.	S 10. Mahachatushpada Adhyaya-	II		YES	YES	YES
27.	S 11. Tisraishaniya Adhyaya-	III		YES	YES	YES
28.	S 12. Vatakalakaliya Adhyaya-	III		YES	YES	YES

6 G - Question paper blue print

A Question Sr. No	B Type of Question	C Question Paper Format 50 marks AH/S 50 Marks CS/S
.Q1	Multiple choice Questions (MCQ) 20 Questions 1 mark each All compulsory	41. Topic number 2 (A.H.Su.Ch.1) 42. Topic number 3 (A.H.Su.Ch.2) 43. Topic number 4 (A.H.Su.Ch.3) 44. Topic number 5 (A.H.Su.Ch.4) 45. Topic number 9 (A.H.Su.Ch.8) 46. Topic number 10 (A.H.Su.Ch.9) 47. Topic number 11 (A.H.Su.Ch.10)

	From Must know part 15 MCQ From Desirable to know 3 MCQ From Nice to know 2 MCQ	48. Topic number 12 (A.H.Su.Ch.11) 49. Topic number 13 (A.H.Su.Ch.12) 50. Topic number 14 (A.H.Su.Ch.13) 51. Topic number 15 (A.H.Su.Ch.14) 52. Topic number 17 (C.S.Su.Ch.1) 53. Topic number 21 (C.S.Su.Ch.5) 54. Topic number 22 (C.S.Su.Ch.6) 55. Topic number 23 (C.S.Su.Ch.7) 56. Topic number 24 (C.S.Su.Ch.8) 57. Topic number 25 (C.S.Su.Ch.9) 58. Topic number 26 (C.S.Su.Ch.10) 59. Topic number 27 (C.S.Su.Ch.11) 60. Topic number 28 (C.S.Su.Ch.12)
Q2	Short answer Questions (SAQ) Eight Questions 5 Marks Each All compulsory Must know 7, Desirable to know 1 No Questions on Nice to know	1. Topic no. 2 (A.H.Su.Ch.1) / Topic no. 25 (C.S.Su.Ch.9)/ Topic number 26 (C.S.Su.Ch.10) 2. Topic no. 3(A.H.Su.Ch.2) / Topic no. 9(A.H.Su.Ch.8) / Topic no. 21(C.S.Su.Ch.5) / Topic no. 24 (C.S.Su.Ch.8) 3. Topic no. 4 (A.H.Su.Ch.3) / Topic no. 22 (C.S.Su.Ch.6) / Topic no. 5 (A.H.Su.Ch.4) / Topic no. 23 (C.S.Su.Ch.7)/ 4. Topic no. 12 (A.H.Su.Ch.11) / Topic no. 13 (A.H.Su.Ch.12)/ Topic no.28 (C.S.Su.Ch.12) 5. Topic no. 17 (C.S.Su.Ch.1) 6. Topic no. 6 (A.H.Su.Ch.5)/ Topic no.7 (A.H.Su.Ch.6)/ Topic no.18 (C.S.Su.Ch.2)/ Topic no.19 (C.S.Su.Ch.3) / Topic no.20 (C.S.Su.Ch.04) / Topic no.16 (A.H.Su.Ch.15) 7. Topic no.8 (A.H.Su.Ch.7) /Topic no. 10 (A.H.Su.Ch.9) / Topic no.11 (A.H.Su.Ch.10)/ 8. Topic no. 14 (A.H.Su.Ch.13) Topic no.15 (A.H.Su.Ch.14)/ Topic no. 27 (C.S.Su.Ch.11)
Q3	Long answer Questions (LAQ) Four Questions 10 marks each All compulsory All questions on Must to know. No Questions on Nice to know and Desirable to know	9. Topic no. 2 (A.H.Su.Ch.1) / Topic no. 17 (C.S.Su.Ch.1)/ Topic no. 25 (C.S.Su.Ch.9)/ Topic number 26 (C.S.Su.Ch.10) 10. Topic no.3(A.H.Su.Ch.2) / Topic no. 4 (A.H.Su.Ch.3)/ Topic no. 21(C.S.Su.Ch.5) / Topic no. 22 (C.S.Su.Ch.6) 11. Topic no. 12 (A.H.Su.Ch.11) / Topic no. 13 (A.H.Su.Ch.12)/ Topic no. 14 (A.H.Su.Ch.13)/ Topic no.15 (A.H.Su.Ch.14) / Topic no.28 (C.S.Su.Ch.12) 12. Topic no. 9(A.H.Su.Ch.8)/ Topic no. 10 (A.H.Su.Ch.9) / Topic no.11 (A.H.Su.Ch.10)/ Topic no. 27 (C.S.Su.Ch.11)/ Topic no.5 (A.H.Su.Ch.4)/ Topic no. 23 (C.S.Su.Ch.7)

6 H - Distribution of Practical Exam

Practical 100 Marks – (Viva 75 + Elective 10(Set-FC) + IA 15) Marks

SN		Heads	Marks
A		Viva (75 Marks)	
	1	Viva on Record Book (of yearly conducted non lecture activities) (Refer Table 5)	15
	2	Viva on Shloka Book and Shloka Recitation (Ref table 3. Recitation)	10
	3	Identification of Tantrayukti Viva on .Introduction to Samhita (ref Table 2: 1)	15
	4	Viva Voce on AH	15
	5	Viva Voce on Ch Su	15
	6	Communication Skill	05
B		Internal Assessment	15
C		Electives	10
		Total Marks	100

7. Reference books/Resources

• Introduction to Samhita

1. Ashtanghridayam with the commentaries ‘Sarvangasundara’ of Arundatta and ‘Ayurvedarasayana’ of Hemadri, Collated by Dr. Anna Moreshwar Kunte and Krishna Ramchandra Shastri Navre
2. Sushruta Samhita by Dr. Ambikadutta Shastri
3. Ayurvedeeya Padartha Vijnana by Prof. C. R. Agnivesh
4. Ayurvedeeya Padartha Vijnana and Ayurvedeeya itihaasam by Prof. C. R. Agnivesh
5. Ayurvediya Padarth Vidnyan by Vd. Ranjit Rai Desai
6. History of Medicine in India by Aacharya Priyavrat Sharma
7. History of Indian Medicine by J. Jolly

• Ashtang Hridaya

1. Ashtanghridayam with the commentaries ‘Sarvangasundara’ of Arundatta and ‘Ayurvedarasayana’ of Hemadri, Collated by Dr. Anna Moreshwar Kunte and Krishna Ramchandra Shastri Navre
2. Ashtanga Hridaya : English commentary by Dr. T. Shreekumar
3. Ashtanga Hridaya : English commentary by Dr. Vishwavasud Gaur
4. Ashtang Hridayam : English translation by Prof. K.R. Srikantha Murthy
5. Ashtanga Hridaya –English translation by Vd. Anantram Shastri
6. Ashtanga Hridayam by Dr. B. Ramarao
7. Illustrated Ashtanga Hridaya text with English Translation by Dr. R. Vidyanath
8. Ashtanga Hridaya: Hindi commentary by Lalchanda Vaidya
9. Ashtanga Hridaya: Hindi commentary by Vd. B.L.Gaur

• Charak Samhita

1. Charakasamhita by Agnivesha Revised by Charaka and Dridhbala with the Ayurveda Dipika commentary of Chakrapanidatta Edited by Vaidya Yadavji Trikamji Acharya

2. Charak Samhita (English Commentary): Dr. Ram Karan Sharma and Vd. Bhagwan Dash or Acharya Priyavrata Sharma
3. Charak Samhita with translation of Chakrapani commentary by Harishchandra Kushvaha
4. Charak Samhita by Acharya P.V.Sharma
5. Charak Samhita (Hindi commentary): Vaidya Jayadev Vidyalankar
6. Charak Samhita (Hindi commentary): Vaidya Atridev Vidyalankar
7. Charak Samhita (Hindi commentary): Prof. Gorakhanath Chaturvedi and Kashinath Shastri
8. Charak Samhita (Hindi commentary): Dr. Brahmanand Tripathi
9. Charak Samhita (Hindi commentary): Dr. Ravidatta Tripathi
10. Charaka Samhita –Ayurveda Dipika Commentary- Hindi translation by Dr. B.L.Gaur
11. Legacy of Charak – M S Valiathan
12. Charak e-Samhita –National Institute of Indian Medical Heritage –
<http://niimh.nic.in/ebooks/ecaraka>
13. Charakasamhitaonline.com- [Charak Samhita New Edition \(carakasamhitaonline.com\)](http://Charak Samhita New Edition (carakasamhitaonline.com))

2nd Professional B.A.M.S.

Dravyaguna vigyan

Table 2 : Contents of Course

Paper1FundamentalDravyaguna					
Sr. No	A2 List of Topics	B2 Term	C2 Marks	D2 Lecture hours	E2 Non- Lecture hours
1	1.DravyagunaVigyana	1	1	1	1
2	2.Dravya 2.1 PanchabhoutikatwaofDravya 2.2 ClassificationofDravyabasedonUtpattibhe da, Yonibheda, Prayogabheda, Prabhavbheda, Doshaghnabheda, RasabhedaandKarmbheda	1	6	5	4

3	3. Guna 3.1 Panchabhoutikatva, characteristics and classification 3.2 Guna and its karman Dosha, Dhatu and Mala, clinical application and research updates 3.3 Paradi Guna with examples, clinical application and research updates	1	11	4	2
4	4. Rasa 4.1 Meaning of "Rasa" in various contexts 4.2 Shadrasa in relative correlation with taste of chemical constituents 4.3 Rasotpatti and Panchabhoutika constitution of Shadrasa 4.4 Rasopalabdhi and pathway of taste perception & sites of taste receptors in the body 4.5 Rasa- Lakshana, Guna & Karma of each Rasa on Dosha, Dhatu and Mala 4.6 Atiyoga Lakshana, 4.7 Clinical application and Research updates of Shadrasa 4.8 Anurasa 4.9 Rasa Sevanakrama of Aushadha	1	11	7	4

5	5. Vipaka ♦ 5.1 TrividhaVipaka ♦ 5.2 VipakkarmaonDosha,DhatuandMala ♦ 5.3 ClinicalapplicationandResearchupdates ♦ 5.4 Vipakopalabdhi(DeterminationofVipaka)&Taratamya(Degreeofvariation)	1	6	3	1
6	6. Virya ♦ 6.1 DifferencebetweenGunaandVirya ♦ 6.2 KarmasofViryaonDosha,DhatuandMala ♦ 6.3 ClinicalapplicationandResearchupdates ♦ 6.4 Viryaopalabdhi(DeterminationofVirya)andunderstandingofViryawithrespecttoactionsofactiveconstituents	1	6	2	2
7	7. Prabhava ♦ 7.1 SamanapratyayarabdhaandVichitrapratyayarabdha ♦ 7.2 ClinicalapplicationofPrabhavaandResearchupdates	1	5	2	1
8	8. Interrelation of Rasa-Guna-Virya-Vipaka-Prabhava ♦ Interrelation of Rasa-Guna-Virya-Vipaka-Prabhava with respect to their strength- Pharmacodynamics	1	1	1	2
9	9. Karma ♦ 9. Individual Karma, correlation with contemporary pharmacological action, examples, clinical application and research updates ♦ 9.1 Deepana ♦ 9.2 Pachana	1	11	9	5

	9.3 Samshodhana 9.4 Samshamana 9.5 Anulomana 9.6 Sransana 9.7 Bhedana 9.8 Rechana 9.9 Chhedana 9.10 Lekhana 9.11 Grahi 9.12 Sthambhana 9.13 Madakari 9.14 Pramathi 9.15 Abhishyandi 9.16 Vyavayi 9.17 Vikashi 9.18 Rasayana 9.19 Vajeekarana 9.20 Medhya				
10	10.KarmasofDashemaniGana	1	5	12	3
11	11. PrinciplesofGeneralPharmacology 11 Drugdefinition,drugdosageforms,routeofdr ugadministration,pharmacokinetics(ADME), pharmacodynamics,Drugdose,principlesofdr ugaction,mechanismofdrugaction&bio- availability 11.1 DrugsActingonCentralNervousS ystem: Anaesthetics,SedativeHypnotics, Antiepileptics,Antiparkinsonian,Antidepressants, AntianxietyDrugs,Opioid-AnalgesicsDrugs 11.2 DrugsActingonPeripheral(somatic)Ner vous System: SkeletalMuscleRelaxants,Local Anaesthetics 11.3 AutacoidsandRelatedDrugs: Nonsteroidal ,Anti- inflammatory(NSAIDs)/AntipyreticandAnalges icsDrugs 11.4 DrugsforRespiratoryDisorders: Bron chodilators,Aerosols/InhalantsExpectorants, AntitussiveDrugs 11.5 CardiovascularDrugs: Antihypertensiv e,AntianginalDrugs 11.6 DrugsActingonKidney: Diuretics 11.7 DrugsAffectingBlood: Haematinics,Coagu	3	20	15	1

	♦ 11.8 Gastrointestinal Drugs: Antacid, Carminatives, Digestants, Antiemetics, Laxatives, Antidiarrhoeal, Hepatoprotective Drugs ♦ 11.9 Antibacterial Drugs: Antibiotics, Antitubercular Drugs ♦ 11.10 Antifungal, Antiviral, Antimalarial and Antihelmintic Drugs ♦ 11.11 Hormones and Related Drugs: Thyroid Hormone, Thyroid Inhibitors, Insulin, Oral Antidiabetic, Hormonal Contraceptives, Uterine Stimulants, Uterine Relaxants Drugs ♦ 11.12 Miscellaneous Drugs: Antiseptics and Disinfectants, Vaccines, Vitamins, Water imbalance and IV fluids				
12	12. Mishraka Gana ♦ 12. Mishrakagana: its composition, gunakarma and therapeutic uses. ♦ 12.1 Brihatpanchamoola. ♦ 12.2 Laghupanchamoola. ♦ 12.3 Vallipanchamoola. ♦ 12.4 Kantakapanchamoola. ♦ 12.5 Trinapanchamoola. ♦ 12.6 Panchavalkala. ♦ 12.7 Triphala. ♦ 12.8 Trikatu. ♦ 12.9 Trimada. ♦ 12.10 Chaturusana. ♦ 12.11 Panchakola. ♦ 12.12 Shadusana ♦ 12.13 Chaturbeeja. ♦ 12.14 Trijataka. ♦ 12.15 Chaturajataka. ♦ 12.16 Panchatikta. ♦ 12.17 Chaturbhadra. 12.18 Trikarshika.	3	6	6	2
13	13. Nomenclature of dravya as per Nighantu, Vedic taxonomy and Botany	3	1	0	2
14	14. Prashasta Bhesaja, Bhesaja Pariksha and drug evaluation method with correlation as per Pharmacognosy	3	1	1	2

15	15.DravyasangrahanaandDrugcollectionmethodsas perGFCP(GoodFieldcollectionpractices)	3	1	1	0
16	16.GCP(Goodcultivationpractices),seedbank,conservationofmedicinalplants,knowledgeaboutRET(Rear,E ndangered&Threatened)medicinalplants.	3	1	1	0
17	17.AbhavaPratinidhiDravya(substitutes)	3	1	1	1
18	18.Classificationsandtechniquesofaqueousandalcoholiceextracts	3	1	0	2
19	19.AdversedrugreactionandPharmacovigilancewithrecentupdates	3	1	1	2
20	20.NMPB(NationalMedicinalPlantBoard),CCRAS(CentralCouncilofResearchinAyurvedaSciences),API(AyurvedicPharmacopeiaofIndia),GCTM(GlobalCentreforTraditionalMedicine),PCIMH(PharmacopeiaCommissionofIndianMedicineandHomeopathy)	3	1	1	0
21	21.VrikshayurvedaandEthno-medicine	3	1	1	1
22	22.NetworkpharmacologyandBioinformatics	3	2	1	1
Total Marks			100	75 hr	39 hr

Paper2AppliedDravyaguna					
Sr. No	A2 List of Topics	B2 Term	C2 Marks	D2 Lecture hours	E2 Non- Lecture hours
23	1.Bheshajavacharaniya(Criteria'stobeconsideredforelectionofdrugsinyadhis)	2	5	1	6
24	2.1Dravya(Drug)Nama-Guna-KarmaJnana	2	55	45	10

- ♦ AmalakiAra
- ♦ gwadhaArju
- ♦ naAshokaAs
- ♦ hwagandhaA
- ♦ tivisha
- ♦ BalaBeejak
- ♦ aBhallatak
- ♦ aBharangi
- ♦ Bhrungaraj
- ♦ a
- ♦ BhumyamalakiBil
- ♦ va
- ♦ BrahmiCh
- ♦ andanaChit
- ♦ rakaDadim
- ♦ aDhatakiD
- ♦ hamasaEra
- ♦ ndaGokshu
- ♦ raGuduchi
- ♦ GugguluH
- ♦ aridraHarit
- ♦ akiHinguJa
- ♦ mbuJatama
- ♦ nsiJyotish
- ♦ matiKanch
- ♦ anaraKanta
- ♦ kariKapika
- ♦ chhu
- ♦ Karkatshrungi
- ♦ KatukiKha
- ♦ diraKumari
- ♦ KutajaLata
- ♦ karanjaLod
- ♦ hraAgnima
- ♦ nth
- ♦ Ahiphena(NK)
- ♦ Ajamoda(DK)
- ♦ Apamarga(DK
- ♦)Asthishrunkh
- ♦ alaBakuchiBru
- ♦ hatiChakramar
- ♦ daDhanyaka
- ♦ Ela
- ♦ Gambhari
- ♦
- ♦

	♦ JapaJatiphal ♦ aJeeraka(D ♦ K)Kalameg ♦ haKampilla ♦ kaKulatha(♦ NK)Kumku ♦ mLajjalula ♦ vanga				
25	2.2Dravya(Drugs)Nama-Guna-Karma-Jnana ♦ Madanphala ♦ Mandukapar ♦ niManjishta ♦ MarichaMes ♦ hashrungeMe ♦ thikaMusta ♦ agkesharNim ♦ baNirgundiP ♦ alashaPashan ♦ abhedaPatha ♦ PippaliPunar ♦ navaRasnaR ♦ asonaSarapa ♦ gandhaSaira ♦ yakSarivaSh ♦ allaki ♦ Shalmali(Mocharasa) ♦ ShankhapushpiShatav ♦ ari ♦ Shigru ♦ Shunth ♦ i ♦ Talisapatra(NK) ♦ TrivrutTul ♦ asiTwakU ♦ sheeraVac ♦ haVaruna ♦ VasaVatsa ♦ nabha ♦ ♦ ♦	3	40	29	20

	♦ VibhitakiVid ♦ angaYashtim ♦ adhu				
Total Marks			100	75 hr	36 hr

Table 3: Learning objectives (Theory) of Course

Paper1 Fundamental Dravyaguna									
A3 Course outcome	B3 Learning Objective (At the end of the session, the student should be able to)	C3 Domain/sub	D3 Must to know / desirable to know / Niceto know	E3 Level Does/ Show show/ Know show/ Know	F3 T-L method	G3 Assessment (Refer abbreviations)	H3 Formative/summative	I3 Term	J3 Integration
Topic 11. Dravyaguna Vigyana (Lecture :1 hours, Non lecture: 1 hours)									
CO1,CO3	Define Dravyaguna Vigyana.	CK	MK	K	L&P PT	P-VIVA	F&S	I	
CO1,CO3	Explain the role of Dravyaguna Vigyana in clinical practice.	CC	MK	KH	L&GD	P-VIVA, C-INT	F&S	I	
Topic 22. Dravya (Lecture :5 hours, Non lecture: 4 hours)									
CO1,CO5,C O8	Classify Dravya based on Utpatti, Yonibheda, Prayogabheda & Prabhavbheda.	CK	MK	K	L&P PT, L S	T-OBT, P-VIVA, P-POS	F&S	I	
CO1,CO5,C O8	Classify Dravya based on Doshaghnabheda, Rasabheda, Karmbheda (Dashemani & Sushrutokta Gana)	CK	MK	K	L&P PT, L S	T-OBT, P-VIVA, P-POS	F&S	I	
CO1,CO3	Describe Panchabhoutikatwa of Dravya.	CC	MK	KH	DIS, PER	T-EW, T-OBT, P-VIVA	F&S	I	
Topic 33. Guna (Lecture :4 hours, Non lecture: 2 hours)									

CO1,CO2,C O3	DefineGunaanddescribeitsPanchabhoutikatva.	CK	MK	K	L&P PT,D IS ,LS	T-EW,P- VIVA,PRN,Q Z	F&S	I	
CO1	StatecharacteristicsofGurvadiGuna.	CK	MK	K	L&P PT,S DL	P- VIVA,PRN,Q Z	F&S	I	
CO1,CO2,C O3	Discuss Gurvadiguna in context to itsKarma on Dosha, Dhatuand Mala with examples.	CC	MK	KH	L&P PT,L &GD ,FC	T-EW,P- VIVA,PRN,O SPE	F&S	I	
CO1,CO2,C O3	Enumerate & Summarize, clinical application of Gurvadi Gunawith research updates.	CC	MK	KH	L&G D,BL ,LS	T-EW,P- VIVA,PRN	F&S	I	
CO1,CO2,C O3	EnlistParadigunawithexamples.	CK	MK	K	L& GD, PER	T-EMI,P- VIVA,PRN,P -POS	F&S	I	
CO1,CO2,C O3	InterpretclinicalapplicationsofParadiguna.	CAP	MK	KH	L&P PT,D IS	T-EMI,P- VIVA,PRN,Q Z	F&S	I	
CO1,CO2,C O3	Discussresearch updates of Paradiguna.	CC	MK	KH	L,TP W,L S	T-EMI,P- VIVA,PRN, CR-RED	F&S	I	
Topic 44. Rasa (Lecture :7 hours, Non lecture: 4 hours)									
CO1,CO2,C O3	Define Rasa and interpret Meaning of “Rasa” in various contexts.	CK	MK	K	L& GD	P- VIVA,PUZ, M-CHT,INT	F&S	I	
CO1,CO2	Classifyandcompareshadarasainrelativecorrelationwithtasteo fchemicalconstituents.	CK	MK	K	L&P PT,E	P- VIVA,PUZ,	F&S	I	

					D	M-CHT,INT			

					U				
CO1,CO2	State Rasa Utpatti and Panchabhoutika constitution of Shadrasa.	CK	MK	K	L&GD, PER	P-VIVA,PUZ, M-CHT,INT	F&S	I	
CO1,CO2	DiscussRasopalabdh.	CC	MK	KH	L&GD,SDL	P-VIVA,PUZ, M-CHT,INT	F&S	I	
CO1,CO2,C O3	Interpretpathwayoftasteperception&sitesoftastereceptorsinthe body	CC	MK	KH	L&PPT,L_V	T-EW,T-OBT ,P-VIVA,PRN ,PUZ,INT	F&S	I	
CO1,CO2	DescribeGunaandLakshanaofeachRasa.	CC	MK	KH	L&PPT	T-EMI,T-EW,P-VIVA,PRN,INT	F&S	I	
CO1,CO2	ExplainkarmaofeachrasaonDosha,DhatuandMalawithexamples.	CC	MK	KH	L&PPT,B S	T-EMI,T-EW,P-VIVA,PUZ, M-CHT,INT	F&S	I	
CO1,CO2	DiscussAtiyogaofeachrasa.	CC	MK	KH	L&PPT,PBL,PER	T-EMI,P-VIVA,PRN, PUZ,INT	F&S	I	
CO1,CO2,C O3	InterpretClinicalapplicationofeachrasa.	CAP	MK	KH	L&PPT,DIS ,SDL ,LS	T-EMI,T-EW, T-OBT,P-VIVA,INT	F&S	I	

CO1,CO2	Discussresearch updates of Shadrasa.	CC	MK	KH	DIS, SDL, LS	T- EW,P- VIVA,PUZ,I NT,CR-RED	F&S	I	

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CO1,CO2	DefineAnurasa.	CK	MK	K	L,LS	T-EMI,P-VIVA,INT	F&S	I	
CO1,CO2	InterpretrelevanceofAnurarasainclinicalpractice.	CAP	MK	KH	L&GD,FC	T-EMI,P-VIVA,PUZ,INT	F&S	I	
CO1,CO2	DescribewithjustificationRasasevanakramaasAushadha.	CC	MK	KH	L&PPT,DIS	T-EMI,T-EW,P-VIVA,PRN,M-CHT,M-POS	F&S	I	
Topic 55. Vipaka (Lecture :3 hours, Non lecture: 1 hours)									
CO1	DefineVipaka.	CK	MK	K	L	P-VIVA	F&S	I	
CO1	StateVipakalakshana.	CK	MK	K	L&GD	P-VIVA,INT	F&S	I	
CO1	DescribetheactionofTrividhaVipakaonDosha,DhatuandMalawithexamples.	CC	MK	KH	L&PPT,T PW,FC	T-EW,P-VIVA,PRN	F&S	I	
CO1,CO3	InterpretclinicalapplicationofVipaka.	CAP	MK	KH	L&PPT,D IS ,SDL ,LS	P-VIVA,QZ	F&S	I	
CO2	StateResearchupdatesofVipaka.	CK	MK	K	L&PPT	P-VIVA,CR-RED	F&S	I	
CO1	ExplainVipakopalabdhi(DeterminationofVipaka)andTarat amya(Degreeofvariation).	CC	MK	KH	L&PPT,FC	P-VIVA,PUZ, M-CHT	F&S	I	

Topic 66. Virya (Lecture :2 hours, Non lecture: 2 hours)									
CO1	Define the lakshanas of Virya.	CK	MK	K	L,SD	P-VIVA,INT	F&S	I	

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					L				
CO1	Differentiate Guna and virya.	CC	MK	KH	L&P PT,R P	P-VIVA,P- EXAM,O- QZ	F&S	I	
CO1	Discuss Karma of Virya on Dosha, Dhatu and Mala.	CC	MK	KH	L&P PT,S DL,P L	P- VIVA,O- QZ,M- CHT	F&S	I	
CO1,CO3	Explain clinical application of Virya.	CC	MK	KH	L&P PT,G BL,T UT	P-VIVA,O- QZ,INT	F&S	I	
CO2	Discuss research updates of Virya.	CC	MK	KH	L&G D,DI S ,SDL	P-VIVA,P- EXAM,O- QZ,CR-RED	F&S	I	
CO1	Discuss Viryaopalabdhi (Determination of Virya).	CC	MK	KH	L& GD	P-VIVA,QZ	F&S	I	
Topic 77. Prabhava (Lecture :2 hours, Non lecture: 1 hours)									
CO1	Define and explain Prabhava with examples.	CC	MK	KH	L&P PT	P-VIVA	F&S	I	
CO1	Describe Samanapratyayarabdha and Vichitrapratyayarabdha with examples.	CC	MK	KH	L&P PT,D IS ,TBL ,BL	T-EW,P- VIVA,INT	F&S	I	
CO3	Explain clinical application of Prabhava.	CC	MK	KH	L&G D,FC ,LS	T-EW,P- VIVA,CR- RED	F&S	I	

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CO1,CO2	DiscussresearchupdatesofPrabhava.	CC	MK	KH	L&G D,S DL	T-EW,P- VIVA,CR- RED	F&S	I	
Topic 88. Interrelation of Rasa-Guna-Virya-Vipaka-Prabhava (Lecture :1 hours, Non lecture: 2 hours)									
CO1	Interpret the interrelation of Rasa-Guna-Virya-Vipaka-Prabhavawith respect to their strength-Pharmacodynamics.	CAP	MK	KH	L&P PT,T PW,P L	P-VIVA,CL- PR	F&S	I	
Topic 99. Karma (Lecture :9 hours, Non lecture: 5 hours)									
CO1	DefineKarma.	CK	MK	K	L	T- OBT,P- VIVA,Q Z	F&S	I	
CO1	DiscussKarmalakshana.	CC	MK	KH	L& GD	T- OBT,P- VIVA,Q Z	F&S	I	
CO1,CO2,CO 4,CO5	ExplainDeepankarmainrelationwithAppetizers.	CC	MK	KH	L&G D,B L	T-EW,T-OBT ,P-VIVA,QZ	F&S	I	
CO1,CO2,CO 3,CO4	CriticallyanalyzeDeepandravyaswithitsgunasandapplicationi nvariousclinicalconditions.	CAP	MK	KH	L&P PT,P BL,G BL	T- OBT,P- VIVA,Q Z ,DEB	F&S	I	
CO1,CO2,CO 3,CO4	ExplainPachankarmainrelationwithDigestives.	CC	MK	KH	L&P PT	T- OBT,P- VIVA,Q Z	F&S	I	

CO1,CO2,CO3,CO4	CriticallyanalyzePachandravyaswithgunasanddiscussitsapplicationinvariousclinicalconditions.	CAN	MK	KH	L&P PT,P BL,P ER	T-EMI,T- OBT,P- VIVA	F&S	I	
CO1,CO2,CO	ExplainSamshodhankarmainrelationwithcontemporary	CC	MK	KH	L_VC	T-OBT,P-	F&S	I	

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4	pharmacologicalaction.				,PL	VIVA,QZ			
CO1,CO3,CO4	DiscussSamshohankarmaanditsclinicalapplication.	CC	MK	KH	PBL,RP,PER	T-EW,T-CS,T-OBT,P-VIVA	F&S	I	
CO1,CO2,CO3,CO4	ExplainSamshamanakarmainrelationwithcontemporarypharmacologicalaction.	CC	MK	KH	L&GD,BL	T-EMI,T-OBT,P-VIVA	F&S	I	
CO1,CO2,CO3,CO4	DescribeSamshamanakarmaanditsclinicalapplication.	CC	MK	KH	L&PPT,CBL,PL	T-EMI,T-CS,P-VIVA,QZ	F&S	I	
CO1,CO2,CO3	ExplainAnulomankarmainrelationwithCarminative.	CC	MK	KH	L_VC,DIS	T-EMI,T-OBT,P-VIVA,DEB	F&S	I	
CO1,CO3	DescribeAnulomankarmaanditsclinicalapplication.	CC	MK	KH	L&PPT,PBL,LS	T-OBT,P-VIVA,QZ	F&S	I	
CO1,CO2,CO3,CO4	ExplainSransanakarmainrelationwithcontemporarypharmacologicalaction.	CC	MK	KH	L&PPT	T-EMI,T-OBT,P-VIVA,DEB	F&S	I	
CO1,CO3	DiscussSransankarmaanditsclinicalapplication.	CC	MK	KH	L&PPT,PBL,LS	T-OBT,P-VIVA,QZ,DEB	F&S	I	
CO1,CO2,CO3,CO4	ExplainBhedanakarmainrelationwithstronglaxativeaction	CC	MK	KH	L_VC,FC	T-EMI,T-OBT,P-VIVA,DEB	F&S	I	

CO1,CO3	DiscussBhedankarmaanditsclinicalapplication.	CC	MK	KH	L&P PT,D IS	T- OBT,P- VIVA,Q Z	F&S	I	
CO1,CO2,CO 3,CO4	ExplainRechankarmainrelationwithPurgative.	CC	MK	KH	L&P PT	T-EMI,T- OBT,P- VIVA	F&S	I	

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CO1,CO3	DiscussRechankarmaanditsclinicalapplication.	CC	MK	KH	L&P PT,D IS	T- OBT,P- VIVA,Q Z	F&S	I	
CO1,CO3	DiscussChhedankarmaanditsclinicalapplication.	CC	MK	KH	L&P PT,C BL,L S	T-EMI,T- OBT,P- VIVA	F&S	I	
CO1,CO2,CO 3,CO4	ExplainLekhankarmainrelationwithcontemporarypharmacolo gicalaction.	CC	MK	KH	L&G D,B L	T-EMI,T- OBT,P- VIVA	F&S	I	
CO1,CO3	DiscussLekhankarmaanditsclinicalapplication.	CC	MK	KH	L&P PT,D IS ,PL	T- OBT,P- VIVA,Q Z ,DEB	F&S	I	
CO1,CO2,CO 3,CO4	ExplainGrahikarmainrelationwithcontemporarypharmacologi calactionbowelbinding.	CC	MK	KH	L_VC	T-EMI,T- OBT,P- VIVA	F&S	I	
CO1,CO3	DiscussofGrahikarmaanditsclinicalapplication.	CC	MK	KH	L&G D,T BL	T- OBT,P- VIVA,Q Z	F&S	I	
CO1,CO2,CO 3,CO4	ExplainStambhankarmainrelationwithcontemporarypharmaco logicalaction.	CC	MK	KH	L&P PT,F C	T-EMI,T- OBT ,P-VIVA,DEB	F&S	I	
CO1,CO3	DiscussStambhankarmaanditsclinicalapplication.	CC	MK	KH	L& GD, PBL	T-EMI,T- OBT ,P-VIVA,DEB	F&S	I	

CO1	DiscussMadakarikarmawithexamples.	CC	MK	KH	L,DIS	T- OBT,P- VIVA,Q Z	F&S	I	
CO1,CO3	DiscussPramathikarmaanditsclinicalapplication.	CC	MK	KH	L&P PT,D IS	T-EMI,T- OBT,P- VIVA	F&S	I	
CO1	DiscussAbhishyandikarmawithexamples.	CK	MK	K	L,DIS	T-EMI,T- OBT	F&S	I	

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						,P-VIVA,DEB			
CO1	DiscussVyavayikarmawithexamples.	CC	MK	KH	L,P ER	T-EMI,T- OBT ,P-VIVA,DEB	F&S	I	
CO1	DiscussVikashikarmawithexamples.	CC	MK	KH	L,DIS	T- OBT,P- VIVA,Q Z	F&S	I	
CO1,CO2	ExplainRasayankarmainrelationwithRejuvenators.	CC	MK	KH	L&P PT,D IS ,BL	T- EMI,P- VIVA,Q Z	F&S	I	
CO1,CO3	AnalyzetypesofRasayandravyaswithitsgunasanddiscussitsclin icalapplicationwithresearchupdates.	CAN	MK	KH	L& GD	T-EMI,T- OBT ,P-VIVA,DEB ,CR-RED	F&S	I	
CO1,CO2	ExplainVajeeekarankarmainrelationwithAphrodisiacs.	CC	MK	KH	L& GD, PL	T- OBT,P- VIVA,Q Z	F&S	I	
CO1,CO2,C O3	Critically Analyze thetypes of Vajeeakaran dravyas with theirguna karmas and discuss its clinical application with researchupdates	CAN	MK	KH	L&P PT,P BL,M L,LS	T- OBT,P- VIVA,Q Z ,DEB,CR- RED	F&S	I	
CO1,CO2	ExplainMedhyakarmainrelationwithcontemporarypharmacolo gicalactions.	CC	MK	KH	L&P PT	T-EMI,T- OBT ,P-VIVA,DEB	F&S	I	

CO1,CO2,CO3	CriticallyanalyzeMedhyadravyaanddiscussitsclinicalapplicati onwithresearchupdates.	CAN	MK	KH	L&P PT,P L,PE R	T- OBT,P- VIVA,Q Z ,WP,CR-RED	F&S	I	
Topic 1010. Karmas of Dashemani Gana (Lecture :12 hours, Non lecture: 3 hours)									
CO1,CO8	DiscussCharakoktaDashemanikarmaswiththeirrasa,guna,vipa k,virya,dhoshakarma,botanicalidentity&pharmaco-	CC	MK	KH	L&P PT,D IS	P-VIVA,P- REC,QZ,M-	F&S	I	

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	therapeutic action of individual drugs.				,FC, REC	CHT,M-POS			
Topic 1111. Principles of General Pharmacology (Lecture :15 hours, Non lecture: 1 hours)									
CO4,CO9	Define Pharmacology and discuss Principles of general Pharmacology.	CK	MK	K	L&P PT	PRN,QZ	F&S	I	
CO4,CO9	Discuss drug definition, drug dosage forms and route of drug administration.	CC	MK	KH	L_VC	T-EW,P- VIVA,Q Z	F&S	I	
CO4,CO9	Explain pharmacokinetics (ADME) drug and pharmacodynamics.	CC	MK	KH	L_VC ,DIS	P-VIVA,PRN	F&S	I	
CO4,CO9	Discuss Drug dose, Principles of drug action, Mechanism of drug action & Bioavailability	CC	MK	KH	L_VC ,PER	P-VIVA,QZ	F&S	I	
CO9	Define, Describe mode of action & Discuss types with examples of following drugs acting on CNS with examples of Anaesthetics, Sedative-Hypnotic, Antiepileptic, Antiparkinsonian, Antidepressants, Antianxiety and Opioid Analgesics Drugs	CC	MK	KH	L&P PT,P BL,P rBL, FC	T-EW,T-OBT ,P-VIVA,QZ ,C-INT	F&S	III	
CO9	Define, Describe mode of action & Discuss types with examples of following drugs acting on Peripheral (somatic) Nervous System with examples of Skeletal Muscle Relaxants and Local Anaesthetics Drugs.	CC	MK	KH	L&P PT,P BL,F C	T-EW,T-OBT ,P-VIVA,QZ	F&S	III	
CO9	Define, Describe mode of action & Discuss types with examples of following drugs acting on Autacoids and Related of Nonsteroidal Antiinflammatory (NSAIDs), Antipyretic and Analgesics Drug	CC	MK	KH	L&P PT,P BL,F C	T-EW,T-OBT ,P-VIVA,PRN	F&S	III	
CO9	Define, Describe mode of action & Discuss types with examples of following drugs acting on Respiratory Disorders-	CC	MK	KH	L&P PT,P B	T-OBT,P- VIVA,PRN	F&S	III	

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	Bronchodilators, Aerosols/Inhalants, Expectorants and Antitussives Drugs				L, BL				
CO9	Define, Describe mode of action & Discuss types with examples of following drugs acting on Cardiovascular Drugs as Antihypertensive and Antianginal Drugs	CC	MK	KH	L_VC, FC	T-OBT, P-VIVA, PRN	F&S	III	
CO9	Define, Describe mode of action & Discuss types with examples of following drugs acting on Kidney as Diuretics	CC	MK	KH	L&P PT, T PW, BL	T-OBT, P-VIVA, QZ	F&S	III	
CO9	Define, Describe mode of action & Discuss types with examples of following drugs acting as Haematinics, Coagulants, Anticoagulants and Hypolipidaemic Drugs	CC	MK	KH	L&P PT, P BL, BL	T-EW, T-OBT, P-VIVA	F&S	III	
CO9	Define, Describe mode of action & Discuss types with examples of following drugs acting on Gastrointestinal tract as Antacid, Carminatives, Digestants, Antiemetics, Laxatives, Antidiarrhoeal and Hepatoprotective Drugs	CC	MK	KH	L&P PT, L & GD, L_VC	T-EW, T-OBT, P-VIVA, QZ	F&S	III	
CO9	Define, Describe mode of action & Discuss types with examples of following drugs acting as Antibiotics and Antitubercular.	CC	MK	KH	L&P PT, F C, GB L	T-EW, P-VIVA, QZ	F&S	III	
CO9	Define, Describe mode of action & Discuss types with examples of following drugs acting as Antifungal, Antiviral, Antimalarial and Anthelmintic Drugs	CC	MK	KH	L&P PT, P BL, G BL	T-EW, T-OBT, P-VIVA, QZ	F&S	III	

CO9	Define,Describe mode of action & Discuss types with examples of following drugs acting on Hormones and Related Drugs as Thyroid Hormone, Thyroid Inhibitors, Insulins, Oral Antidiabetic, Hormonal Contraceptives, Uterine Stimulants and Uterine Relaxants Drugs.	CC	MK	KH	L&P PT,B L,PE R	T-EW,T-OBT ,P-VIVA,PRN	F&S	III	

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CO9	Define,Describe mode of action & Discuss types with examples of following drugs acting on Antiseptics, Disinfectants, Vaccines, Vitamins, Water imbalance and IV	CC	MK	KH	L&P PT,B L,PE R	T-EW,T- OBT,P- VIVA	F&S	III	
Topic 1212. Mishraka Gana (Lecture :6 hours, Non lecture: 2 hours)									
CO1,CO3	Explain Brihatpanchamool composition.	CC	MK	KH	L&P PT,E DU	T-EW,P- VIVA,P- POS,QZ ,M-CHT	F&S	III	
CO1,CO3	Describe Guna karma and combined therapeutic effect of Brihatpanchamoola.	CC	MK	KH	L&P PT,D IS ,TBL	T-EW,P- VIVA,P- POS,QZ ,M-CHT	F&S	III	
CO1,CO3	Explain Laghupanchamool composition.	CC	MK	KH	L& GD	T-EW,P- VIVA,P- POS,QZ ,M-CHT	F&S	III	
CO1,CO3	Describe Guna karma and combined therapeutic effect of Laghupanchamoola.	CC	MK	KH	L&P PT,D IS ,PL	T-EW,P- VIVA,P- POS,QZ	F&S	III	
CO1,CO3	Explain Vallipanchamool composition.	CC	MK	KH	L&P PT	T-EW,P- VIVA,P- POS,QZ ,M-CHT	F&S	III	
CO1,CO3	Describe Guna karma and combined therapeutic effect of Vallipanchamoola.	CC	MK	KH	L& GD, PER	T-EW,P- VIVA,Q Z	F&S	III	

CO1,CO3	ExplainKantakapanchamoolacomposition.	CC	MK	KH	L&P PT,B S,	T-EW,P- VIVA,Q Z	F&S	III	

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					TPW				
CO1,CO3	Describe Guna karma and combined therapeutic effect of Kantakapanchamoola.	CC	MK	KH	L&P PT,L S,PE R	P-POS,QZ,M- CHT	F&S	III	
CO1,CO3	Explain Trinapanchamoolacomposition.	CC	MK	KH	L_VC ,PER	P-VIVA,P- EXAM,QZ	F&S	III	
CO1,CO3	Describe Guna karma and combined therapeutic effect of Trinapanchamoola.	CC	MK	KH	L&P PT,C BL,P L	T-EW,P- VIVA,M- CHT	F&S	III	
CO1,CO3	Explain Panchavalkalacomposition.	CC	MK	KH	L&P PT,B L,GB L	P-VIVA,P- POS,QZ	F&S	III	
CO1,CO3	Describe Guna karma and combined therapeutic effect of Panchavalkala.	CC	MK	KH	L&P PT,F C	T-CS,T- OBT,P- VIVA,QZ	F&S	III	
CO1,CO3	Explain Triphalacomposition	CC	MK	KH	L,DIS	T-EW,P- VIVA,P- POS	F&S	III	
CO1,CO3	Describe Guna karma and combined therapeutic effect of Triphala.	CC	MK	KH	L&P PT,P ER	T-OBT,P- VIVA,P- EXAM,QZ	F&S	III	
CO1,CO3	Explain Trikatu composition.	CC	MK	KH	L&P PT,P L	T- EMI,P- VIVA,Q Z	F&S	III	

CO1,CO3	Describe Gunakarma and combined therapeutic effect of Trikatu	CC	MK	KH	L&P PT,P L	T-OBT,P- VIVA,P- POS	F&S	III	
CO1,CO3	Explain Trimada composition	CC	MK	KH	L,DIS	T-EW,P- VIVA,Q Z	F&S	III	

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CO1,CO3	Describe Guna karma andcombined therapeutic effect ofTrimada.	CC	MK	KH	L&P PT,D IS ,TUT	T-EW,P- VIVA,Q Z	F&S	III	
CO1,CO3	Explain Chaturusana composition.	CC	MK	KH	L&P PT	T-OBT,P- VIVA,P- POS	F&S	III	
CO1,CO3	Describe Guna karma andcombined therapeutic effectof Chaturusana.	CC	MK	KH	L&P PT,F C	P-VIVA,P- POS,QZ	F&S	III	
CO1,CO3	Explain Panchakola composition.	CC	MK	KH	L&P PT,L _VC	P-VIVA,QZ	F&S	III	
CO1,CO3	Describe Guna karma andcombined therapeutic effectof Panchakola.	CC	MK	KH	L&P PT,D IS	T-EW,T- CS,P- VIVA,QZ	F&S	III	
CO1,CO3	Explain Shadusana composition.	CC	MK	KH	L&P PT,P L	T-OBT,P- VIVA,P- POS	F&S	III	
CO1,CO3	Describe Guna karma andcombined therapeutic effectof Shadusana	CC	MK	KH	L&P PT,F C	T-EW,P- VIVA,Q Z	F&S	III	
CO1,CO3	Explain Chaturbeeja composition.	CC	MK	KH	L&P PT,L _VC	T-OBT,P- VIVA,P- EXAM	F&S	III	
CO1,CO3	Describe Guna karma andcombined therapeutic effectof Chaturbeeja	CC	MK	KH	L&P PT,P ER	T-EW,P- VIVA,Q Z	F&S	III	

CO1,CO3	Explain Trijataka composition.	CC	MK	KH	L_VC ,DIS ,SD L	T-OBT,P- VIVA,P- EXAM,P- POS	F&S	III	

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CO1,CO3	Describe Guna karma andcombined therapeutic effectof Trijataka	CC	MK	KH	L&P PT,P L	T-EW,P- VIVA,P- POS	F&S	III	
CO1,CO3	Explain Chaturajataka composition.	CC	MK	KH	L_VC ,PER	T- OBT,P- VIVA,Q Z	F&S	III	
CO1,CO3	Describe Guna karma andcombined therapeutic effectof Chaturajataka.	CC	MK	KH	L&P PT,D IS	T-EW,P- VIVA,P- POS	F&S	III	
CO1,CO3	Explain Panchatikta composition.	CC	MK	KH	L&P PT,F C	T-OBT,P- VIVA,P- REC,QZ	F&S	III	
CO1,CO3	Describe Guna karma andcombined therapeutic effectof Panchatikta.	CC	MK	KH	L&P PT,P L	T-EW,P- VIVA,P- POS	F&S	III	
CO1,CO3	Explain Chaturbhadra composition.	CK	MK	K	L,DIS	T- OBT,P- VIVA,Q Z	F&S	III	
CO1,CO3	Describe Guna karma andcombined therapeutic effectof Chaturbhadra.	CC	MK	KH	L&P PT,F C	T- EMI,P- VIVA,Q Z	F&S	III	
CO1,CO3	Explain Trikarshika composition.	CC	MK	KH	L,DIS	T-OBT,P- VIVA,P- EXAM	F&S	III	

CO1,CO3	Describe Guna karma and combined therapeutic effect of Trikarshika.	CC	MK	KH	L&P PT,D IS ,PL	T- OBT,P- VIVA,Q Z	F&S	III	
Topic 1313. Nomenclature of dravya as per Nighantu, Vedic taxonomy and Botany (Lecture :0 hours, Non lecture: 2 hours)									
CO1	Describe the Nomenclature of dravya as per Raj Nighantu.	CC	MK	KH	L&P PT,F C,RP	P- VIVA,PRN, P-ID,QZ	F&S	III	
CO1	Explain the Nomenclature of dravya as per Vedic taxonomy.	CC	MK	KH	L&P PT	P-VIVA,P- ID,QZ	F&S	III	

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CO1	Discuss the Nomenclature of dravya as per botany.	CC	MK	KH	L&P PT,B L,PE R	P-VIVA,P- ID,QZ	F&S	III	
Topic 1414. Prashasta Bhesaja, Bhesaja Pariksha and drug evaluation method with correlation as per Pharmacognosy (Lecture :1 hours, Nonlecture: 2 hours)									
CO1,CO5	Describe Prashasta Bhesaja.	CC	MK	KH	L& GD, PL	P-VIVA,QZ	F&S	III	
CO1,CO5	Explain Bhesaja Pariksha of Charakasamhitavimanasthana.	CC	MK	KH	L&G D,S DL, LS	P-VIVA,QZ ,M-CHT	F&S	III	
CO1,CO5	Discuss drug evaluation method in correlation with Pharmacognosy.	CC	MK	KH	L&P PT,D IS	P-VIVA,QZ	F&S	III	
Topic 1515. Dravyasangrahana and Drug collection methods as per GFCP (Good Field collection practices) (Lecture :1 hours, Non lecture: 0hours)									
CO1,CO2	Discuss Dravyasangrahana and Drug collection methods as per GFCP (Good Field collection practices).	CC	DK	KH	L&P PT,P ER	P- VIVA,PUZ,C HK	F&S	III	
CO1,CO2	Discuss Drug collection methods as per GFCP (Good Field collection practices).	CC	DK	KH	L&P PT,D IS ,PrBL	P- VIVA,PUZ,C HK	F&S	III	
Topic 1616. GCP (Good cultivation practices), seed bank, conservation of medicinal plants, knowledge about RET (Rear, Endangered & Threatened) medicinal plants. (Lecture :1 hours, Non lecture: 0 hours)									

CO2	Discuss good cultivation practices, seed bank, conservation of medicinal plants, knowledge about RET (Rear, Endangered & Threatened) medicinal plants.	CC	DK	KH	L&P PT,L _VC, FC	P-VIVA,M- POS	F&S	III	

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Topic 1717. Abhava Pratinidhi Dravya (substitutes) (Lecture :1 hours, Non lecture: 1 hours)									
CO1,CO7	Discuss the concept of Abhava pratinidhi dravya (substitutes) as per Bhava prakasha.	CC	MK	KH	L&G D,BS ,EDU	P-VIVA,QZ	F&S	III	
Topic 1818. Classifications and techniques of aqueous and alcoholic extracts (Lecture :0 hours, Non lecture: 2 hours)									
CO2,CO6	Appraise the techniques of aqueous and alcoholic extracts of medicinal plants.	CC	DK	KH	L_VC ,D	P-VIVA,DOPS	F&S	III	
Topic 1919. Adverse drug reaction and Pharmacovigilance with recent updates (Lecture :1 hours, Non lecture: 2 hours)									
CO2,CO8	Explain adverse drug reaction and pharmacovigilance in ayurveda with recent updates.	CC	MK	KH	L&P PT,L &GD ,LS	P-VIVA,PRN,Q Z,M-CHT	F&S	III	V-RS
Topic 2020. NMPB (National Medicinal Plant Board), CCRAS (Central Council of Research in Ayurveda Sciences), API (Ayurvedic Pharmacopeia of India), GCTM (Global Centre for Traditional Medicine), PCIMH (Pharmacopeia Commission of Indian Medicine and Homeopathy) (Lecture :1 hours, Non lecture: 0 hours)									
CO2	State NMPB (National Medicinal Plant Board), CCRAS (Central Council of Research in Ayurveda Sciences), API (Ayurvedic Pharmacopeia of India), GCTM (Global Centre for Traditional Medicine) and PCIMH (Pharmacopeia Commission of Indian Medicine and Homeopathy).	CK	NK	K	SDL	P-VIVA,QZ ,INT	F&S	III	
Topic 2121. Vrikshayurveda and Ethno-medicine (Lecture :1 hours, Non lecture: 1 hours)									
CO2	Explain concept of Vrikshayurveda and Ethnomedicine.	CC	NK	KH	L&G D,M L ,PER	P-VIVA,CR- RED	F&S	III	
Topic 2222. Network pharmacology and Bioinformatics (Lecture :1 hours, Non lecture: 1 hours)									

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CO2	DescribeNetworkPharmacologyandBioinformatics.	CC	NK	KH	L&G D,S DL, LS	P-VIVA,CR- RED	F&S	III	

Paper2AppliedDravyaguna									
A3 Courseoutco me	B3 Learning Objective (At the end of the session, the studentsshould be able to)	C3 Doma in/sub	D3 Must to know / desirable toknow / Niceto know	E3 Level Does/ Show show/ Know show/ Know	F3 T-L meth od	G3 (Refer abbreviations)	H3 Form ative/ summ ative	I3 Term	J3 Integr ation
Topic 11. Bheshajavacharaniya (Criteria's to be considered for selection of drugs in vyadhis)(Lecture :1 hours, Non lecture: 6 hours)									
CO5	Interprettheselectionofappropriatedrugsindifferentvyadhisasp ercriteria'smentioned inBheshajavacharaniya(asperAs.Sa.Su2 3)	CAP	MK	KH	L&P PT,C BL,P rBL, SDL	T-EW,P- VIVA,Q Z	F&S	II	H-RN ,H- S W
Topic 22.1 Dravya (Drug) Nama-Guna-Karma Jnana(Lecture :45 hours, Non lecture: 10 hours)									
CO3	SpecifyusefulpartswithitsRasapanchakaoffollowingdrugs.	CK	MK	K	L&G D,C BL,F C	T- OBT,P- VIVA	F&S	II	
CO4	Describekarma,agryakarmaanddoshakarmaoffollowingdrugs.	CC	MK	KH	L&PP	T-EMI,T-	F&S	II	

						OBT			

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					T,DIS ,ML	,P-VIVA,QZ			
CO5	ExplainAmayikaprayogausedinVyadhi(Disease)pertainingtov ariousSrotasandVyadhiavastha(Stage).	CC	MK	KH	L&G D,BS ,CBL	T-EMI,T- OBT,P- VIVA	F&S	II	
CO5	IndicatetheKalpana(dosageform),Matra(Dose),Anupana(Vehi cle),Marga(Route),Sevanakala(Timeofadministration),Kalava dhi(Duration)andPathya-pathya)offollowingdrugs.	CAP	MK	KH	L&P PT,D IS ,GBL	T-EMI,T- OBT ,P-VIVA,PRN	F&S	II	V- RS,H -SW
CO2	Enlistactivephyto- constituents&importantformulationsDiscussresearchupdat esoffollowingdrugs.	CK	MK	K	L&P PT,M L	T-OBT,P- VIVA,CR- RED	F&S	II	
CO8	Enlistbotanicalname&family.ExplainmainsynonymsasperBru hatryeesandBhavaprakasha. Vernacularname(Hindi,Englishan dlocalname)offollowingdrugs.	CK	MK	KH	L&P PT,D IS	T-OBT,P- VIVA,QZ,O- QZ	F&S	II	
CO8	Demonstrateexternalmorphology- habit,root,leaf,stem,flower,inflorescence,fruit,seedandofficina lusefulpartsoffollowingdrugs.	CC	MK	KH	L_VC ,DIS ,BS	T-OBT,P- VIVA,O- QZ	F&S	II	
CO7	Describevarieties,grahyagrahyatwaAdulterants,substituteandt oxiceffectsoffollowingdrugswhereverapplicable	CC	MK	KH	L& GD	T-EW,T-OBT ,P-VIVA,QZ	F&S	II	H-AT
Topic 32.2 Dravya (Drugs) Nama -Guna-Karma-Jnana (Lecture :29 hours, Non lecture: 20 hours)									
CO3	SpecifyusefulpartswithitsRasapanchakaoffollowingdrugs	CK	MK	K	L&P PT,D IS	T-EMI,T- OBT ,P-VIVA,QZ	F&S	III	
CO4	Describekarma,agryakarmaanddoshakarmaoffollowingdr ugs.	CC	MK	KH	L&P PT,D IS ,BS	T- OBT,P- VIVA,Q Z	F&S	III	

CO5	ExplainAmayikaprayogausedinVyadhi(Disease)pertainingto	CC	MK	KH	L&PP	T-OBT,P-	F&S	III	

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	various Srotas and vyadhi avastha (Stage).				T, DIS , CBL	VIVA, QZ			
CO5	Indicate the Kalpana (dosage form), Matra (Dose), Anupana (Vehicle), Marga (Route), Sevanakala (Time of administration), Kalavadi (Duration) and Pathya-pathya of following drugs.	CAP	MK	KH	L&P PT, DIS , ML	T-EMI, P-VIVA	F&S	III	V-RS, H-SW
CO2	Enlist active phyto-constituents & important formulations. Discuss research updates of following drugs.	CK	MK	K	L&GD, BS	T-EMI, T-OBT , P-VIVA, QZ	F&S	III	
CO8	Enlist botanical name & family. Explain main Synonyms as per B ruhatryees and Bhavaprakasha. Vernacular name (Hindi, English and local name) of following drugs.	CK	MK	K	L&GD, FC , ML	T-OBT, P-VIVA, QZ	F&S	III	
CO8	Demonstrate external morphology-habit, root, leaf, stem, flower, inflorescence, fruit, seed and officinal useful parts of following drugs.	CC	MK	KH	L_VC , ML	T-OBT, P-VIVA, QZ	F&S	III	
CO7	Describe varieties, grhyahratwa, adulterants, substitute and toxic effects of following drugs wherever applicable.	CC	MK	KH	L&P PT, DIS , EDU	T-EMI, T-OBT , P-VIVA, PUZ	F&S	III	H-AT

List of Practicals (Term and Hours)

PRACTICALS(Marks-100)			
S.No	List of Topics	Term	Hours
1	1.AssessmentandUnderstandingtherelationbetweenParthivatwa&subjective/objectiveparametrictests	1	10
2	2.AssessmentofobjectiveparametricmeasuresofGuna	1	12
3	3.AssessmentofRasa	1	6
4	4.Comparativeorganolepticandmacroscopicexamination	1	23
5	5.MicroscopicIdentificationofgenuineandadulterateddrug	1	4
6	6.Demonstrationofskillstoidentifythemedicinalplantsinthecollegegarden.	1	10
7	7.Outcampusvisit(Cultivatedgardens,Tissueculturelab,Herbaria,Pharmacognosylab,QualitycontrollabandForestplantdemonstration)	1	10
8	8.Dravyaprayoga	1	12
9	9.Physico-chemicalstudy	2	8
10	10.Phytochemical	2	4
11	11.ThinLayerChromatography(TLC)technique	2	2
12	12.Demonstrationofskillstoidentifythemedicinalplantsinthecollegegarden	2	10
13	13.Outcampusvisit(cultivatedgardens&In-situplantdemonstration)	2	10
14	14.Ekaladravyaprayoga	2	10
15	15.DifferentCultivationtechniqueincludingmethodsmentionedinVrikshayurveda	2	6
16	16.ExerciseonNetworkpharmacology	3	6
17	17.Preparationsofdigitalherbarium	3	2
18	18.Demonstrationofskillstoidentifythemedicinalplantsinthecollegegarden	3	10
19	19.Outcampusvisit(cultivatedgardens&In-situplantdemonstration)	3	10
20	20.Ekaladravyaprayoga	3	10

Table 4: Learning objectives (Practical)

A4 Course outcome	B4 Learning Objective (At the end of the session, the student should be able to)	C4 Domain/sub	D4 Must to know / desirable to know / Nice to know	E4 Level Does/ Show show/ Know show/ Know	F4 T-L method	G4 Assessment (Refer abbreviations)	H4 Formative/summative	I4 Term	K4 Integration
Topic 11. Assessment and Understanding the relation between Parthivatwa & subjective/ objective parametric tests									
CO1,CO6	Observe the objective parametric measure to understand the relation between Parthivatwa by Density (bulk) of Asthishrnkhala, Sariva, Vidari, Maricha, Shatavari, Jambu, Godhuma & Ushira.	PSY - GUID	MK	KH	PT	P-VIVA	F&S	I	
CO1,CO6	Observe the objective parametric measure to understand the relation between Jaliyatwa by Viscosity, Moisture content of Kumari, Vidari, Sariva, Shunthi, Ikshu, Usheera, Kamala & Apamarga.	PSY - GUID	MK	KH	PT	P-VIVA	F&S	I	
CO1,CO6	Observe the objective parametric measure to understand the relation between Aagneyatwa by Moisture content of Shunthi, Shatavari, Maricha, Dhataki, Chitraka, Gokshura, Hingu & Chandana.	PSY - GUID	MK	KH	PT	P-VIVA	F&S	I	
CO1,CO6	Observe the objective parametric measure to understand the relation between Vayaviyatwa by Fat content & Bulk density of Usheera, Ashwagandha, Nimba, Vidari, Khadira, Tila, Jambu & Kapikacchu.	PSY - GUID	MK	KH	PT, D_L	P-VIVA	F&S	I	

CO1,CO6	Observe the objective parametric measures to understand the relation between Aakashiyatwaby Bulk density of Usheera, Kumari, Apamarga, Jeeraka & Jatamansi.	PSY - GUID	MK	KH	PT,D _L	P-VIVA	F&S	I	
CO1,CO6	Participate in the methods of specific gravity (Solid) and bulk density of Asthishrukhala, Sariva, Vidari, Maricha, Shatavari, Jambu, Godhum & Ushir by objective parameters measure to understand the relation between Parthivatwa.	AFT - RES	MK	KH	PT,D _L	P-VIVA	F&S	I	
CO1,CO6	Follow the methods of Viscosity, Moisture content & Specific gravity (Liquid) of Kumari, Vidari, Sariva, Shunthi, Ikshu, Usheera, Kamala & Apamarga by objective parameters measure to understand the relation between Jaliyatwa.	AFT - REC	MK	KH	PT,D _L	P-VIVA	F&S	I	
CO1,CO6	Describe the methods of pH and Moisture content of Shunthi, Shatavari, Maricha, Dhataki, Chitraka, Gokshura, Hingu & Chandan by objective parameters measure to understand the relation between Agneeyatwa.	AFT - REC	MK	KH	PT,D _L	P-VIVA	F&S	I	
CO1,CO6	Answer to the methods of Fat content, Specific gravity (liquid) & Bulk density of Usheera, Ashwagandha, Nimba, Vidari, Tila, Jambu & Kapikachhu by objective parameters measure to understand the relation between Vayaviyatwa.	AFT - RES	MK	KH	PT,D _L	P-VIVA	F&S	I	
CO1,CO6	Follow the methods of Bulk density of Ushira, Kumari, Apamarga, Jeeraka & Jatamansi by objective parameters measure to understand the relation between Aakashiyatwa	AFT - REC	MK	KH	PT,D _L	P-VIVA	F&S	I	
CO1,CO6	Perform the objective parametric measure to understand the relation between Parthivatwaby Specific gravity (solid) of Asthishrukhala, Sariva, Vidari, Maricha, Shatavari, Jambu, Godhuma & Ushira.	PSY - ADT	MK	SH	PRA	P-EXAM, P-PRF	F&S	I	

CO1,CO6	PerformtheobjectiveparametricmeasurestounderstandtherelationbetweenJaliyatwaSpecificgravity(Liquid)ofKumari,Vidari,Sariva,Shunthi,Ikshu,Usheera,Kamala&Apamarga.	PSY - ADT	MK	SH	PT	P-EXAM,P-PRF	F&S	I	
CO1,CO6	PerformtheobjectiveparametricmeasurestounderstandtherelationbetweenAagneyatwabypHofShunthi,Shatavari,Maricha,Dhataki,Chitraka,Gokshura,Hingu&Chandana.	PSY - ADT	MK	SH	PT	P-EXAM,P-PRF	F&S	I	
CO1,CO6	Performtheobjectiveparametricmeasurestounderstandtherelation between Vayaviyatwaby Specific gravity (Liquid)ofUsheera,Ashwagandha,Nimba,Vidari,Khadira,Tila,Jambu&Kapikacchu.	PSY - ADT	MK	SH	PT	P-EXAM,P-PRF	F&S	I	
Topic 22. Assessment of objective parametric measures of Guna									
CO1,CO6	ObservetheassessmentofobjectiveparametricmeasuresofShatavariandBalaforitsgurugunabyDensity(bulk).	PSY - GU D	MK	KH	PT,D _L	P-VIVA	F&S	I	
CO1,CO6	ObservetheSpecificgravity(Liquidandsolid)ofShatavariandBalaforitsguruguna.	PSY - GU D	MK	KH	PT,D _L	P-VIVA	F&S	I	
CO1,CO6	ObservetheassessmentofobjectiveparametricmeasuresofYavaandDhanyakaforitsLaghugunabyDensity(bulk)	PSY - GU D	MK	KH	PT,D _L	P-VIVA	F&S	I	
CO1,CO6	DemonstratetheSpecificgravity(Liquidandsolid)YavaandDhanyakaforitsLaghuguna.	PSY - GU D	MK	KH	PT,D _L	P-VIVA	F&S	I	

CO1,CO6	Observe the assessment of objective parametric measures of Snigdha gunadruugs by total fat content, moisture content of Tila and Era nda	PSY - GU D	MK	KH	PT,D _L	P-VIVA	F&S	I	
CO1,CO6	Demonstrate Swelling index of Snigdha gunadruugs of Tila, and Era nda.	PSY - GU D	MK	KH	D_L, PRA	P-VIVA	F&S	I	
CO1,CO6	Observe the assessment of objective parametric measures of	PSY-	MK	KH	PT,D_	P-VIVA	F&S	I	

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	RukshagunadrugsbytotalfatcontentandmoisturecontentofKulattha&Vidanga	GUD			L				
CO1,CO6	DemonstrateSwellingindexofRukshagunadrugsofKulattha&Vidanga	PSY - GU D	MK	KH	PT,D _L	P-VIVA	F&S	I	
Topic 33. Assessment of Rasa									
CO2,CO6	PerformtheassessmentofRasabasedonclassicalsymptomsforea chrasadravyas.	PSY - ADT	MK	SH	PT,D _L	P-EXAM,P- PRF,INT	F&S	I	
Topic 44.Comparative organoleptic and macroscopic examination									
CO6	Performthecomparativeorganolepticcharacters(Taste,Colour ,Smell,Sound,Touch)andmacroscopicexamination(Size,Sha pe,Fracture,Externalmarkingslikelenticels,ridges,nodes,furr ows,cracksetc)ofrootofAshwagandha,Chitraka,Manjistha,M usta,Shatavari,VatsanabhaandYashtimadhu.	PSY - ADT	MK	SH	L_VC ,PT,D _L	P-EXAM,P- PRF	F&S	I	
CO6	Performthecomparativeorganolepticcharacters(Taste,Colour ,Smell,Sound,Touch)andmacroscopicexamination(Size,Sha pe,Fracture,Externalmarkingslikelenticels,ridges,nodes,furr ows,cracksetc)ofRhizome/StolonofHaridra,Katuki,Shunthia ndVacha.	PSY - ADT	MK	SH	PT,D _L	P-EXAM,P- PRF	F&S	I	
CO6	Performthecomparativeorganolepticcharacters(Taste,Colour ,Smell,Sound,Touch)andmacroscopicexamination(Size,Sha pe,Fracture,Externalmarkingslikelenticels,ridges,nodes,furr ows,cracksetc)ofStemofAsthishrinkhalaandGuduchi.	PSY - ADT	MK	SH	PT,D _L	P-EXAM,P- PRF	F&S	I	

CO6	Perform the comparative organoleptic characters (Taste, Colour, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc) of Bark of Arjuna, Ashoka, Kutaja, Nimba and Tawak.	PSY - ADT	MK	SH	BS, PT , D_L	P-EXAM, P- PRF	F&S	I	

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CO6	Perform the comparative organoleptic characters (Taste, Colour, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, crack setc) of Heartwood of Beejaka, Chandana and Khadir a	PSY - ADT	MK	SH	BS, PT, D_L	P-EXAM, P-PRF	F&S	I	
CO6	Perform the comparative organoleptic characters (Taste, Colour, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, crack setc) of Leaf of Kumari, Meshashringi and Vasa.	PSY - ADT	MK	SH	BS, PT, D_L	P-EXAM, P-PRF	F&S	I	
CO6	Perform the comparative organoleptic characters (Taste, Colour, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, crack setc) of Flower of Dhataki, Kunkum (kesara) and Lava nga.	PSY - ADT	MK	SH	PT, D_L	P-EXAM, P-PRF	F&S	I	
CO6	Perform the comparative organoleptic characters (Taste, Colour, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, crack setc) of Fruit of Amalaki, Aragavadha, Bhallataka, Bibhitaki, Gokshura, Haritaki, Madanphala, Maricha, Pippali and Vidanga.	PSY - ADT	MK	SH	D_L, PRA	P-EXAM, P-PRF	F&S	I	
CO6	Perform the comparative organoleptic characters (Taste, Colour, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, crack setc) of Phalaraja of Kampillaka.	PSY - ADT	MK	SH	PT, D_L	P-EXAM, P-PRF	F&S	I	
CO6	Perform the comparative organoleptic characters (Taste, Colour, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, crack setc) of Seed of Bakuchi, Ela, Eranda, Jyotishmati	PSY - ADT	MK	SH	PT, D_L	P-EXAM, P-PRF	F&S	I	

	andKapikacchu.								
CO6	Performthecomparativeorganolepticcharacters(Taste,Colour,Smell,Sound,Touch)andmacroscopicexamination(Size,Shape,Fracture,Externalmarkingslikelenticels,ridges,nodes,furrows,cracksetc)ofUnorganizeddrugsofGuggulu,HinguandMocharasa.	PSY - ADT	MK	SH	PT,D _L	P-EXAM,P- PRF	F&S	I	
CO6	Performthecomparativeorganolepticcharacters(Taste,Colour,Smell,Sound,Touch)andmacroscopicexamination(Size,Shape,Fracture,Externalmarkingslikelenticels,ridges,nodes,furrows,cracksetc)ofWholeplantofApamarga,Bhrungaraja,Bhummyamalaki,Brahmi,KalmeghaandMandukaparni.	PSY - ADT	MK	SH	PT,D _L	P-EXAM,P- PRF	F&S	I	
CO6	Performthecomparativeorganolepticcharacters(Taste,Colour,Smell,Sound,Touch)andmacroscopicexamination(Size,Shape,Fracture,Externalmarkingslikelenticels,ridges,nodes,furrows,cracksetc)ofGallsofKarkatshrungi.	PSY - ADT	MK	SH	PT,D _L	P-EXAM,P- PRF	F&S	I	
Topic 55. Microscopic Identification of genuine and adulterated drug									
CO6	PerformthecomparativemicroscopicexaminationofgenuineandadulteratedanytwosamplesofRoot/stem/leaf/bark/fruits(E.g.likeSariva/Manjishta/Vidanga/Maricha/Ashoka).	PSY - ADT	MK	SH	TUT, PT,D _L	P-EXAM,P- PRF	F&S	I	
Topic 66. Demonstration of skills to identify the medicinal plants in the college garden.									
CO8	Demonstrateidentificationfeaturesofcollegegardenmedicinalplantsfortheir morphology,taxonomicalkeys,regionalflorawiththerapeuticuses.	PSY - GU D	MK	KH	L_VC ,ML, SDL, DG,F V	P-VIVA,P- EXAM,P- ID	F&S	I	
CO8	ParticipateactivelyinIdentificationofMedicinalplants.	AFT - RES	MK	SH	DG	P-VIVA,P- EXAM	F&S	I	

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Topic 77. Out campus visit (Cultivated gardens, Tissue culture lab, Herbaria, Pharmacognosy lab, Quality control lab and Forest plant demonstration)									
CO8	Visit to observe the identification features of medicinal plants which are from cultivated or natural habitat/forest plant.	PSY - GU D	MK	KH	ML, SDL, DG	P-VIVA, P- EXAM	F&S	I	
CO8	Visit to observe the Tissue culture techniques of medicinal plants in local/nearby Tissue culture lab.	PSY - GU D	MK	KH	PT, D _L	P-VIVA	F&S	I	
CO8	Visit to observe the herbaria of medicinal plants in nearby institute.	PSY - GU D	MK	KH	PT, D	P-VIVA	F&S	I	
CO6	Visit to observe the nearby AYUSH approved Quality control lab for quality control techniques.	PSY - GU D	MK	KH	L_VC ,PT,D _L	P-VIVA	F&S	I	
Topic 88. Dravya prayoga									
CO5	Observe the selection of Ekala Dravya (single drug) in various clinical conditions	PSY - GU D	MK	KH	DIS, CBL, SDL, TUT	P-VIVA, QZ	F&S	I	
CO5	Perform the selection of Ekala dravya prayoga in various clinical conditions by masked casesheets.	PSY - ADT	MK	SH	CBL ,EC E	P-VIVA, P- EXAM	F&S	I	H-RN
Topic 99. Physico-chemical study									

CO6	Perform the foreign matter study of minimum 2 useful parts of medicinal plants.	PSY - ADT	MK	SH	PT,D _L	P-VIVA	F&S	II	
CO6	Observe the Loss on drying (LoD) study of minimum 2 useful parts of medicinal plants.	PSY - GU D	MK	KH	TUT, PT,D _L	P-VIVA	F&S	II	

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CO6	Observe the Ash value and Extractive value of minimum 2 useful parts of medicinal plants.	PSY - GU D	MK	KH	PT,D _L	P-VIVA	F&S	II	
Topic 1010. Phytochemical									
CO6	Perform Preliminary phytochemical study of minimum 2 medicinal plant extracts.	PSY - ADT	MK	SH	PT,D _L	P-VIVA, P-EXAM, P-PRF	F&S	II	
Topic 1111. Thin Layer Chromatography (TLC) technique									
CO6	Observe the TLC (Thin layer chromatography) technique of one medicinal plant extract.	PSY - GU D	MK	KH	TUT, PT,D _L	P-VIVA, INT	F&S	II	
Topic 1212. Demonstration of skills to identify the medicinal plants in the college garden									
CO8	Demonstrate identification features of college garden medicinal plants for their morphology, taxonomical keys, regional flora with therapeutic uses.	PSY - GU D	MK	KH	L_VC ,DG	P-VIVA, P-EXAM, P-PRF	F&S	II	
CO8	Participate actively in Identification of Medicinal plants.	AFT - RES	MK	SH	DG	P-VIVA	F&S	II	
Topic 1313. Out campus visit (cultivated gardens & In-situ plant demonstration)									
CO8	Visit to observe the identification features of medicinal plants which are from cultivated or natural habitat/forest plant.	PSY - GU D	MK	KH	DG	P-VIVA	F&S	II	
Topic 1414. Ekala dravya prayoga									

CO5	Perform the selection of Ekaladravya prayog in various clinical conditions by masked case sheets.	PSY - ADT	MK	SH	DIS, CBL, ECE, D _BED	P-VIVA,P- EXAM	F&S	II	H-RN
CO5	Appraise the value of selection of Ekala Dravya Prayog in	AFT-	MK	SH	PBL,	P-VIVA,P-	F&S	II	H-RN

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	various clinical conditions by providing masked casesheets.	VAL			CBL ,CD	EXAM			
Topic 1515. Different Cultivation technique including methods mentioned in Vrikshayurveda									
CO8	Demonstrated different cultivation technique of medicinal plants in garden.	PSY - GU D	MK	KH	L_VC ,DG	P-VIVA,INT	F&S	II	
CO8	Demonstrated different cultivation methods mentioned in Vrikshayurveda in garden.	PSY - GU D	MK	KH	DG	P-VIVA	F&S	II	
Topic 1616. Exercise on Network pharmacology									
CO2	Conduct the Identification (Data mining) active constituents by Pubmed, IMPPAT or PubChem in digital library.	PSY - SET	MK	KH	DIS,D	P-VIVA,PA	F&S	III	
CO2	Conduct Target identification by BindingDB.	PSY - SET	MK	KH	D	P-VIVA	F&S	III	
CO2	Conduct Identification of disease gene by DisGeNET.	PSY - SET	MK	KH	TUT ,D	P-VIVA	F&S	III	
CO2	Conduct GO (Gene ontology) enhancement analysis by KEGG Pathway, Rratio.	PSY - SET	MK	KH	D	P-VIVA	F&S	III	
CO2	Conduct Network construction by STRING, PPI network, sytoscope.	PSY - SET	MK	KH	D	P-VIVA	F&S	III	
Topic 1717. Preparations of digital herbarium									

CO8	Preparedigitalherbariumofminimum10medicinalplantsdurin gfieldvisitwithallpartsoftheplantwithgeo-tagphotos.	PSY - ADT	MK	SH	L_VC ,W,T UT, D	P-SUR,RK	F&S	III	
Topic 1818. Demonstration of skills to identify the medicinal plants in the college garden									
CO8	Demonstrateidentificationfeaturesofcollegegardenmedicinal	PSY-	MK	KH	L_VC	P-VIVA,P-	F&S	III	

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	plantsfortheirmorphology,taxonomicalkeys,regionalflora withtherapeuticuses.	GUD			,DG	EXAM			
CO8	ParticipateactivelyinIdentificationofMedicinalplants.	AFT - RES	MK	SH	DG	P-VIVA,P- EXAM	F&S	III	
Topic 1919. Out campus visit (cultivated gardens & In-situ plant demonstration)									
CO8	Visittoobservetheidentificationfeaturesofmedicinalplantswhic harefromcultivatedornaturalhabitat/forestplant.	PSY - GU D	MK	KH	DG	P-VIVA	F&S	III	
Topic 2020. Ekala dravya prayoga									
CO5	PerformtheselectionofEkaladravyaprayogainvariousclinicalco nditionsbymaskedcasesheets.	PSY - ADT	MK	SH	CBL, ECE, D_B ED,P RA	P-VIVA,P- EXAM,RK	F&S	III	H-RN
CO5	AppraisethevalueofselecionofEkalaDravyaPrayogainvari ousclinicalconditionsbyprovidingmaskedcasesheets.	AFT - VAL	MK	SH	PBL ,CB L,C D	P-VIVA,P- EXAM	F&S	III	H-RN

Table 4a: List of Practical

S.No	Name of practical	Term	Activity	Practical hrs
1	1.Assessmentand Understandingtherelation betweenParthivatwa& subjective/objective parametrictests	1	♦ 1.1Assessmentand Understandingtherelation betweenParthivatwa& subjective/objectiveparametric tests ♦ Density(bulk) ♦ Specificgravity(solid) ♦ Drugstostudyfore.g.- Asthishrnkhala,Sariva,Vidari, Maricha,Shatavari,Jambu, Godhuma&Ushira ♦ 1.2Assessmentand Understandingtherelation betweenJaliyatwa&subjective/objectiveparametrictests ♦ Viscosity ♦ Specificgravity ♦ Moisturecontent ♦ Drugstostudyfore.g.-Kumari, Vidari,Sariva,Shunthi,Ikshu, Usheera,Kamala&Apamarga ♦ 1.3Assessmentand Understandingtherelation betweenAagneyatwa& subjective/objectiveparametric tests ♦ pH ♦ Moisturecontent ♦ Drugstostudyfore.g.:Shunthi, Shatavari,Maricha,Dhataki, Chitraka,Gokhura,Hingu& Chandana ♦ 1.4Assessmentand Understandingtherelation betweenVayaviytwa& subjective/objectiveparametric tests ♦ Fatcontent ♦ Specificgravity ♦ Density(bulk) ♦ Drugstostudyfore.g.:Usheera, Ashwagandha,Nimba,Vidari, Khadira,Tila,Jambu& Kapikacchu ♦ 1.5Assessmentand	10

			Understanding the relation between Aakashiyatwa & subjective/objective parametric tests Density (Bulk) ♦ Drugs to study for e.g.: Usheera, Kumari, Apamarga, Jeeraka & Jatamansi	
2	2. Assessment of objective parametric measures of Guna	1	♦ 2.1 Assessment of objective parametric measures Guru & Laghu Guna ♦ Density (bulk) ♦ Specific gravity (Liquid and solid) Drugs to study for e.g.: Guru: Shatavari, Bala; Laghu: Yava, Dhanyaka ♦ 2.2 Assessment of objective parametric measures of Snigdhaan d Rukshagunad rugs ♦ Total fat ♦ content Moisture ♦ content Swelling index ♦ Drugs to study for e.g.: Snigdha: Tila, Eranda; Ruksha: Kulaththa, Vidanga	12
3	3. Assessment of Rasa	1	Assessment of Rasa based on classical symptoms for each rasadravyas. One Example For each rasa	6
4	4. Comparative organoleptic and macroscopic examination	1	♦ Comparative organoleptic (Taste, Color, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lentils, ridges, nodes, furrows, cracks, etc) of the following group of drugs. ♦ a. Root: Aswagandha, Chitraka,	23

			Manjistha, Musta, Shatavari, Vatsanabha, Yashtimadhu. ♦ b. Rhizome/Stolon: Haridra, Katuki, Shunthi, Vacha. ♦ c. Stem: Asthishrinkhala, Guduchi. ♦ d. Bark: Arjuna, Ashoka, Kutaja, Nimba, Twak. ♦ e. Heartwood: Beejaka, Chandana, Khadira. ♦ f. Leaf: Kumari, Meshashringi, Vasa. ♦ g. Flower: Dhataki, Kunkum (kesara), Lavanga. ♦ h. Fruit: Amalaki, Aragavadha, Bhallataka, Bibhitaki, Gokshura, Haritaki, Madanphala, Maricha, Pippali, Vidanga. ♦ i. Phalaraja: Kampillaka. ♦ j. Seed: Bakuchi, Ela, Eranda, Jyotishmati, Kapikacchu. ♦ k. Unorganized drugs: Guggulu, Hingu, Mocharasa. ♦ l. Whole plant: Apamarga, Bhrungaraja, Bhumyamalaki, Brahmi, Kalmegha, Mandukaparni. ♦ m. Galls: Karkatshrungi.	
5	5. Microscopic Identification of genuine and adulterated drug	1	♦ Microscopic identification of genuine and adulterated drug, minimum 2 samples from Root/stem/leaf/bark/fruits. ♦ (E.g. Sariva/Manjishta/Vidanga/Maricha/Ashoka)	4
6	6. Demonstration of skills to identify the medicinal plants in the college garden.	1		10
7	7. Out campus visit (Cultivated gardens, Tissue culture lab, Herbaria, Pharmacognosy)	1	♦ General instructions regarding combined educational visit	10

lab, Quality control lab and Forest plant demonstration)

Combined educational visit can be planned wherever feasible as, for

Dravyaguna-

Cultivated gardens, Tissue culture lab, Herbaria, Pharmacognosy lab, Forest plant demonstration; for

Aghadatantra-

forensic lab, snake park, pollution control board and snake venom unit; for

Swasthivrutta-

Yoga and naturopathy center, Milk dairy plant, Water Purification plant, Sewage treatment plant, Leprosy rehabilitation Centre & for

Rasashastra-

GMP certified Lab, Drug Analysis Lab

SOP for Outcampus Field Visits Theme-

Based Visits: Plan visits based on specific educational themes (Deshemani Ganas, Familywise), selecting locations relevant to the theme and collaborating with local experts.

Dress Code: Participants must wear jeans, paints and T-shirts, closed-toe shoes, a hat or cap for sun protection, and weather-appropriate gear such as jackets or raincoats.

Essential Materials: Each participant should carry a water bottle, a stick (optional), materials for sample storage (newspaper, blotting paper, sealers, plastic bags), a cap, goggles, and a packed lunch or snacks in a suitable container.

Safety Precautions: Conduct a safety briefing before the visit, outline emergency procedures, collect medical information, and emphasize 'unexpected behaviors' during the trip.

Itinerary: Develop a detailed itinerary with activities and a timeline, considering the chosen theme and objectives of the visit. **Public Address System (PASystem):** If necessary,

♦ provide a portable PA system with a

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			microphone, amplifier, and powersource for effective communication with larger groups. ♦ Test the PA System: Prior to the visit, ensure the PA system is in working order and audible, conducting necessary tests to guarantee functionality. ♦ Responsible Usage: Use the PA system judiciously, speaking clearly and at an appropriate volume, while encouraging participants to utilize the system for questions or clarifications. ♦ Follow-up Activities: Organize post-visit discussions and assignments to reinforce learning, encourage knowledge sharing, and facilitate deeper exploration of the theme. ♦ Review and Revise: Regularly update and adapt this SOP to comply with safety standards, educational objectives, and local regulations.	
8	8. Dravya prayoga	1	♦ 8.1 (Part I) Demonstration of selecting appropriate Ekaladravya as per clinical conditions. ♦ 8.2 (Part II) Selection of Ekaladravya prayoga in various clinical conditions by providing masked casesheets per rotas (5 cases in each term)	12
9	9. Physico-chemical study	2	♦ Physicochemical study of medicinal plant. (minimum 2 drugs) a. Foreign matter ♦ b. Loss on drying ♦ c. Ash value ♦ d. Extracts ♦	8

			♦ Note: The same plants should be used for all the tests	
10	10. Phytochemical	2	♦ Preliminary phytochemical study of medicinal plant. (minimum 2 drugs)	4
11	11. Thin Layer Chromatography (TLC) technique	2	♦ TLC technique of medicinal plant (anyone)	2
12	12. Demonstration of skill to identify the medicinal plants in the college garden	2		10
13	13. Out campus visit (cultivated gardens & In-situ plant demonstration)	2		10
14	14. Ekaladavya prayoga	2	♦ Selection of Ekaladavya prayoga in various clinical conditions by providing masked case sheets. (5 cases in each term)	10
15	15. Different cultivation technique including method mentioned in Vrikshayurveda	2		6
16	16. Exercise on Network pharmacology	3	♦ Exercise on Network Pharmacology ♦ 1st activity: Identification (Data mining) active constituents by PubMed, IMPPAT or PubChem. 2nd activity: Target identification by BindingDB.	6

			♦ 3rd activity: Identification of disease gene by DisGeNET. ♦ 4th activity: GO enrichment analysis by KEGG Pathway, R ratio. ♦ 5th step: Network construction by STRING, PPI network, Cytoscape.	
17	17. Preparation of digital herbarium	3	♦ Preparation of digital herbarium of minimum 10 drugs with all parts of the plant (with geo-tag photos) by compulsory field visit	2
18	18. Demonstration of skill to identify medicinal plants in the college garden	3		10
19	19. Out campus visit (cultivated gardens & In-situ plant demonstration)	3		10
20	20. Ekaladavya prayoga	3	Selection of Ekaladavya prayoga in various clinical conditions by providing masked casesheets. (5 cases in each term)	10
Total Hr				175

Activity

CO	Topic name	Activity Details	Hours
CO1, CO3	Dravyaguna Vigyana.	♦ Group activity – Assignments are to be given to the students to prepare 2-3 flashcards on importance of Dravyaguna Vigyana in clinical practice.	1

CO1,CO5,CO8	Dravya	♦ Segregation of dry drugs based on Panchabhoutik characteristics. Various Dravya sare given to the students for segregation of dravya according to Panchabhoutik constitution ♦ Classify live plants based on Panchabhoutik characteristics in garden. (Details mentioned in Rasavaisheshik Sutra 2 chapter 101-111) Quiz– ♦ based on classification of dravyas ♦ Brainstorming- Activity should be assigned to the students to search in samhitas related to classification of dravyas as Prayogabheda, Doshagnabheda and Karma bheda. Prepare the list of specific assigned classification for group of students.	4
CO1,CO2,CO3	Guna Panchabhoutikata, characteristics and classification.	♦ Matching of Gurvadi guna with its karma ♦ Animated Powerpoint Presentation ♦ non Guna. ♦ Brain storming- To search in Chikitsasthana of samhitas regarding clinical application of Gurvadi guna and Paradiguna	2
CO1,CO2,CO3	Rasa	♦ Game based activity by closing the eyes they should ask to identify the taste Activity ♦ based learning enlisting the dravyas of specific taste ♦ Matching activity- Matching of specific Rasas with their Guna & Karma ♦ Making of Flashcards- Cards with information regarding different concepts of Rasas	4

CO1,CO2,CO3	Vipak	♦ Flashcards- Preparing flashcards containing pictures of dravya to identify dravya and its vipaka ♦ Preparing charts of 20 dravyas with a yatharth vipaka and a yatharth vipaka	1
CO1,CO2,CO3	Virya	♦ Talk and chalk activity by students on Dwividhavirya and dashtavidhavirya. ♦ Making charts of dravyas from Bhavaprakashnighanturegarding Dwividhavirya- 25 Sheeta Viryadravyas & 25 Ushna Viryadravyas.	2
CO1,CO2,CO3	Prabhav	♦ Puzzle- Segregating the dravyas based on Samanpratyayarabdha, Vichtrapratyayarabdha and Prabhava.	1
CO1	Interrelation of Rasa-Guna-Virya-Vipaka-Prabhava with respect to their strength- Pharmacodynamics	♦ Making flowcharts regarding the rules explained in relation with concepts of dravyaguna ♦ Group Discussion- Interrelation of Rasa-Guna-Virya-Vipaka-Prabhava with respect to their strength- Pharmacodynamics	2
CO1,CO2,CO3,CO4,CO5	karma	Case based learning- Taking different clinical conditions & selecting appropriate karma Think, Pair and share based activity- A specific problem has to be given,	5

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		students should be allowed to think and discuss about appropriate karmas Ga mification- Pairing Karma with the drugs. Role play for identification of specific karma- Asking one student to enact & others to find out Karma Presentation- On concept of Karma, types of karma & Individual Karma. Enlisting specific karma- In relation to dravyas from Bruhatrayee & Sharangdhara samhita	
CO1, CO8	Karmas of Dashemani	Cramming– Memorizing the dravyas from specific ganas Fish bowl activity written hit of drugs picked by students and should say the name of the Gana Shloka recitation- Shlokas of Dashemani Gana (Ch. Su. 4) Symposia- Short discussion on various clinical applications of Dashemani Gana	3
CO4, CO9	Principles of General Pharmacology	Video: Showing relevant videos regarding principles of pharmacology and mode of action Mobile based learning – Searching about pharmacology in listed websites	1
CO1, CO3	Mishrak Gana	GBL- Identification of mishrak gana by using clues of utility of specific mishrak gana from samhita and chikitsa grantha Matching of dravyas with specific mishrak Gana Role play– enacting individual and combined action of composition fore.g. Triphala- Individualaly they should enact	2

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		as Haritaki, Bibhitaki and Aamalaki explaining their karmas, then they should come together depicting Triphala. ♦ Self-directed learning- Mobile based learning on Mishraka Gana	
CO1	Nomenclature of dravya as per Nighantu, Vedic taxonomy and botany	♦ Bulletin boards: Highlighting significant points of nomenclature ♦ Demonstration: Demonstration of the dravya on the basis of various criteria's of nomenclature ♦ Symposium: By making groups of specific criteria for nomenclature and asked to present synonyms based on that particular criteria allotted to the group e.g. Upama, Rudhi, Prabhav, Deshokti, Swabhavatha, Lanchana & Guna	2
CO1, CO5	Prashasta Bhesaja, Bhesaja Pariksha and drug evaluation method with correlation as per Pharmacognosy	♦ Read aloud: Student come on the Dias and read with loud voice ♦ Self-directed learning- Charak Samhita Vimansthana Chapter 8	2
CO1, CO7	Abhavapratinidhidravya (substitutes)	♦ Self-directed learning: Self study on Abhavapratinidhidravya (substitutes) from Bhavaprakasha	1
CO2, CO6	Classifications and techniques of aqueous and alcoholic extracts	♦ Demo in lab Video ♦ 0	2
CO2	Adverse drug reaction and Pharmacovigilance with recent updates	PBL: Storytelling about reported cases	2

♦

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		♦ Survey: visit to pharmacovigilance cell at institution ♦ Guest lecture: Activities of pharmacovigilance cell	
CO8	Vrikshayurveda and ethno medicine	♦ Videos- Showing videos on cultivation practices and Ethnomedicine	1
CO2	Network Pharmacology & Bioinformatics	♦ Video Presentation	1
CO5	Bheshajavacharaniya	♦ Making chart on Various Rasadravya indicated in specific vyadhis foreg. ♦ Tiktarasain Jvara & Kushtha, ♦ Katurasain Amavata, ♦ Kashayarasain Pakwatisara, and Raktasambhava, ♦ Madhurrasain Dhatukshyaja nyavyadhi, ♦ Amla & Lavanarasain Udavarta, Udara, Gulma, also used as Agnideepana, Mudhavanulomana, Pachana	6
CO2, CO3, CO4, CO5, CO7, CO8	2. Dravya (Drug) Nama - Guna - Karma Jnana	♦ Game based activity- Activity based learning as the hits are prepared of different karmas, those are circulated among the students, once their circulation stops then the student with the hit will be asked to read the karma mentioned in the hit and to explain with examples. CBL (Case based learning) and PBL (Problem based learning) activities taken for understanding of Karma in specific clinical scenario	08

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		♦ Segregation of dravyas mentioned in syllabus according to Dashemani Gana ♦ Researching of Mishrak gana from samhita and chikitsa granths for its utility ♦ Collecting information about Grahya and Agahya dravyas mentioned in the syllabus with their characteristics	
CO2, CO3, CO4, CO5, CO7, CO8	3. Dravya (Drug) Nama - Guna - Karma Jnana	♦ Matching Rasapanchak, Rogagnata, Agryakarma of dravya ♦ Making of charts regarding Aamayika Prayogas, Agrya Karma & Specific Kalpana ♦ Case based activity - one particular disease & suitable plant in order ♦ Critical reading with the help of different indexed research articles ♦ Quiz	17
CO2, CO3, CO4, CO5, CO7, CO8	3. Dravya (Drug) Nama - Guna - Karma Jnana	♦ Moc practical - ♦ 1) 15 dry & 15 wet sampled dravyas potting test ♦ Test should include at least one each from Leaf, Stem, Root, Rhizome, Gall, Flower, Fruit, Seed, Bark & Resin. ♦ Each spot should be solved in 1 minute so 30 minutes activity should be conducted. ♦ 2) Skill based assessment - ♦ There shall be three components in skill assessment ♦ A. Identify and separate Grahya & Agrya of given sample ♦ B. Identifying and grouping of drug of given Mishrak Gana ♦ C. Understand the clinical scenario and identify five suitable single drug ♦ Instructions: Spotting stations are to be numbered as per the batch. Each spotting station contains: A. Mixture of Grahya & Agrya B. Name of Mishrak Gana and	05

		C. Clinical Scenario. Students are allotted with the spotting station by lottery method. ♦ Arrangement of Spotting Stations: ♦ A. Identify and separate Grahya & Agrahya of Given Sample: Sufficient quantity (approximately 20 gm of Vidanga & Maricha) of mixture of Grahya and Agrahya drawn to be provided. There shall be two empty bowls each labelled as 'Grahya' and 'Agrahya'. Students are asked to separate the given sample into Grahya and Agrahya. There shall be different drugs for each station. ♦ B. Identifying and grouping of drugs of given Misra Kana: Each station shall contain one label containing name of the Misra Kana with question 'Recollect the drugs belonging to the given Misra Kana, identify those drugs, collect and make a group'. There shall be empty bowl of sufficient size as per the given Kana for collection of drugs. ♦ C. Understand the clinical scenario and identify five suitable single drugs: Provide the clinical scenario in not less than 100 words and not more than 200 words without investigation report shall be provided at each spotting station (preferably separate cases for each station). Students are asked to go through the scenario and understand the clinical conditions, select 1 single drug, identify, collect and place it in the bowl given for the same. Select five suitable drugs and write as per preference based.	

#Hours indicated are included in calculations of Table 3 and 4

Table 5- Teaching learning method

Sr No	Teaching learning methods in the course	No of Activities
1	Lecture	13

2	LecturewithPowerpointpresentation	100
3	Lecture&GroupDiscussion	35
4	LecturewithVideoclips	19
5	Discussions	42
6	Brainstorming	7
7	PBL	14
8	CBL	7
9	Project-BasedLearning	3
10	TBL	3
11	Teamprojectwork	5
12	Flippedclassroom	22
13	BlendedLearning	13
14	Edutainment	4
15	Mobilelearning	7
16	Roleplays	3
17	Self-directedlearning	14
18	Game-BasedLearning	6
19	LibrarySession	18
20	Peerlearning	16
21	Recitation	1
22	Tutorial	2
23	Presentations	20
24	Demonstration	1

These are overall teaching learning methods listed in Table 3 and 4. Teachers can select the best possible method among the given methods as per objective, available time etc.

Table 6: Assessment Summary: Assessment is subdivided in A to H points

6 A-Number of Papers and Marks Distribution

Subject Code	Papers	Theory	Practical/Clinical Assessment					Grand Total
			Practical	Viva	Elective	IA	Sub Total	

AyUG -DG	2	200	100	70	-	30	200	400

6 B - Scheme of Assessment (formative and Summative)

PROFESSIONAL COURSE	DURATION OF PROFESSIONAL COURSE		
	First Term (1- 6Months)	Second Term (7- 12Months)	Third Term (13- 18Months)
Second	3PA&FirstTT	3PA&SecondTT	3PA&UE**

PA:PeriodicalAssessment;**TT:**TermTest;**UE:**UniversityExaminations.

---** University Examination shall be on entire syllabus !---

6 C - Calculation Method for Internal assessment Marks

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERMASS ESSMENT	
	A 1	B	C	D	E	F	G	H
	1(15 Marks)	2(15 Marks)	3(15 Marks)	Average(A+B+C/3)	Converted to 30 Marks(D/15*30)	Term Test(Marks converted to 30)	SubTotal _/60 Marks	Term Assessment(.../30)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. **Conduct Theory (100 Marks) (MCQ (20*1 Marks), SAQ (8*5), LAQ (4*10)) and Practical (100 Marks) Then convert to 30 marks.							

6 D - Evaluation Methods for Periodical Assessment

S. No	Evaluation Methods
1	Activities Indicated in Table 3-Column G 3 as per Indicated I, II or III term in column I 3

Evaluation Methods in MSE

1. Practical /Clinical Performance
2. Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3. Open Book Test (Problem Based)
4. Summary Writing (Research Papers/ Samhitas)
5. Class Presentations; Work Book Maintenance
6. Problem Based Assignment
7. Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8. Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9. Small Project etc.

6 E Question Paper Pattern

II PROFESSIONAL BAMS EXAMINATIONS AyUG-DG PAPER-1

Time: 3 Hours Maximum Marks: 100 INSTRUCTIONS:

All questions compulsory

		Number of Questions	Marks per question	Total Marks
Q1	MULTIPLE CHOICE QUESTIONS (MCQ)	20	1	20
Q2	SHORT ANSWER QUESTIONS (SAQ)	8	5	40
Q3	LONG ANSWER QUESTIONS (LAQ)	4	10	40
				100

Similar for Paper II (AyUG-DG)

6 F Distribution of theory examination

Paper1FundamentalDravyaguna						
Sr. No	A List of Topics	B Term	C Marks	MCQ (1 Mark)	SAQ (5 Marks)	LAQ (10 Marks)
1	1.DravyagunaVigyana	1	1	Yes	No	No
2	2.Dravya	1	6	Yes	Yes	No
3	3.Guna	1	11	Yes	No	Yes
4	4.Rasa	1	11	Yes	No	Yes
5	5.Vipaka	1	6	Yes	Yes	No
6	6.Virya	1	6	Yes	Yes	No
7	7.Prabhava	1	5	No	Yes	No
8	8.InterrelationofRasa-Guna-Virya-Vipaka-Prabhava	1	1	Yes	No	No
9	9.Karma	1	11	Yes	No	Yes
10	10.KarmasofDashemaniGana	1	5	No	Yes	No
11	11.PrinciplesofGeneralPharmacology	3	20	Yes	Yes	Yes
12	12.MishrakaGana	3	6	Yes	Yes	No
13	13.NomenclatureofdravyaasperNighantu,VedictaxonomyandBotany	3	1	Yes	No	No
14	14.PrashastaBheshaja,BheshajaParikshaanddrugevaluationmethodwithcorrelationasperPharmacognosy	3	1	Yes	No	No
15	15.DravyasangrahanaandDrugcollectionmethodsasperGFCP(GoodFieldcollection	3	1	Yes	No	No

	practices)					
16	16.GCP(Goodcultivationpractices),seedbank,conservationofmedicinalplants,knowledgeaboutRET(Rear,Endangered&Threatened)medicinalplants.	3	1	Yes	No	No
17	17.AbhavaPratinidhiDravya(substitutes)	3	1	Yes	No	No
18	18.Classificationsandtechniquesofaqueousandalcoholicextracts	3	1	Yes	No	No
19	19.AdversedrugreactionandPharmacovigilancewithrecentupdates	3	1	Yes	No	No
20	20.NMPB(NationalMedicinalPlantBoard),CCRAS(CentralCouncilofResearchinAyurvedaSciences),API(AyurvedicPharmacopeiaofIndia),GCTM(GlobalCentreforTraditionalMedicine),PCIMH(PharmacopeiaCommissionofIndianMedicineandHomeopathy)	3	1	Yes	No	No
21	21.VrikshayurvedaandEthno-medicine	3	1	Yes	No	No
22	22.NetworkpharmacologyandBioinformatics	3	2	Yes	No	No
Total Marks			100			

Paper2AppliedDravyaguna						
Sr. No	A List of Topics	B Term	C Marks	MCQ (1 Mark)	SAQ (5 Marks)	LAQ (10 Marks)
23	1.Bheshajavacharaniya(Criteria'stobeconsideredforselectionofdrugsinvyadhis)	2	5	Yes	No	No
24	2.1Dravya(Drug)Nama-Guna-KarmaJnana	2	55	Yes	Yes	Yes

25	2.2Dravya(Drugs)Nama-Guna-Karma-Jnana	3	40	Yes	Yes	Yes
Total Marks			100			

Paper No:1		
Question No	Type of Question	Question Paper Format
Q1	Multiple choice Questions 20 Questions 1 mark each All compulsory Must know part- 15 MCQ Desirable to know- 3 MCQ Nice to know part- 2 MCQ	1. Dravyaguna Vigyana 2. Dravya 3. Guna 4. Rasa 5. Vipaka 6. Virya 8. Interrelation of Rasa-Guna-Virya-Vipaka-Prabhava 12. Mishraka Gana/9. Karma 11. Principles of General Pharmacology 12. Mishraka Gana 13. Nomenclature of dravya as per Nighantu, Vedic taxonomy and Botany 14. Prashasta Bhesaja, Bhesaja Pariksha and drug evaluation method with correlation as per Pharmacognosy 15. Dravya sangraha and Drug collection methods as per GFCP (Good Field collection practices) 16. GCP (Good cultivation practices), seed bank, conservation of medicinal plants, knowledge about RET (Rare, Endangered & Threatened) medicinal plants. 17. Abhava Pratinidhi Dravya (substitutes) 18. Classifications and techniques of aqueous and alcoholic extracts 19. Adverse drug reaction and Pharmacovigilance with recent updates 20. NMPB (National Medicinal Plant Board), CCRAS (Central Council of Research in Ayurveda Sciences), API (Ayurvedic Pharmacopoeia of India), GCTM (Global Centre for Traditional Medicine), PCIMH (Pharmacopoeia Commission of Indian Medicine and Homeopathy) 21. Vrikshayurveda and Ethno-medicine 22. Network pharmacology and Bioinformatics
Q2	Short answer Questions Eight Questions 5 Marks Each	2. Dravya 5. Vipaka 6. Virya 7. Prabhava 10. Karma of Dashemani Gana

	All compulsory Must know- 7 SAQ Desirable to know- 1 SAQ No question on Nicetoknow	6. 11. Principles of General Pharmacology 7. 11. Principles of General Pharmacology 8. 12. Mishraka Gana
Q3	Long answer Questions Four Questions 10 marks each All compulsory All questions on must know . No Questions on Nicetoknow and Desirable to know	1. 3. Guna 2. 4. Rasa 3. 9. Karma 4. 9. Karma
Paper No:2		
Question No	Type of Question	Question Paper Format
Q1	Multiple choice Questions 20 Questions 1 mark each All compulsory Must know part- 15 MCQ Desirable to know- 3 MCQ Nicetoknow part- 2 MCQ	1. 2.2 Dravya (Drugs) Nama-Guna-Karma-Jnana 2. 2.2 Dravya (Drugs) Nama-Guna-Karma-Jnana 3. 2.2 Dravya (Drugs) Nama-Guna-Karma-Jnana 4. 2.2 Dravya (Drugs) Nama-Guna-Karma-Jnana 5. 2.2 Dravya (Drugs) Nama-Guna-Karma-Jnana 6. 2.2 Dravya (Drugs) Nama-Guna-Karma-Jnana 7. 2.2 Dravya (Drugs) Nama-Guna-Karma-Jnana 8. 2.2 Dravya (Drugs) Nama-Guna-Karma-Jnana 9. 2.2 Dravya (Drugs) Nama-Guna-Karma-Jnana 10. 2.2 Dravya (Drugs) Nama-Guna-Karma-Jnana 11. 2.2 Dravya (Drugs) Nama-Guna-Karma-Jnana 12. 2.2 Dravya (Drugs) Nama-Guna-Karma-Jnana 13. 2.2 Dravya (Drugs) Nama-Guna-Karma-Jnana

		14. 2.2Dravya(Drugs)Nama-Guna-Karma-Jnana 15. 2.2Dravya(Drugs)Nama-Guna-Karma-Jnana 16. 2.2Dravya(Drugs)Nama-Guna-Karma-Jnana 17. 2.2Dravya(Drugs)Nama-Guna-Karma-Jnana 18. 2.2Dravya(Drugs)Nama-Guna-Karma-Jnana 19. 2.2Dravya(Drugs)Nama-Guna-Karma-Jnana 20. 2.2Dravya(Drugs)Nama-Guna-Karma-Jnana
Q2	ShortanswerQuestionsEightQuestions 5MarksEachAllcompulsory Mustknow-7SAQDesirabletoknow-1SAQNoquestionsonNicetoknow	1. 2.2Dravya(Drugs)Nama-Guna-Karma-Jnana 2. 2.1Dravya(Drug)Nama-Guna-KarmaJnana 3. 2.2Dravya(Drugs)Nama-Guna-Karma-Jnana 4. 2.1Dravya(Drug)Nama-Guna-KarmaJnana 5. 2.2Dravya(Drugs)Nama-Guna-Karma-Jnana 6. 2.1Dravya(Drug)Nama-Guna-KarmaJnana 7. 2.2Dravya(Drugs)Nama-Guna-Karma-Jnana 8. 2.1Dravya(Drug)Nama-Guna-KarmaJnana
Q3	LonganswerQuestionsFourQuestions 10markseachAllcompulsory Allquestionsonmustknow.NoQuestionsonNicetoknowandDesirabletoknow	1. 2.2Dravya(Drugs)Nama-Guna-Karma-Jnana 2. 2.1Dravya(Drug)Nama-Guna-KarmaJnana 3. 2.2Dravya(Drugs)Nama-Guna-Karma-Jnana 4. 2.1Dravya(Drug)Nama-Guna-KarmaJnana

6 H Distribution of Practical Exam

S.No	Heads	Marks
1	1) 15dry&15wetsampledavyaspottingtest-30minutes Test should include at least one each from Leaf, Stem, Root, Rhizome, Gall, Flower, Fruit, Seed, Bark & Resin.	30
2	2) Skill based assessment- There shall be three components in skill assessment A. Identify and separate Grahya & Agrahya of given sample - 10 minutes B. Identifying and grouping of drug of given Mishra Ka Gana - 10 minutes C. Understand the clinical scenario and identify five suitable single drug - 10 minutes Instructions: Spotting stations are to be numbered as per the batch. Each spotting station contain: A. Mixture of Grahya & Agrahya B. Name of Misra Ka Gana and C. Clinical Scenario. Students are allotted with the spotting station by lottery method. Arrangement of Spotting Stations: A. Identify and separate Grahya & Agrahya of Given Sample: Sufficient quantity (approximately 20 gm of Vidanga & Maricha) of mixture of Grahya and Agrahya dravya to be provided. There shall be two empty bowls each one labelled as 'Grahya' and 'Agrahya'. Students are asked to separate the given sample into Grahya and Agrahya. There shall be different drugs for each station. B. Identifying and grouping of drug of given Misra Ka Gana: Each station shall contain one label containing name of the Misra Ka Gana with question 'Recollect the drugs belonging to the given Misra Ka Gana, identify those drugs, collect and make a group. There shall be empty bowl of sufficient size as per the given Gana for collection of drugs. C. Understand the clinical scenario and identify five suitable single drugs: Provide the clinical scenario in not less than 100 words and not more than 200 words with or without investigation reports shall be provided at each spotting station (preferably separate cases for each station). Students are asked to go through the scenario and understand the clinical conditions, select 1 single drug, identify, collect and place it in the bowl given for the same. Select five suitable drugs and write as per preference base.	30
3	3. QC practical (30 minutes) - Performance based components 3.1. Comparison Macroscopic evaluation of one genuine and one	40

	adulterants sample-10 marks-15 minutes ♦ 3.2. Panchamahabhoutikata assessment by parametric measures by pH of a given sample Phant/Kwatha- (Concern drug Phant/Kwatha should be prepared by college for pH analysis)-10 marks-15 minutes ♦ 3.3. Panchabhautikata assessment by parametric measures by Specific Gravity of a given sample Phat/Kwatha (Concern drug Phant/Kwatha should be prepared by college for Specific Gravity)-20 marks-30 minutes	
4	4. Viva voce (10 minutes per student) Questions should be asked on following topics- ♦ 1. Fundamentals (Dravya, Guna, Rasa, Vipaka ♦ , Veerya & Prabhava)-3 questions-15 marks ♦ 2. Karma, Dashemani, Mishrak Gana-3 questions-15 marks ♦ 3. Pharmacology & Network pharmacology-3 questions-15 marks ♦ 4. Clinical application of drugs-3 questions-15 marks ♦ 5. Viva on practical records-06 marks ♦ 6. Communication skill (4 marks)	70
5	5. Internal Assessment	30
Total Marks		200

References Books/ Resources

S.No	Book	Resources
1	DravyaGunaShastram	VaidyaG.A.Phadke,PradnyaMudranalaya,VaidyaVamanraoDeenanathShuddhaayurvedPathyakramaSamitee,DadabhaiNavrojiPath,Mumbai
2	Bhavaprakasha	SriBrahmasankaraMishraandSriRupalalajivaishya,ChaukhambaSanskritSeriesoffice,Varanasi,
3	AushadhiVigynaShastra(AyurvedicPharmacology)	Sri.VishvanathaDwidevi,ShriBaidyanathAyurvedBhavanPvtLtd;Nagpur
4	AyurvediyaAushadkarmaVigyana	AcharyaV.J.Thakar,GujuratAyurvedaUniversity,Jamnagar
5	BhavaPrakashNighantu	Vd.KrishnaChandraChunekarCommentary,ChaukhambhaSanskritSansthan,Varanasi
6	ClassicalUsesofMedicinalPlants	AcharyaPriyavrataSharma,ChaukhambaVisvabharati,Varanasi
7	SomeControversialDrugsinIndianMedicine	Dr.Bapalal,Vaidya,ChaukhambhaOrientalia,Varanasi
8	DravyagunaKosha	AcharyaPriyavrataSharma,ChaukhambhaOrientalia,Delhi
9	DravyagunaVigyana(Vol.1-3)	Dr.GyanendraPandey,ChaukhambhaKrishnadasAcademy,Varanasi
10	DravyagunaVigyana(Vol.1-2)	AcharyaYadavjiTikramji,BaidyanathAyurvedBhavanLtd
11	DravyagunaVigyana(Vol.1-5)	AcharyaPriyavrataSharma,ChaukhambhaBhartiAcademy,Varanasi
12	NighantuAdarsh(Vol.1-2)	Vd.G.BapaLal,ChaukhambhaBhartiAcademy,Varanasi
13	AyurvedicPharmacology&TherapeuticUsesofMedicinalPlantsDravyagunavignyan	VaidyaVMGogte,ChaukhambhaPublications,NewDelhi
14	Dravyagunavijnana(PartIandII)	Prof.D.S.Lucas,ChaukhambaVisvabharati,Varanasi
15	GlossaryofVegetableDrugsinBrihatrayi	ThakurBalwantSingh&Vd.KrishnaChandraChunekar,ChaukhambhaAmarbhartiPrakashakan,Varanasi
16	IntroductiontoDravyaguna(English)	AcharyaPriyavrataSharma,ChaukhambhaOrientalia,Varanasi
17	ATextBookofDravyagunaVijnana(Vol1,2&3)	Dr.PrakashL.HegdeandDr.HariniA.,ChaukhambhaPublications,NewDelhi
18	Raspanchaka	Prof.ShivCharanDhyani,ChaukhambhaKrishnadasAcademy,Varanasi

19	DravyagunaSiddhanta	Prof.ShivCharanDhyani,ChaukhambhaKrishnadasAcademy,Varanasi
20	TheAyurvedicPharmacopoeiaofIndia,PartIVol.1-VII	MinistryofAYUSH,India,NewDelhi
21	MedicinalPlantsusedinAyurveda(2ndEdition)	RashtriyaAyurvedaVidyapeeth,NewDelhi
22	PlantsofBhavaprakash(English)	Prof.K.C.Chunekar&Dr.N.P.Hota,RashtriyaAyurvedaVidyapeeth,NewDelhi.
23	DatabaseofMedicinalPlantsusedinAyurvedaVol.1to8	CCRASNewDelhi
24	ATextBookofDravyagunaVijnana(Vol.1to2)	Dr.J.L.NSastryandDr.TanujaMNesari.
25	DravyagunaVigyana(Vol.1to2)	Dr.ManasiDeshpandeandDrArvindDeshpande, <i>ChaukhambaSanskritPratisthan</i> .NewDelhi
26	EssentialsofMedicalPharmacology	K.D.Tripathi. JaypeeBrothersMedicalPublishers(P)Ltd
27	PharmacologicalbasisofMedicalPractice	Goodman&Gillman,McGraw-HillEducation
28	PharmacologyandPharmacotherapeutics	SatoskarBhandarkar&Ainapure,PopularPrakashanMumbai
29	TextbookofPharmacognosy	Trease&Evans,Elsevierpublication
30	TextbookofPharmacognosy	Tyler,Brady&Robber,Lea&Febiger,USA
31	QualityControlofHerbalDrugs:AnApproachtoEvaluationofBotanicals	PulokKMukharjee,Elsevier
32	Ausadhinamarupavijnanam(Vol.1and2)	DrSanjeevKumarLale.,Mr.HemrajLale,Indore
33	PracticalPharmacognosy	Dr.K.R..KhandelwalandDr.VrundaSethi,NiraliPrakashanPune
34	Pharmacognosy	S.B.Gokhale,C.K.KokateandA.P.Purohit
35	BotanyofcommonlyusedmedicinalPlantswithDiagnostickeys	Dr.HemaSaneandDr.YoginiKulkarni.VisionPublicationPune
36	BasicBioinformatics	SGladisHepsybaHelen,MJPPublishers
37	PharmacovigilanceinAyurveda	ManjunathAjanal,BSPrasad,ShreddhaUNayak,ChaukhambhaPrakashak,Varanasi
38	CultivationOfMedicinalAndAromaticCrops	AzharAliFarooqi,B.S.Sreeramu,UniversitiesPress(India)Pvt.Ltd.Hyderabad

39	WHO Guidelines on Good Agricultural and Collection Practices (GACP) for Medicinal Plants	World Health Organization, World Health Organization, Geneva
40	Medicinal Plants: Biodiversity, Sustainable Utilization and Conservation	K. Thammasiri, Chunlin Long, Henrik Lutken, Shaik Mahammad Khasim, SpringerLink
41	Network Pharmacology	Shao Li, SpringerLink
42	Vrikshayurveda- Ancient Science of Plant Life and Plant Care	S. Rajasekharan, G. S. Unnikrishnan Nair, Kerala State Biodiversity Board, Kerala
43	Evidence-Based Validation of Herbal Medicine - Translational Research on Botanicals	Pulok K. Mukherjee, Elsevier Science
44	Research updates of Gurvadiguna	1. Vaidyabhushanam K. Raghavan Tirumulpad. Rasavaisheshika. (Text with commentary). Arya Vaidya Sala, Kottakkal Malappuram Dist., Kerala. 2. Interactive workshop on Ayurveda (Dravyaguna), Published by Rashtriya Ayurveda Vidyapeetha, New Delhi. 3. Mishra S, Dwivedi RR, Ravishankar B. Conceptual and applied study of Snigdha and Ruksa Guna with special reference to Rasa-rakta gata Sneha (hyperlipidemia). Ayu. 2011 Apr; 32(2): 200-6. 4. Nair JU, Vyas HA, Nariya MB. An experimental study to evaluate Gunasankarya (combination of properties). Ayu. 2021 Oct-Dec; 42(4): 169-174. 5. Gupta, Monika & Gudipudi, Sarvabhouma & Pujar, Rashmi & Gopikrishna, S. (2019). Clinical aspect of Guna Siddhanta with special reference to Trisutra Ayurveda. 6. 2407-2414.
45	Research updates of Paradiguna	1. Vaidyabhushanam K. Raghavan Tirumulpad. Rasavaisheshika. (Text with commentary). Arya Vaidya Sala, Kottakkal Malappuram Dist., Kerala. 2. Interactive workshop on Ayurveda (Dravyaguna), Published by Rashtriya Ayurveda Vidyapeetha, New Delhi. 3. Gupta, Monika & Gudipudi, Sarvabhouma & Pujar, Rashmi & Gopikrishna, S. (2019). Clinical aspect of Guna Siddhanta with special reference to Trisutra Ayurveda. 6. 2407-2414.

46	Research updates of Shadrasa	1. Vaidyabhushanam K. Raghavan Tirumulpad. Rasavaishika. (Text with commentary). Arya Vaidya Sala, Kottakkal Malappuram Dist., Kerala. 2. Interactive workshop on Ayurveda (Dravyaguna), Published by Rashtriya Ayurveda Vidyapeetha, New Delhi. 3. Standard Protocol for quality assessment of Raw medicinal plants material on the basis of Rasa. Ref: https://aiia.gov.in/wp-content/uploads/2021/12/RASA.pdf 4. Rath SK, Panja AK, Nagar L, Shinde A. The scientific basis of rasa (taste) of a substance as a tool to explore its pharmacological behavior. Anc Sci Life. 2014 Apr-Jun; 33(4):198-202. 5. Gilca M, Dragos D. Extraoral Taste Receptor Discovery: New Light on Ayurvedic Pharmacology
47	Research updates of Vipaka	1. Vaidyabhushanam K. Raghavan Tirumulpad. Rasavaishika. (Text with commentary). Arya Vaidya Sala, Kottakkal Malappuram Dist., Kerala. 2. Interactive workshop on Ayurveda (Dravyaguna), Published by Rashtriya Ayurveda Vidyapeetha, New Delhi. 3. Ranade AV, Shirolkar A, Pawar SD. Gut microbiota: One of the new frontiers for elucidating fundamental of Vipaka in Ayurveda. Ayu. 2019 Apr-Jun; 40(2):75-78.
48	Research updates of Virya	1. Vaidyabhushanam K. Raghavan Tirumulpad. Rasavaishika. (Text with commentary). Arya Vaidya Sala, Kottakkal Malappuram Dist., Kerala. 2. Interactive workshop on Ayurveda (Dravyaguna), Published by Rashtriya Ayurveda Vidyapeetha, New Delhi.

49	ResearchupdatesofPrabhava	♦ 1. VaidyabhushanamK.RaghavanTirumulpad. Rasavaishika.(Textwithcommentary).AryaVaidyaSala,KottakkalMalappuramDist.,Kerala. ♦ 2. InteractiveworkshoponAyurveda(Dravyaguna),PublishedbyRashtriyaAyurvedaVidyapeetha,NewDelhi.
50	ResearchupdatesofKarma	♦ 1. VaidyabhushanamK.RaghavanTirumulpad. Rasavaishika.(Textwithcommentary).AryaVaidyaSala,KottakkalMalappuramDist.,Kerala. ♦ 2. InteractiveworkshoponAyurveda(Dravyaguna),PublishedbyRashtriyaAyurvedaVidyapeetha,NewDelhi.

Abbreviations

Assessment

S.No	Short form	Discription
1	T-EMI	Theoryextendedmatchingitem
2	T-EW	TheoryEssaywriting
3	T-MEQs	TheoryMEQs
4	T-CRQs	TheoryCRQs
5	T-CS	Theorycasestudy
6	T-OBT	Theoryopenbooktest
7	P-VIVA	PracticalViva
8	P-REC	PracticalRecitation
9	P-EXAM	Practicalexam
10	PRN	Presentation
11	P-PRF	PracticalPerformance
12	P-SUR	PracticalSurvey
13	P-EN	Practicalenact
14	P-RP	PracticalRoleplay
15	P-MOD	PracticalModel
16	P-POS	PracticalPoster
17	P-CASE	PracticalCasetaking
18	P-ID	Practicalidentification
19	P-PS	PracticalProblemsolving
20	QZ	Quiz
21	PUZ	Puzzles
22	CL-PR	ClassPresentation,
23	DEB	Debate
24	WP	Wordpuzzle
25	O-QZ	Onlinequiz

26	O-GAME	Onlinegame-basedassessment
27	M-MOD	MakingofModel
28	M-CHT	MakingofCharts
29	M-POS	MakingofPosters
30	C-INT	Conductinginterview
31	INT	Interactions
32	CR-RED	Criticalreadingpapers
33	CR-W	CreativityWriting
34	C-VC	Clinicalvideocases,
35	SP	Simulatedpatients
36	PM	Patientmanagementproblems
37	CHK	Checklists
38	OSCE	OSCE
39	OSPE	OSPE,
40	Mini-CEX	Mini-CEX
41	DOPS	DOPS
42	CWS	CWS
43	RS	Ratingscales
44	RK	Recordkeeping
45	COM	Compilations
46	Portfolios	Portfolios
47	Logbook	Logbook
48	TR	Trainersreport
49	SA	Self-assessment
50	PA	Peerassessment
51	360D	360-degreeevaluation
52	TT-Theory	Theory
53	PP-Practical	Practical
54	VV-Viva	Viva

Domain

S.No	Short form	Discription
1	CK	Cognitive/Knowledge
2	CC	Cognitive/Comprehension
3	CAP	Cognitive/Application
4	CAN	Cognitive/Analysis
5	CS	Cognitive/Synthesis
6	CE	Cognitive/Evaluation
7	PSY-SET	Psychomotor/Set
8	PSY-GUD	Psychomotor/Guided response
9	PSY-MEC	Psychomotor/Mechanism
10	PSY-ADT	Psychomotor Adaptation
11	PSY-ORG	Psychomotor/Origination
12	AFT-REC	Affective/ Receiving
13	AFT-RES	Affective/Responding
14	AFT-VAL	Affective/Valuing
15	AFT-SET	Affective/Organization
16	AFT-CHR	Affective/ characterization

T L method

S.No	Short form	Discription
1	L	Lecture
2	L&PPT	Lecture with Power point presentation
3	L&GD	Lecture & Group Discussion
4	L_VC	Lecture with Video clips
5	DIS	Discussions
6	BS	Brainstorming
7	IBL	Inquiry-Based Learning
8	PBL	PBL
9	CBL	CBL
10	PrBL	Project-Based Learning
11	TBL	TBL
12	TPW	Team project work
13	FC	Flipped classroom
14	BL	Blended Learning
15	EDU	Edutainment
16	ML	Mobile learning
17	ECE	ECE
18	SIM	Simulation
19	RP	Role plays
20	SDL	Self-directed learning
21	PSM	Problem solving method
22	KL	Kinesthetic Learning
23	W	Workshops
24	GBL	Game-Based Learning
25	D-M	Demo on Model

26	LS	Library Session
27	PL	Peer learning
28	RLE	Real life experience
29	REC	Recitation
30	SY	Symposium
31	TUT	Tutorial
32	PER	Presentations
33	PT	Practical
34	XRy	X ray identification
35	CD	Case diagnosis
36	LRI	Lab report interpretation
37	DA	Drug analysis
38	D	Demonstration
39	D_BED	Demonstration bedside
40	D_L	Demonstration Lab
41	DG	Demonstration Garden
42	FV	Field visit
43	PRA	Practical

Rasashastra evam bhaishajyakalpana
Topic 2 : Contents of Course

Paper1AyurvediyaAushadhiNirmanaVigyana					
Sr. No	A2 List of Topics	B2 Term	C2 Marks	D2 Lecture hours	E2 Non- Lecture hours
1	1.ChronologicaldevelopmentofAyurvediyaAushadhiNirmana Definition,chronologicaldevelopment,significanceandscopeofRasashastraandBhaishajyaKalpana.ConceptofRasashala,RasamandapaandBheshajagaraConceptofRas-RasayanaBriefingonIndiansarefirsttoppreparemetalbasedmedicinesandRecentdevelopmentinAyurvedicPharmaceuticals.	1	05	2	1

2	2.Paribhasha(Terminology) 1. DefinitionandImportanceofParibhasha 2. WordDerivation- Aushadha,Bheshaja,Kalpana,Kashaya,Panchakasha yaYoni,Samskara3.Dravya/VargaParibhasha- (ClassicalNames,Englishnames,ChemicalComposit ion/Formula) A) Rasa,Maharasa,Uparasa,Dhatuvarga,Upadhatu,Ratn a,Uparatna,Sudhavarga,Sikatavarga,Lavanavarga,Visha ,Upavisha,Kajjali,Mitrpanchaka,DravakaGana, B) Sandigdha(Contraversial):Vaikranta,Chapa la,Rasanjana,Pushpanjana,Vahnijara,Girisindu ra,Kankushtha. C) Anupalabdh(NotAvailable):Rasaka,Sauviranjana D) Krutrima(Artificial):Sasyaka,Gandhaka,Kasis a,Rasanjana,Hingula E) Pratinidhi(Substitute):VajrabhaveVaikranta,Suvarna -SuvarnaMakshika 4.PrakriyaParibhasha- A) Shodhana:TypesofShodhana,SamanyaShodhana ,VisheshaShodhana,DifferenttechniquesusedforSho dhana,Swedana,Mardana,Dhalana,Nirvapa,Nirjalee karana,Nimajjana,Bhavana,Bharjana B) Marana,:Definition,ImportanceofMarana,TypesofM arana- AgnipakaMethod,PutapakaMethod,KupipakwaMethod, BhanupakaMethod,SwangaSheeta C) Amrutikarana,Lohitikarana D) Sattvapatana,Shuddhavarta,Beejavarta E) Druti:Definition,Drutilakshana F) ParadaSamskara:Definition,Importanc e,Ashtasamskara ParadaJaranaa,Murchchhana,NamesofParad-Bandhas 5) PramanikaranaParibhasha(TermsforStandardization)- A) Grahya-Agrahyattva,Siddhilakshana B) Bhasmapariksha:Varitara,Rekhapurnata,Unama,	1	10	8	4

	Slakshnattva, Sukshma, Anjana Sannibha, Dantagrena Ka chakacha Bhavati, Varna, Avami, Apunarbhava, Niruttha, Gata Rasattva, Nischandrattva, Niramlattva, Nirdhumattva, Jihvagreahyamanattva, Dadhi/Nimbu Pariksha, 6) Puraka Paribhasha (Supplementary)- Rudra Bhaga, Dhanvantari Bhaga 7) Mana- Paribhasha- A) Definition, Classical Types B) Classical and Modern- Conversion chart as per AFI, Scientific Metrology C) Essential Kala-mana.				
3	3. Adharbhuta Siddhanta (Application of fundamental principles) Dravya Sangraha and Samrakshana • Time of drug Collection • General Rules • Specific time for specific plant part collection • Time of the day for drug collection • Collection of Pranija Dravya • Place of Drug collection Bhumimaha bhuta predominance • Places from where drug should not be collected • Stage of drug collection • Rule of Duplication (Dwiguna Mana Ganana) • Ardra and Shushka Dravya mana • Dravya Sangraha Vidhi and Dravya samrakshana • Rasa, Guna, Virya, Vipaka, Prabhava Anukta Visheshokt agra hana: Considering Anukta Dravya Aushadha Namakarana: Naming and Preparation Aushadha Sevana Kala: Time of Drug Administration Savee ryata Avadhi (Shelf life of different kalpana) Aushadha Matra: Dosage/Posology Anupana & Sahapana (Adjuvant) Youngika Dravya Siddhanta (Drug Combination)	1	05	4	2
4	4. Yantropakaranani- I (Equipments and machineries) Principles involved, currently used yantras, their correlation, utility, and Instruments used in Large scale Production Dola Yantra Valuka Yantra Puta Yantra Khalwa Yantra Patana Yantra Darvika Yantra Ulukhala Yantra Patala Yantra Kupi Yantra Arkapatan Yantra Pithara Yantra	1	05	6	4

	Sharava Yantra Pa lika Yantra Sthali Yantra Swedana Y antra Vidyadhara Yantra Modern Machinery- Grinder Disintegrator Pulverizer Powd er Mixer Mechan icalsifter Ballmil l Granulator Dryer Tablet compressing machin e Pill making machine Coati ng pan Polishing pan End runner machine Ed gerunner machine Caps ule filling machine Oint ment mixer Tube filling machine Si eves & Meshes Liquid f illing machine Distillat ion plant Strip packing machine Pouch filling machine Pyrometer				
5	5. Yantropakaranani-II (Equipments, fuel and Heating Devices) Principle involved, importance of temperature, currentl y used heating devices utility, quantum of heat and Instru ments used in Large scale Production Puta-Chandra Puta Surya Puta M aha Puta Gaja Put a Varaha Put a Kukkut a Put a Kapota Put a Lavak P uta Budhar P uta Gorvara P uta Valuka Pu ta Kumbha/Bhanda Puta Musha Samany a Musha Crucibl es-Silica Mudra	1	05	5	4

	SandhiBandhanMaterial Koshthi- ChullikaAng arKoshthi SatwapatanBhrashtri GasStove HotPlateHeatin gMantleInducti onStoveHotAir Oven MuffleFurnace-HorizontalandVertical HeatingMaterial- Solid- Kashtha,coal(wooden/stone),Kshara,Lavana,Valuka,Sh akrit,Dhanya Drava-Jala/steam,Taila Indirectheating-DhanyaRashi,Bhugarbhashthapana				
6	6.KalpanaNirmanal(Primary&Secondarydosagefor ms) Definition,classificationwithsuitableexamples,refere nceingredients,quantity,methodofpreparation,princ ipleinvolved,instrumentsusedinsmallandlargescalep roduction,siddhilakshana,storage,shelflife,moderna spectofrelatedpreparationofthefollowingPanchavid haKashyaKalpana(Primarydosageforms): Swarasa, Kalka,Kwatha,Hima,Phanta Upaklpana(Secondarydosageforms): Kalka: ChurnaKalpana Kwatha: PramathyaKalpana,PaniyaKalpana,Ushnodaka, KsheeraPakaKalpana,LakshaRasa,MamsaRasa HimaKalpana: ManthaKalpana,UdakaKalpana,PanakaK alpana PhantaKalpana: Arka	1	10	6	4

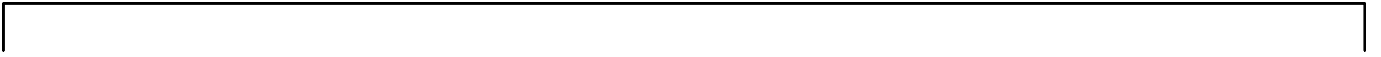
7	7.KalpanaNirmana-II(MethodofPreparationofdifferentdosageforms&DietarySupplements))Avaleha Definition,reference,essentialingredients,generalmethodofpreparation,specificrulesofavalehapreparation,importanceoftemperature,siddhilakshana,shelflifewithexamplesi.eVasavaleha,Kushmandaavaleha,researchupdatesonAvalehaKalpana,marketsurvey SnehaKalpana AimsofSnehaKalpana,definition,reference,essentialingredients,generalmethodofpreparation,specificrulesofsnehapreparation,importanceoftemperature,grithamurchana,tailamurchana,snehasiddhilakshana,typesofsnehapaka,Patra(GandhaPaka),timedurationtocooksnehapreparation,shelflifewithexamplesPhalagritaand	1	10	5	4
	KsheerabalaBalaTaila,ConceptofAvartana,Researchupdatesonsnehakalpana,marketsurvey SandhanaKalpana Introduction,significanceofsandhanakalpana,classification,differencebetweenMadhyaandShuktaKalpana,generalmethodofpreparation,essentialingredients,anuktaManasandhanavidhi,observations,Burnigcandletest,Lime waterTest,importantfactorsinAsavaArishtaPreparationlikesandhananpatraselection,placeforfermentation,importanceoffroomtemperature,sandhanakala,addingofhoney,bhasma,prakshepakadravya,differencebetweenAsava&Arishta,shelflifeandalcohol%withexamplesDraksharistaandUsheerasava,ResearchupdatesonSandhanaKalpana,marketsurvey PathyaKalpana Definition,significanceofPathya,types,general,methodofpreparationManda,Peya,Yavagu,Vilepi,AnnaorOdanaKalpana,Krashara,Yusha,Takra,Khada,Kambalika,Raga,Shadava,RelatedResearchupdates,MarketsurveyofDietarySupplements				

8	8.RasaDravyaParichaya-I Synonyms,minerologicalidentification,sources,types,g rahyaandagrahyata,doshas,shodhana,maranaandoth erprocessingtechniques,ProbablePhysico- chemicalChanges,importanceoftemperaturewhileproc essing,yoga,Researchupdatesofthefollowing MusttoknowDrugsPar ada(mercury)Abhraka(BiotiteMica)Makshika(Chalco-pyrite) Shilajatu(AsphaltumPunjabianum) Gandhaka(Sulfur) Gairika(RedOchre)Ka nkshi(Alum)Haratala(Orpiment)Manahshila (Realgar) Kampillaka(MallotusPhilippinensi s)Navasagara(Ammoniumchloride) Hingula(RedCinnabar) Swarna(Gold)Raj ata(Silver)Tamra (Copper)Loha(Ir on)Mandur(rustir on)Vanga(Tin) Naga(Lead)Yash ada(Zinc)Mukta(Pearl),Pravala(Co ral)	2	10	12	4

	Vajra(Diamond)Kapa rda(Cowries)Shukti(O ysterShell)Shankh(Co nchShell)Godanti(Gy psum) Samudraphena(CattleFishbone)Ku kkutandatwak(Hen'sEggShell)Tan kanakshara(Borax)				
9	9.RasaDravyaParichayaII Synonyms,mineralogicalidentification,sources,types, grahyaandagrahyata,shodhana,maranaandotherpro cessingtechniqueswithprobablechemicalreactions,th eimportanceoftemperature,yoga,researchupdatesoft hefollowing:Desirabletoknowdrugs: Sasyaka(Peacockore)Kase esa(GreenVitriol), Gauripashana(Arsenicoxide);Trina kanta, Akika(Agate),Sudh a(Limestone),Khati ka Ajashthi; Jaharmohara(Serpentine)Dugdhapa shana(Talc)	2	5	7	6
10	10.RasadravyaParichayaIII Synonyms,MinerologicalIdentification,sources,types ,Grahya,Agrahyata,Shodhana,Marana,ProbableCh emicalChanges,Properties,dose,Ashuddha/Apakwa BhasmaSevanajanyaVydhiandtheirshantyupaya,yog a,Researchupdates Nicetoknowdrugs: Vaikrantha, Vimala(IronPyrite),C hapala RasakaAnja naKankusth aAgnijara GiriSindura(RedoxideofHg)Mri ddarashringa(Litharge)Kamsya(Bronze) Pittala(Brass)Var taloha. Manikya(Ruby)Tarks hya(Emerald)Pushpar aga(Topaz)Nilam(Sap phire) Gomeda(ZirconorCinnamonestone)	2	5	3	6

	Vaidurya(Catseye)Mrig ashringa(Staghorn)Sikat a(Silica) Vyomashma(Sangeyashab- Jade)Kousheyashma(Asbestos)Bad arshama(silicateoflime)				
11	11.KalpanaNirman- III(MethodofPreparationofdifferentdosageforms) SharkaraKalpana - Generalmethodofpreparation,differencebetwee nsharkarakalpanaandsyrup,importanceoftemper ature,precautions,confirmatorytests,packing,pre servation,shelflifewithExampleofTulasiArkaSh arkara Gudapaka GeneralMethodofPreparation,importanceoftem perature,precautions,confirmatorytests,packing, preservation,shelflifewithExampleofManibhadr aGuda,GudaPippali LavanaKalpana GeneralMethodofPreparation,importanceoftemperature, precautions,confirmatorytests,packing,preservation,shel flifewithExampleofNarikelaLavana KsharaKalpana - GeneralMethodofPreparation,importanceoftem perature,precautions,confirmatorytests,packing, preservation,shelflifewithExampleofKadaliKsh ara,chinchaKshara AyskritiKalpana - GeneralMethodofPreparation,importanceoftem perature,precautions,confirmatorytests,packing, preservation,shelflifewithExampleAyaskriti LepaKalpana GeneralMethodofPreparation,importanceoftem perature,precautions,confirmatorytests,packing, preservation,shelflifewithExampleof	2	10	8	6

	AvalgunjadiLepa,KeshavardhakaLepa.				
12	12.ChaturvidhaRasayana Introduction,definition,importance,types,Procedure ,necessaryequipment,Shelflifewithfollowingexample KharaliyaRasayana: ShwasakuthararasaandVatavidw ansanarasa ParpatiRasayana: Lohaparpatiandsudhaparpati Kupip akwaRasayana: RasasidhuraandRasakarpura PottaliRa sayana: TamragarbhapottaliandLohagrarbhapottali	2	10	4	4
13	13.CurrentandemergingtrendinAyurvedicpharmac euticals Cosmetics- Formulation,RegulatoryProvisions BriefIntroductionto Cosmetics- Formulation,RegulatoryProvisions,PlantLayoutandother factoryrequirements,processusedinthemanufactureofCos metics,MostcommonlyusedcosmeticRawmaterials,Contr olofmicrobialcontaminationinthemanufactureofcosmetic sandQualityControlofcosmetics,SkinSensitizationSensiti vityTesting,Invitro- TestsforSkinIrritation,QualityControlofRawmaterials,In termediatesandFinishedProducts,StabilityofCosmetics In troductiontoDosageforms Introduction,Classificationof Dosageforms(Soliddosageforms,Liquiddosageformsand Semisoliddosageforms),Needofdosageforms.	3	5	3	4
14	14.GMP(ScheduleT)&RegulatoryaspectsofAyurvedic drugs Briefoverviewoffollowing DrugandCosmeticsAct1940andRules1945 imp ort,manufacture,saledistributionofdrugsandcos meticsstandardsquality,misbranded,adulterate d,spuriousdrugsandcosmeticsasamendedfromti metotime. NewActsrelatedtoDrugsandDevices. GoodManufacturingPractices(GMP)ofASUD rugsinaccordancetoSchedule-T FoodSafetyandStandardsAuthorityofIndia (FSSAI)and FDA ApprovalDrugs.	3	5	2	4
Total Marks			100	75 hr	57 hr



Paper2AyurvediyaAushadhiPrayogaVigyana					
Sr. No	A2 List of Topics	B2 Term	C2 Marks	D2 Lecture hours	E2 Non-Lecture hours
15	1.AushadhiPrayogaVigyana Introduction,Ethymology,ScopeofAushadhiPrayogavigyanaPrashasthabheshajaLakshana	1	5	1	2
16	2.Singledrug(Herbal&Mineral) Singledrugitsvarietyofformulationsandtheirdifferen tindications•Chemical/phytochemicalcomposition • Pharmacodynamicsandpharmacokineticsaspe rformulation • Therapeuticproperties • AwasthanusaraUses(asapplicable) • Matra • Anupana • Pathyapathya • SevanaKala • Kalamaryada(durationofmedicationasapplicable) • Sideeffectsofmedication(asapplicable) • Researchupdatesandclinicalevidencesforeachoft hefollowingformulations Guduchi GuduchiSwarasa(Sha.Sam.Ma.Kh.Chp1/7page 138) GuduchyadiChurna(B.R.PleehayakrutRogdhikara)Gud uchiKwatha(B.R.Jwaradhikara) GuduchiHima(B.R.ChardiRogadhikara) GuduchiGhana- SamshamaniVati(AFIPartIIPage183)GuduchiSatva(AF I-PartI,Page205) Amrutadi Guggulu(AFI-Part III, Page 107)Amritarishta(AFIPartIpage6) Amalaki AmalakiSwarasa(Sha.Sam.Ma.Kha.)Amala kyadiChurna(Sha.Sam.M.Kha.Churnakalpana)Triph alaRasayana(Cha.Chi.RasayanaAdhyaya)Chyavanap rasha(AFIPartIpage37) DhatriLauha(AFIPartIPage284) AmalakyadiGutika(Sha.Sam.Ma.Kha.VatiKalpana)Pha latrikadiKwatha(Sha.Sam.Ma.Kha.KwathaKalpana)Tri phalaGhrita(Sha.Sam.Ma.Kha.GhritaKalpana) Bhallat aka BhallatakaModaka(B.R.Pleeha- YakritRogadhikara)BhallatakaGhrita(B.R.GulmaR ogadhikara)BhallatakaGuda(B.R.ArshaRogadhikar a)BhallatakadiTaila(B.R.NadivrinaRogadhikara)B hallatakaAvaleha(B.R.ArshaRogadhikara)	1	10	8	2

	BhallatakadiLepa(B.R.KushtaRogadhikara)Bhallataka diKwatha(B.R.UrusthabhaRogadhikara)Note:ForBhall atakaadditional ashuddha, avidhi sevanajanyavyadhiandtheirshantyupayaGandhaka Gandhakachurna(SYpage217) Gandhaka Rasayana(AFI-Part II, Page 115)GandhakaDruti(RRR3rdChapter)Ga ndhakaTaila(R.T.8thChapter) GandhakadyaMalahara(AFI- PartII,Page165)GandhakadiLepa(RRSShiroro gaChikitsa)GandhakaVati(B.R.Agnimandya Rogadhikara)Gairika GairikaPradeha(Cha.Chi.VisarpaRogadhyaya LaghusutashekharaRasa(AFIPartIIPage282) GairikadyaMalahara(AFI- PartIII,Page224)GairikadyaGutikanjana(B.R. Netraroga)Gairikarasakriya(Cha.Chi.26/235) Varnakaralepa(Cha.Chi.25/117)				
17	3.Singledrug(Bhasma,Shuddha&Pishti) • Singledrug/formulationanditsmodeofactionind ifferentindications •Chemical/phytochemicalcomposition • Pharmacodynamicsandpharmacokineticsaspe rformulation • Therapeuticproperties • AwasthanusaraUses(asapplicable) • Matra • Anupana • Pathyapathya • SevanaKala • Kalamaryada(durationofmedicationasapplicable) • Sideeffectsofmedication(asapplicable) • Ashuddhaapakwa,avidhisevanajanyavyadhiand theirshantyupaya, • Researchupdatesandclinicalevidencesforeachoft hefollowingformulations: AbhrakaBhasma SwarnaMakshikaBhasmaS warnaBhasma RajataBhasmaLau haBhasmaTamra BhasmaVangaBh asmaNagaBhasma YashadaBhasmaK asisaBhasmaShud dhaShilajatuShud dhaGandhaka ShuddhaGairika	2	15	12	6

	ShuddhaKankshiMukt aPishti&Bhasma PravalaPishti&BhasmaVaj raBhasma KapardaBhasma ShankhBhasmaG odantiBhasmaSh uddhaTankanaSh uddhaKankshi				
18	4.AushadhiKalpa-I(Compoundformulations) •Chemical/phytochemicalcomposition • Pharmacodynamicsandpharmacokineticsaspe rformulation • Therapeuticpropertiesanditsmodeofactionind ifferentindications, • AwasthanusaraUses(asapplicable) • Matra • Anupana • Pathyapathya • SevanaKala • Kalamaryada(durationofmedicationasapplicable) • Sideeffectsofmedication(asapplicable) • Ashuddhaapakwaprocessed,avidhisevanajanya vyadhiandtheirshantyupaya, • Researchupdatesandclinicalevidencesforeachoft hefollowingformulations: KharaliyaRasayana • ArogyavardhiniGutika:A.F.I.- I,Rasayoga,20:4,R.R.S.VisarpaChi.20/106 • KumaraKalyanaRasa:A.F.I.- I,Rasayoga,20:9,B.R.Balaroga/163 • GarbhapalaRasa:A.F.I.- II,Rasayoga,16:14,R.T.Sa.Part-I,140 ChandraprabhaVati:A.F.I.- I,VatiGutika,12:10,Sha.Sa.M.7/40 • PravalaPanchamritaRasa:A.F.I.- II,Rasayoga,16:37,B.R.Gulma/139 • AnandbhairavaRasa:A.F.I.- I,Rasayoga,20:3,R.Sa.Sa.Jwara2/103 • YogendraRasa:A.F.I.- I,Rasayoga,20:31,B.R.Vatavyadhi/506 • LaxmivilasRasa:A.F.I.- I,Rasayoga,20:39,B.R.Rasayana/55 • VasantakusumakaraRasa:A.F.I.- I,Rasayoga,20:42,R.Sa.Sa.RasayanaVajikarana /80 • VasantamaltiRasa:A.F.I.- I,Rasayoga,20:41,Si.Bhai.Ma.Ma.Jwara/60	2	15	16	4

	• BrihatVataChintamaniRasa:A.F.I.-I,Rasayoga,20:26,				

B.R., Vata vyadhi/502 • Shankha Vati: A.F.I.- I, Vati Gutika, 12:32, B.R. Agnimandya/182 • Shwaskuthara Rasa: A.F.I.- I, Rasayoga, 20:49, Yo. Ra., Swasa/Page 373 • Kamadudha Rasa: A.F.I.- II, Rasayoga, 16:9, R. Ta. Sa. Kharaliya Rasayana/80 • Sutashekhar Rasa: A.F.I.- II, Rasayoga, 16:63, Yo. Ra. Amlapita/Page 125 • Navayasa Loha: A.F.I.- II, Lauha, 17:2, Cha. Sa. Chi. 16/70 • Ichchhabhedi Rasa: A.F.I.- I, Rasayoga, 20:5, B. Ra. Udararoga/84 • Krimikuthara Rasa : A.F.I. - II, Rasayoga, 16:12, R. Ta. Sa. Kharaliya Rasayana / P. 103 Parpati Rasayana • Panchamruta Parpati: A.F.I.- I, Parpati, 16:1, B. R. Grahani/461 • Bola Parpati: A.F.I.- I, Parpati, 16:2, Yo. R., Pradara/P842 Kupipakwa Rasayana • Swarna Vanga: A.F.I.- I, Kupipakwa, 15:9, Rasamruta 3/95 • Makaradhwaja: A.F.I.- I, Kupipakwa, 15:2, B. R. Vajikarana 2/237 • Sameerpannaga Rasa: A.F.I. - I, Kupipakwa, 15:8, A.A.G.S. Part-4 Page 88 Pottali Rasayana • Hemagarbha Pottali: A.F.I.- II, Rasayoga, 16:66, Rasamruta Rasavigyaniya 9/2 18				

19	5.AushadhiKalpa-II(CompoundDrugs/Formulations) • Chemical/phytochemicalcomposition • Pharmacodynamicsandpharmacokineticsaspe rformulation • Therapeuticpropertiesanditsmodeofactionind ifferentindications, • AwasthanusaraUses(asapplicable) • Matra • Anupana • Pathyapathya • SevanaKala • Kalamaryada(durationofmedicationasapplicable) • Sideeffectsofmedication(asapplicable) • Improperlyprocessed,avidhisevanajanyavyadhi andtheirshantyupaya, • Researchupdatesandclinicalevidencesforeachoft hefollowingformulations: DashamoolaKwatha(AFIPartIPage55)Mahamanjista diKwatha(AFIPartIPage59)	3	15	14	2
	PushyanugaChurna(AFI- PartI,Page113)SudarshanaChurna(AFIPartIP age116)LavanaBhaskaraChurna(AFI- PartI,Page114)BilvadiGutika(AFIPartIPage1 88) ChitrakadiGutika(AFI- PartI,Page186)SanjivaniVati(B.R.Jwara dhikara)VyoshadiVati(AFIPartIIIPage25 3) BalaChaturbhadraRasa(B.R.Balarogadhikara)SimhanadaGuggulu(AFI- PartI,Page71)YogarajaGuggulu(AFI- PartI,Page69)Chyavanaprashavaleha(AFIPart Ipage37)Dadimavaleha(Y.R.Jwarataradhy a)PanchagavyaGhrita(AFIPartIPage90)Brah miGhrita(AFIPartIPage93) NarayanaTaila(AFIPartIPage138)Neelib hringadiTaila(AFIPartIPage139)Pancha gunaTaila(AFI- PartII,Page145)Aravindasava(AFIPartIp age7)Ashokarishta(AFIPartIpage8)Kum aryasava(AFIPartIpage10)Kutajarishta(AFIPartIpage10) GandhakadyaMalahara(AFI- PartII,Page165)LepaGuti(AFIPartIIIPage232)				

20	6.DosageForms&CosmeticProducts Definitionofdosageform,-Cosmetics Advantagesanddisadvantagesofcurrentlyavailabledosageformsandcosmetics.Routeoftheir administration.ResearchupdatesonmodificationofclassicalAyurvedicdosageformsandrelevantcasestudies.	3	5	5	2
21	7.Nutraceuticals Introduction Types,nonIndiannutraceuticalsandtheirusesAyurvedicPerspectiveofNutraceuticals withspecialreferencetodieticpreparation,rasayanawithoneexamplesforeachcategory,modeofaction,nutritionalvaluecalculation,researchupdatesandcasestudiesonbelowmentionedcategory GeneralHealth: Kushmandaavaleha PediatricHealth: PreenanaModaka(Kashyapa) GeriatricHealth: Chavanaprashaavaleha ReproductiveHealth: PhalaGrita Women'shealth: Soubhagyashuntipaka,Shatavarigrita Cardio-protective: ArjunaKsheerapaka&Rasonaksheerapaka Sportsendeavor: Kharjuradimantha Mentalhealth: BrahmaRasayana	3	5	6	1
22	8.AnupanaPrayogaforAushadhiKalpa	3	5	4	1

Properties of Anupana Factors to be considered for selection of Anupana • Dosha • Aushadha • Roga/Rogi • Ahara Purpose of Anupana Contraindications of Anupana Eka Kalpa Vyadhi anusara aneka Anupana for following yogas 1. Kaishore Guggulu: Sarangadhar Samhita, Madhyamkhanda-7/72-81, P:1362. Yogaraj, Guggulu: Sarangadhar Samhita Madhyam khanda- 7/56-69, P:1353. Narayana Churna: Sarangadhar Samhita of Pandit Sarangadharacharya,, Madhyamkhanda-7/83-91, P:123-1244. Rasa Sindoor: Rasa Tarangini Hindi commentary of Sri Sadananda Sarma, Chaukhambha Surbharti, Murcchanavigyaniya Taranga, 6/203-234, P:125-1275. Rasa Parpati: Rasa Tarangini of Sri Sadananda Sarma, Chaukhambha Surbharti Prakashan, Murcchanavigyaniya Taranga, 6/144-153, P:116-1176. Kankayan Vati: Sarangadhar Samhita Surbharti Prakashan, Madhyamkhanda, 7/50-55, P:134-135)				

23	9.Aushadhi Prayoga MargaIntroduction Typesinayurveda Advantages and disadvantages of each aushadhi prayogamarga and probable mode of action after administrationoffollowingdosageformsinbelowmenti onedroutes 1. Mukha(OralCavity):Vati,Gutika,Churna,Asava,Ari shta,Kashaya,Avaleha,Khanda,Sneha(Ghrita/Taila), 2. Nasa(NasalRoute)-Dosageformused- Churna,taila,swarasa,arka 3. Karna(ThroughEar)-Taila,Ghrita 4. Akshi(ThroughEyes)--Ghrita,Taila, 5. Twak(ThroughSkin)- Lepa,Alepa,Pralepa,Malahara,upanaha,pradeha,abhya nga,udvartana • Shirodhara-Takra • Abhyanga-SahacharadiTaila • AshtiBhagna-MurivennaTaila • Vrana-JatyadiTaila • Smashru–ShankhaBhasma • KeshaGhanata-BringarajaTaila • AkalaPalita–HasthiDantaMasi • Indralupta–IcchabhediRasa • Lomashatana–LomashatanaLepa 6. Guda(AnalRoute)-Dosageforms- Vartis,taila,ghrita,kalka,churna,kashaya 7. Mutramarga(Throughurethra)-UttaraBastiwith	3	10	5	1

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	Dosageforms-Taila,ghrita 8.Yonimarga(Throughvagina)- YoniDharana,YoniDhavana,YoniPichu,YoniDhoopana				
24	10.RationalprescriptionalongwithsafedisensingofAyurvedicformulations. RationalprescriptionalongwithsafedisensingofAyurvedicformulationsasperNABHguideline	3	5	1	4
25	11.Traditional&LocalhealthPractices IntroductiontoTraditional&LocalhealthPracticesandGovernmentinitiativestopreserveit.BriefintroductiontoTKDL	3	5	2	4
26	12.PharmacovigilanceforAyurvedadrugs PharmacovigilanceandAdverseDrugReactions(ADR)PharmacovigilanceProgrammeofAyurveda,Siddha,UnaniandHomeopathy(ASU&H)Drugs CentralSectorSchemeandCentresofPharmacovigilanceofASU&HDrugs	3	5	1	4
Total Marks			100	75 hr	33 hr

Table 3: Learning objectives (Theory) of Course

Paper1AyurvediyaAushadhiNirmanaVigyana									
A3 Course outcome	B3 Learning Objective (At the end of the session, the student should be able to)	C3 Domain/sub	D3 Must to know / desirable to know / Niceto know	E3 Level Does/ Show show/ Know show/ Know	F3 T-L method	G3 Assessment (Refer abbreviations)	H3 Formative/summative	I3 Term	J3 Integration
Topic 11.Chronological development of Ayurvediya Aushadhi Nirmana (Lecture :2 hours, Non lecture: 1 hours)									
CO1	ExplainhistoricalevolutionofAyurvediyaushadhinirmanand Rasashastra.	CK	MK	K	L&GD	TT-Theory	F&S	I	
CO1	DescribeaboutcontributionofNagarjunaAcharyatoRasashast ra	CK	MK	K	L_VC	TT-Theory	F&S	I	
CO1	EnlistimportantclassicaltextsofRasashastraanddescribetheir uniquefeaturesinshort.	CK	DK	K	L&PPT	TT-Theory	F&S	I	
CO1	DescribestructureofPharmacyandenlistformulationsprepare dinpharmacy,aftervisitingtheunitofteachingpharmacyofow ncampus	CC	MK	KH	L&GD	CL-PR	F	I	
CO1	DescribeRecentdevelopmentinAyurvedicPharmaceuticalsviz, newdosageforms,pharmaceuticalmodificationtechniques.	CK	DK	K	L&PPT	TT-Theory	F&S	I	
CO1	DefineRasaandRasayanaanddescribedifferencebetweenRasaa ndRasayana	CK	DK	K	L&PPT	T-MEQs	F	I	

CO1	Justify design of ancient Rasashala	AFT - VAL	NK	KH	SDL	PRN	F	I	
Topic 22. Paribhasha (Terminology) (Lecture :8 hours, Non lecture: 4 hours)									
CO1	Explain the term Paribhasha and its importance in Ayurvediya Aushadhi Nirmana.	CK	MK	K	L	T-CRQs	F	I	
CO1	Describe the terms Aushadha, Bheshaja, Kalpana, Kashaya, Kashaya yoni, Samskara-based on their word derivations	CC	MK	K	L	T-EW	F&S	I	
CO1	Enlist sequentially names of all drugs classified in the Varga (group). Recite shloka of Maharasa, Uprasa, Sadharana Rasa Varga from Rasaratnasamuchchaya.	CC	MK	K	EDU ,SDL ,GB L,RE C	P-REC,P- ID,PUZ,O- QZ	F&S	I	
CO1	Enlist and discuss Sandigdha, Krutrima, Pratinidhi and Anupalabdhadravya.	CK	DK	K	L&P PT,S DL,G BL	P-ID,CL-PR	F	I	
CO1,CO2	Describe the definition of the term Shodhana. Explain with examples different techniques used for the procedures of Shodhana.	CAP	MK	KH	L& GD, L_V C,P T	T-MEQs,P- EXAM,O- QZ,O-GAME	F&S	I	
CO1	Explain the term Marana and describe its types with examples	CK	MK	K	L&P PT,L S	T-OBT	F&S	I	
CO1	Enlist all relevant prakriya paribhasha of Amrutikarana, Lohitikarana, Sattvapata, druti and discuss with examples	CK	DK	K	DIS, LS	PRN	F	I	

CO1,CO2	Recites sequentially names of Parada Ashtasamskara. Explain the terms Jarana Murchchhana and cite types with examples. Compare Jarana and Murchchhana.	CC	MK	KH	L_VC ,PrBL	T-EMI,T- MEQs,PRN, M-CHT	F&S	I	

CO1	Identify names of Parada Bandhas	CK	NK	K	LS	T-OBT	F	I	
CO1, CO2, CO5	Describe Grahya grahya parameters used for selection of Rasadravyas.	CK	MK	SH	L&P PT, Pr BL	T-EW	F&S	I	
CO1, CO2, CO5, CO6	Illustrate all Bhasmapariksha as per classical description.	CC	MK	KH	L_VC , IBL, DA, D	T-MEQs, P- EXAM, CHK	S	III	
CO1, CO2, CO5	Define the word Siddhilakshani. Recite examples of classical Siddhilakshani. Interpret its rationality	CE	MK	KH	L&P PT, S DL, R EC, D _L	T-MEQs, P- EXAM	F&S	I	
CO1	Recognise and discuss Dhanvantari Bhaga and Rudrabhaga	CC	NK	K	RLE	C-INT	F	I	
CO1	Explain importance of Manapariksha and classical types of Mana. Recall Chart of Mana.	CK	DK	KH	L&P PT, P SM	T-CRQs, P- SUR	F	I	
CO1, CO2	Categorize parameters of Drug Standardization and develop check list for assessment of quality of rasadravyas	CE	DK	KH	BS, I BL, T PW, S DL	CL- PR, WP, CHK	F&S	I	
CO2	Explain Value of selection of genuine raw material	AFT - VAL	MK	KH	DIS	DEB	F	II	
CO2, CO3	Explain importance of ethical practices for drug processing (Shodhan, Marana)	AFT - VAL	MK	K	PrBL	P-POS	F	II	

CO2,CO3	DiscussandjustifyimportanceofBhasmaPariksha	AFT - RES	MK	KH	BS	T-EW	F&S	III	

CO2,CO3	ExplainvalueofkeenandaccurateapplicationofweightsandmeasuresinAyurvediyaAushadhinirmana	AFT - VAL	DK	K	L& GD	PRN	F	II	

Topic 33.Adharbhuta Siddhanta (Application of fundamental principles)(Lecture :4 hours, Non lecture: 2 hours)

CO1,CO2	ElaboratefundamentalprinciplesofAyurvediyaAushadhiNirmanalongwiththeirclassicalreferencesanddiscusstheirapplicationwithclassicalexamplesofvariouskalpas.	CC	MK	KH	L&P PT,B S	T- EW,M- POS	F&S	I	
CO1,CO2	ExplainDravyaSamgrahavidhi.ExplaintypesofBhumideshaandtypesofdrugstobecollectedfromparicularplace&placesfromwhereDravyashouldnotbecollected.	CC	MK	KH	L&P PT,D IS ,BS	T-EW	F&S	I	H-DG
CO1,CO2	DescribetimeofDravyacollectionandexplainrationalitybehindit.	CC	MK	KH	L&P PT,B S	T-EW	F&S	I	H-DG
CO1,CO2	EnlistpartsofSthavara&JangamaDravyasusedforAyurvediyaAushadhinirmana.	CC	MK	KH	L& GD, BS	T-EW	F&S	I	H-DG
CO1,CO2	DefineSamskara.DiscussroleofSamskarainAyurvediyaAushadhiNirmanalongwithvariousexamples.	CC	MK	KH	L&P PT,B S	T-EW	F&S	I	H-Sa mhita
CO1,CO2	DiscribeArdra-ShushkaDravya&Anukta–VisheshoktaDravyacollectionprinciples.	CC	MK	KH	L&P PT,D IS	T-EW	F&S	I	H-DG

CO1,CO2	Describeimportanceofkalpasevanmatra.Explainfactorsconsideredfordecidingdosageofanydrug(Ayurvedicaswellasmodernmedicineprinciples).DescribePosology	CC	MK	KH	L&P PT,B S	T-EW	F&S	I	
CO1,CO2	ExplainSaveeryataAvadhi(Shelflife)ofAyurvedicdosageforms.	CK	DK	K	L&P PT,D IS	T-MEQs,P-VIVA	F&S	I	
CO1,CO2	DiscussYogikaDravyaSidhdhanta(Drugcombination)	CC	MK	KH	L&P PT,B S	T-EW	F&S	I	
CO1	ExplainimportanceofKala(Time)SamskarainAyurvediya	CK	MK	K	L&PP	TT-Theory	F&S	I	

	AushadhiNirmana.ElaborateAushadhisevanakalamentionedinSharangdharasamhita.Discribechrono-Therapeutics.				T				
CO1	JustifyAushadhikalpanamakaranasiddhantawithexamples	CC	DK	KH	IBL	CL-PR	F	I	

Topic 44.Yantropakaranani- I (Equipments and machineries)(Lecture :6 hours, Non lecture: 4 hours)

CO1,CO5	ChooseandrecordcontemporarymachinesusedinAyurvedicdrugpreparation.	CC	DK	K	L&P PT,D IS	T-EW	F&S	I	
CO1,CO5	Discuss the pharmaceutical use of Distillation apparatus, Ball Mill, Pulveriser, End Runner, Edge Runner, Tablet compression machine, Capsule filling machine, Pouch filling machine, Liquid filling machine in Ayurvediya Aushadhi Nirmana	CC	DK	K	L&P PT,D IS	T-EW	F	I	

CO1,CO5	Describe the principles behind construction and working of the classical Yantras used for Ayurvedic Aushadhi Nirmana.	CAP	MK	KH	L&P PT,DIS	T-MEQs,P-VIVA	F&S	I	
CO1,CO5	Enlist categorical information about the following Yantras in the charts- Ulukhal Yantra, Patan Yantra, Jarana Yantra, Patala Yantra and Svedana Yantra.	CK	DK	K	L&P PT,DIS	T-EW	F	I	

CO1,CO5	Interpret the mechanism and effect of Yantras/machines on the Physical and Chemical properties of the drug material.	CC	DK	KH	DIS, IBL	M-POS	F	I	
CO1	Enlist Ayurvedic aushadhi kalpana and equipments/yantras/machines used for preparation of each kalpana.	CK	DK	K	L&P PT	T-EW	F	I	

Topic 55. Yantropakaranani -II (Equipments, fuel and Heating Devices) (Lecture :5 hours, Non lecture: 4 hours)

CO1,CO5	Describe the term Yantra and enlist yantras described in classics useful for aushadhi nirmana.	CK	DK	K	L&P PT	TT-Theory	F	I	
	-								
CO1,CO5	Define the term Puta and cite its classical explanation.	CK	MK	K	L_VC ,RLE	T- EW,M-POS	F&S	I	

CO1,CO5	Producecategoricalinformation(SizeofPit,Numberofcowdu nkcakes,useetc.)aboutfollowingPutasviz.Mahaputa,Gajaput a,Varahputa,Kukkutaputa,Kapotputa,Lavakputa,Kumbhapu ta,Bhandaputa,ValukaputaandBhudharputa.	CK	MK	K	L&P PT,D IS ,TPW	T-EW,M- POS,COM	F&S	I	
CO1,CO5	Recognisetheprinciplesbehindconstructionandworkingofthecl assicalPutas.	CC	MK	KH	L&P PT,D IS ,IBL	T- EW,M- POS	F&S	I	
CO1,CO5	Identifyandenlistcontemporarydevicesusedinthe preparation	CC	DK	K	L&PP	T-MEQs,QZ	F&S	I	

	ofBhasma.				T,DIS ,IBL	,M-POS			
CO1,CO5	ReviewthetemperaturepatternofvariousPutasbyreferringres earcharticles.	CC	DK	K	TPW ,SDL	QZ,M-POS	F&S	I	
CO1,CO5	Compilenamesandsignificanceoftemperaturemeasuringdevi ceswithreferencetoPutas.	CK	DK	K	DIS ,ML	CL-PR,M- POS	F	I	
CO1,CO5	EnlistthespecificPutasusedforaparticularBhasmaNirmana.	CC	DK	KH	L&P PT	CL-PR,M- POS	F	I	
CO1,CO5	EnlistvariousdevicesusedforheatingduringAyurvediyaAush adhinirmana.	CK	DK	K	L,DIS ,RLE ,FV	T-EW,P-SUR	F&S	I	

CO1,CO5	EnlistconstituentsneededforSamanyaMushaNirmana.	CK	DK	K	L&P PT,I BL	T-MEQs	F&S	I	
CO1,CO5	DefinethetermMushaanddescribeusesofvarioustypesofMusha.	CK	DK	D	L_VC ,D-M	T-OBT	F&S	I	
CO1,CO5	EnlistanddiscussthematerialusedforSandhiBandhan(whileusingSharavaandKachakupi)	CK	NK	K	DIS, RLE	T-OBT	F	I	
CO1,CO5	IdentifyandrecordthetypesofCrucibles.	CK	NK	K	L&P PT	M-POS	F	I	

CO1,CO5	InterprettheeffectofheattransformationinthematerialsubjectedtoheatingthroughMusha.	CAP	DK	KH	L&P PT,D IS ,D-M	PRN,CL-PR	F	I	
CO1,CO5	RecallPakajUtpattiSiddhantandinterpretitforAgniSannikarsaSanskara.	CC	DK	KH	L&P PT,D IS	T-EW,CR- RED	F&S	I	
CO1,CO5	ExplainthePharmaceuticaluseoftheHotplate,heatingmantle,inductionstove,hotairoven,mufflefurnace(horizontalandvertical type)	CC	NK	KH	DIS, SDL	P-SUR,M- POS	F	I	
CO1	DescribetypesofKoshthiandtheiruses	CK	DK	K	L	COM	F	I	
CO1,CO5	DescribetheCurrenttrendsinheattransferdevicee.g.steamjacketedheatingdevice,programmedmufflefurnace,programmedfurnaceforParpati/Pottalipreparation.	CC	DK	K	L&P PT,I BL ,SDL	M-POS,COM	F	I	

CO1,CO5	Assessandinterprettheeffectoffuelinquantumofheatgiven(timeandtemperature)	CC	DK	KH	DIS,PrBL	M-POS,CR-RED	F	I	
CO1,CO5	Enlistvariousfuelsusedforheatingforestimationoftheirheatvalue.	CK	NK	K	IBL,SDL	M-POS	F	I	
CO2,CO3	AnalyseandappraiseuseofproperheatingdeviceandfuelsusedforAyurvediyaAushadhiNirmana.	AFT-SET	DK	KH	BS	DEB	F	II	

Topic 66.Kalpana Nirmana I (Primary & Secondary dosage forms)(Lecture :6 hours, Non lecture: 4 hours)

CO1,CO2	1. ExplainKashayakalpana 2. EnlistthedosageformcomeunderPanchavidhaKashaya	CC	MK	KH	L	T-EW,P-VIVA	F&S	II	

	KalpanaandtheirUpakalpana 3.JustifyPrimary,secondaryandtertiarydosageformunderPanchavidhakashayaKalpanaandtheirUpakalpana								
CO1	DefinewithsynonymsandclassifydifferentvarietiesofthedosageforminAyurvediyaAushadhinirmana	CK	MK	K	L	T-EW,P-VIVA	F&S	II	
CO1	Describemethodsofpreparationofthedosageformalongwiththeprinciplesofextraction,concentrationanddilutionetc.	CC	MK	KH	L&PPT	T-EW,P-VIVA	F&S	II	
CO1,CO2	ExplainindetailsaboutStandardOperatingProcedure(SOP)ofeachkalpana.	CC	MK	KH	L&PPT,DIS	T-EW,P-VIVA	F&S	II	

CO1,CO3	Enlistdetailsoftheapplications/administration(samanyaMatra, Anupanaorsahapana,indicationsandcontraindications)ofthedo sageformwithvariousexamples	CC	MK	K	L&P PT	T- EW,P- VIVA	F&S	II	
CO1,CO6	Assessanddiscussmoderndaydevelopmentandmarkettrendofth edosageform	CC	DK	K	L&G D,IB L ,LS	T-MEQs,P- SUR	F&S	II	
CO1	Determinetheadvantagesanddisadvantagesofthedosageform	CC	DK	K	L	T- EW,P- VIVA	F&S	II	
CO2	Describemethodofpreparationofdosageformalongwiththepri ncipleinvolved	CK	MK	K	L&P PT,D IS	T- EW,P- VIVA	F&S	II	
CO1	DescribemeaningofthetermUpakalpana.Enlistpanchavidhak ashayakalpanaandtheirrespectiveUpakalpana	CK	DK	K	L	T-MEQs,P- VIVA	F&S	II	
CO1	ExplainvariouskalpasbelongingtoVariousdosageforms	CK	MK	K	L_VC	P-EXAM	S	II	

	- Ingredients,proportion,matra,sevanvidhiifany,therapeuticuses				,PT				
CO2	Criticallyevaluate rationality behind different proportion of water used in various formulations	AFT - VAL	DK	KH	BS	P-VIVA	F&S	III	
Topic 77.Kalpana Nirmana-II (Method of Preparation of different dosage forms& Dietary Supplements))(Lecture :5 hours, Non lecture: 4 hours)									
CO1,CO5	Explain the basic principles involved, processing techniques, quality control parameters used/involvement in the preparation of Avaleha, Kalpana with examples, instruments used in small and Large scale production, Research updates	CAP	MK	K	L&P PT,T PW, BL	T-EW,T-OBT	F&S	II	
CO1,CO5	Explain the basic principles involved, processing techniques, quality control parameters used/involvement in the preparation of Sneha Kalpana, Kalpana with examples, instruments used in small and Large scale production, Concept of Avartana, Research updates on Sneha kalpana, Markets survey	CK	MK	K	L_VC ,TUT	T- EW,P- VIVA	F&S	II	
CO1,CO4	Describe the Significance of sandhanakalpana, classification, Difference between Madya and Shukta Kalpana, general method of preparation, essential ingredients, Anukta Mana, Sandhana Vidhi, observations, Burnig candle test, Limewater Test, difference between Asava and Arishta, essential knowledge of sale and clinical practice, Research updates	CAP	MK	K	L_VC ,PrBL	T-EW,T-OBT	F&S	II	
CO1,CO3,CO5	Explain Definition, significance of Pathya, types, general, method of preparation Manda, Peya, Yavagu, Vilepi, Anna or Odana Kalpana, Krushara, Yusha, Takra, Khada, Kambalika, Raga, Shadava, Related Research updates, Markets survey of Dietary Supplements and Nutraceuticals	CAP	MK	KH	L_VC ,RLE	T-EW,P- VIVA,P- EXAM	F&S	II	
Topic 88.Rasa Dravya Parichaya- I(Lecture :12 hours, Non lecture: 4 hours)									
CO1		CC	MK	K	L&PP	T-MEQs,P-	S	I	

	EnlistsynonymsofRasadravyaandexplainsignificanceofthat				T,D _L	VIVA			
CO1,CO2,C O6	Explain classical & Mineralogical identification and Sources ofRasadravyas	CC	MK	SH	L&P PT,P T	T- EW,P- EXAM	F&S	I	
CO1,CO2	Discriminatetypes,Grahya-AgrahyataandDoshaofRasadravya	CC	MK	KH	L&P PT,P T	P-VIVA,TT- Theory	F&S	I	
CO1,CO2	ExplainShodhanandMaranaandotherprocessingtechniquesoftheRasa-Dravya.	CC	MK	KH	L_VC ,IBL ,D	T-EW,P- VIVA,INT	F&S	I	
CO1,CO2,C O6	Discussprobablephysical,chemicalchangesoccurringduringprocess&afterShodhanaandMaranaofParada,Haratala,Tamraa ndShankha.	CC	MK	KH	L&P PT,B S,SD L	T-EW,P- VIVA,P- EXAM	F&S	I	
CO6		CC	DK	KH	DIS,B	P-VIVA	F&S	I	

	ExplainresearchupdatesaboutShilajatu,Naga,MuktaandKapa rdika.?				S				
CO1,CO2,C O6	Discussprobablephysical,chemicalchangesoccurringafterBha vana,Put&wholeprocessofBhasmanirmanafromRasadrav yas	CC	MK	KH	DIS, BS	T-OBT	F&S	I	
CO1,CO4	EnlistKalpaspreparedfromtheseRasdravyasandtherapeutici mortanceofthatRasadravya	CK	DK	K	IBL, SDL	PRN	F	II	
CO2,CO3	Developchecklistforidentificationofgenuinerasadavyas	AFT - CHR	MK	K	IBL	P-PS	F&S	III	
Topic 99.Rasa Dravya Parichaya II (Lecture :7 hours, Non lecture: 6 hours)									
CO1	EnlisttheimportantsynonymsofRasadavyas	CC	DK	KH	L&P PT,D IS	P-VIVA	F&S	II	
CO1,CO6	Explainclassical&MinerologicalidentificationandtheirSourc es.	CK	DK	K	L&P PT,D _L	P-VIVA	F&S	II	

CO1	Elaboratetypes,Grahya-AgrahyataandDoshaoofRasadravyas	CK	DK	K	L&P PT	P-VIVA	F	II	
CO1,CO2	ExplainShodhana,Marana&andotherprocessingtechniquesw ithprobablechemicalreactions.	CC	MK	KH	L&P PT,D IS ,LS	T- EW,P- VIVA	F&S	II	
CO1,CO2	ExplainShodhana,Marana&andotherprocessingtechniquesw ithprobablechemicalreactions.	CE	DK	K	L& GD, PT	P-VIVA	F&S	I	
CO6	ExplainresearchupdatesofKasisa,GauripashanaandAkika.	CC	DK	KH	DIS ,ML	PRN	F	I	
CO1,CO5	Enlistnamesofrasadravyasandimportantkalpaspreparedfromre spectivedravya.DescribetherapeuticimportanceofthatRasadrav ya.	CK	DK	K	DIS, SDL	CL-PR,M- CHT	F	II	
Topic 1010.Rasadravya Parichaya III (Lecture :3 hours, Non lecture: 6 hours)									
CO1	EnlistSynonymsandsources.	CK	NK	K	PrBL ,TP W,P ER	T-OBT,M- CHT	F&S	II	

CO1,CO6	Determinetypes,Grahya-Agrahya,properties&classicalaswellasMineralogicalIdentificationofRasadravyas	CC	NK	K	L&P PT,D IS ,SDL	P-VIVA,CHK	F&S	II	
CO1,CO2	ExplainShodhana,MaranaandProbableChemicalChanges.	CC	DK	K	L&P PT,I BL	PRN	F&S	II	
CO6	ExplainresearchupdateofBadarashma.	CK	NK	K	DIS, LS	P-VIVA	F	II	
CO1,CO5	EnlistRasadravyasfromthisgroupanddescribeimportantkalpaswiththeirtherapeuticutility	CK	DK	K	TPW	PRN	F	II	
Topic 1111.Kalpana Nirman -III (Method of Preparation of different dosage forms)(Lecture :8 hours, Non lecture: 6 hours)									
CO1,CO2,C O3	DescribesharkarakalpanaalongwithpreparationmethodofSyrup.Explaintherapeuticimportanceofpreparedsharkarakalpanaalongwithitsshelflife.	CC	NK	K	L&P PT,S DL	P-VIVA	F&S	II	
CO1,CO2,C O3	DescribeGudapakapreparationmethodwithitsconfirmatorytestsandprecautionsExplaintherapeuticimportanceofpreparedGudapakaalongwithitsshelflife.	CC	NK	K	L&P PT	P-VIVA	F&S	II	
CO1,CO2,C O3	DescribeLavanakalpanapreparationmethodwithitsconfirmatorytestsandprecautionsExplaintherapeutic	CC	DK	K	L&P PT	T-CRQs,P- VIVA	F&S	II	

	importance of prepared Lavanakalpana along with its shelf life and packaging techniques.								
CO1, CO2, CO3	Describe Ksharakalpana preparation method with its confirmatory tests and precautions. Explain the therapeutic importance of prepared Ksharakalpana and Ksharasutra integration with Shalya tantra department along with its shelf life and packaging techniques.	CAP	MK	KH	L&P PT	P-VIVA, TT-Theory	F&S	II	V-SHL
CO1, CO2, CO3	Describe Ayaskritikalpana preparation method with its confirmatory tests and precautions. Explain the therapeutic importance of prepared Ayaskritikalpana along with its shelf life and packaging techniques.	CC	NK	KH	L&P PT	P-VIVA	S	II	
CO1, CO2, CO3	Describe Lepakalpana preparation method with its confirmatory tests and precautions. Explain the therapeutic importance of prepared Lepakalpana, integration with Kayachikitsa and Panchakarma department along with its shelf life and packaging techniques.	CC	MK	K	L&P PT	T-EW, P-VIVA	F&S	II	V-KC, V-PC
Topic 1212. Chaturvidha Rasayana (Lecture : 4 hours, Non lecture: 4 hours)									
CO1, CO2	Describe importance and unique features of Chaturvidha Rasayana - Kharaliya Rasayana, Parpati Rasayana, Kupipakwa Rasayana & Pottali Rasayana.	CC	MK	KH	L&P PT, IBL	T-EW, P-VIVA	F&S	II	
CO1, CO2	Explain definition, types and method of preparation of Chaturvidha Rasayana.	CAP	MK	D	L&P PT, P T	T-EW	F&S	II	

CO1,CO2	DetermineroleofYantra,Agni&Kalaforpharmaceuticalproce ssofchaturvidharasayana	CAN	DK	KH	PT	T- EW,P- VIVA	F&S	II	
CO6	Explainsshelf-lifeofChaturvidhaRasayana.	CAN	DK	SH	L,DIS	P-VIVA	F&S	II	
CO5	Describechemicalchangesoccurringduringthepreparationofch aturvidharasayanaanditsimpactonPharmacologicalactionofC haturvidhaRasayana	CAN	DK	KH	L&G D,BS ,SDL	CR- RED,CR-W	F	II	
CO5	Explain law of Definite proportion and proportion of Mercuryand sulphur needed for preparation of sulphide of Mercury. inChaturvidharasayana	CAP	DK	KH	BS,I BL	CL-PR	F	II	
Topic 1313.Current and emerging trend in Ayurvedic pharmaceuticals (Lecture :3 hours, Non lecture: 4 hours)									
CO1,CO5,C O6	Discusstheclassificationofdifferentdosageforms.	CK	DK	K	L&P PT,D IS	P-VIVA,M- POS	F&S	III	
CO1,CO5,C O6	Explaintheneedofdifferentdosageforms.	CK	DK	K	L&P PT,D IS ,SDL	P-VIVA,M- POS	F&S	III	
CO1,CO5,CO	Enlistcategoricalinformationaboutthecosmeticsusedindaily	CK	DK	K	L_VC	PRN,M-POS	F	III	

6	routine. Appreciate Ayurvedic cosmetic products.				,DIS ,FV				
CO1,CO5	Appreciate Ayurvedic cosmetic products.	AFT - VAL	DK	KH	BS,P rBL	PRN,P-SUR	F	III	
CO1,CO5,C O6	Choose and record the contemporary machineries used in the manufacture of cosmetics.	CK	NK	K	L_VC ,DIS ,SD L	M-POS	F	III	
CO1,CO5,C O6	Enlist Quality Control parameters of cosmetics preparations.	CK	DK	K	L&P PT,D IS	P-VIVA,M- POS	F&S	III	
Topic 1414.GMP(Schedule T) & Regulatory aspects of Ayurvedic drugs (Lecture :2 hours, Non lecture: 4 hours)									
CO5	Explain the legal and regulatory aspects of manufacturing, and sale of Ayurvedic drugs.	CC	MK	K	L&P PT,I BL	CL-PR	F&S	III	
CO5	Describe acts and rules mentioned in Drug & Cosmetic Act 1940 & Rule 1945 and their relevance to Ayurvedic, Siddha, Unani (ASU) drugs.	CC	MK	K	L& GD, BS	QZ	F&S	III	H-DG
CO5	Discuss the guidelines of Food Safety and Standards Authority of India (FSSAI) and FDA.	CK	DK	K	L&G D,S DL	CL-PR	F	III	
CO3,CO5	Determine the principles and practice of establishment of Ayurvedic pharmacy.	CK	DK	K	L& GD, TP W	P-EN,CL-PR	F	III	

CO5	Discuss the NABL guidelines for testing laboratory (Chemical).	CK	NK	K	L&P PT,D –	CL-PR,CHK	F&S	III	

					L				
CO1,CO5	Explain long forms of these- (FSSAI) and (FDA), (CCRAS), (DCGI), (CDSCO)	CK	DK	K	L	T-EMI	S	III	
CO4	Discuss ethical aspect of large scaled drug preparation in Ayurvedic Pharmacies	AFT - VAL	DK	K	DIS	CL-PR	F	III	

Paper 2 Ayurvediya Aushadhi Prayoga Vigyana									
A3 Course outcome	B3 Learning Objective (At the end of the session, the student should be able to)	C3 Domain/sub	D3 Must to know / desirable to know / Niceto know	E3 Level Does/ Show show/ Know show/ Know	F3 T-L method	G3 Assessment	H3 Formative/ summative	I3 Term	J3 Integration
Topic 11. Aushadhi Prayoga Vigyana (Lecture :1 hours, Non lecture: 2 hours)									
CO1	Define Aushadhi Prayoga Vigyana and its scope and enlist prashastabhesha laxana	CK	MK	K	L	TT-Theory	F&S	I	
Topic 22. Single drug (Herbal & Mineral) (Lecture :8 hours, Non lecture: 2 hours)									

CO1,CO2,CO4,CO5,CO6	Describe different dosage forms prepared out of a single herb or mineral	CK	MK	KH	L_VC	P-VIVA,COM,TT-Theory	F&S	I	
CO1,CO2,CO4,CO5,CO6	Appreciate how the therapeutic efficacy varies depending on the dosage form	AFT - VAL	MK	K	L&P PT	T-EW,DEB	F&S	I	

CO1,CO2,CO4,CO5,CO6	Describe the therapeutic efficacy of different formulations of Vishadravya (Bhallataka), with its toxic effects and remedy.	CK	NK	K	L&GD	P-VIVA	F	I	
CO1,CO5	Describe the therapeutic efficacy of different formulations of Guduchi, Gairika, Gandhaka	CC	MK	K	L&GD, PER	P-VIVA,TT-Theory	F&S	III	
CO3,CO4	Appraise multiple factors considered for preparation of various dosage forms from a single drug and create list of more such examples.	AFT - CHR	DK	KH	BS, IBL	COM	F	III	

Topic 33. Single drug (Bhasma, Shuddha & Pishti) (Lecture :12 hours, Non lecture: 6 hours)

CO2,CO6	Explain chemical form/composition, Pharmacodynamics and pharmacokinetics of Abhraka, Loha and Godanti Bhasma.	CC	DK	KH	L&P PT,DIS,IBL	P-VIVA	S	III	
CO1,CO2	Explain therapeutic properties, dosage, Anupana, Pathyapathya, duration of treatment, Sevana Kala, shelf life, important Yogas of each Bhasma.	CC	MK	KH	L&P PT,T PW	T-EW,P-VIVA	F&S	III	

CO1,CO2	DescribeApakwaAshuddhaAvidhiBhasmaSevanajanyaVya dhiandtheirShanti-upaya.	CK	DK	KH	DIS, BS	P-VIVA,TT- Theory	F	III	
CO1,CO2	DescribeindetailAmayikaPrayoga(Therapeuticuses)ofeachB hasma/Pishtiwithgivenreferences.	CAP	MK	SH	L& GD, W	T- EW,P- VIVA	F&S	III	

CO2,CO6	Explain research updates and clinical evidences of SwarnaBhasma, Makshika Bhasma and Shankha Bhasma.	CE	DK	K	PrBL ,SDL	PRN	F&S	III	

Topic 44.Aushadhi Kalpa -I (Compound formulations)(Lecture :16 hours, Non lecture: 4 hours)

CO1,CO2	Describereference,ingredients,therapeuticproperties, dosageandalladministrationdetailsalongwithAnupanaofeachfo rmulation.	CK	MK	KH	L&P PT,B S,SD L	T- EW,P- VIVA	F&S	III	
CO1,CO2	ExplainPathyaApathya,SevanaAvadhi(durationoftreatment)andshelf-lifeofeachformulation.	CC	MK	KH	L&P PT,D IS ,BS	T-EW	F&S	III	

CO1,CO2	Interpret probable mode of action of each formulation as per Ayurveda.	CC	DK	KH	L&GD,BS	T-EW,P-VIVA	F&S	III	
CO2,CO3,CO6	Explain research updates and clinical evidences of Arogyavardhini Gutika and Gandhaka Rasayana	CE	DK	K	PrBL	P-VIVA	F&S	III	

CO3,CO4	Criticallyanalysecompounddrugsfortheirtherapeuticactions mentionedintheclassics.	AFT - VAL	DK	KH	IBL	PRN	F	III	
Topic 55.Aushadhi Kalpa-II (Compound Drugs/Formulations) (Lecture :14 hours, Non lecture: 2 hours)									
CO1,CO2,CO3,CO4	DescribeIngredients,therapeuticimportance,dose,anupana,pa thya- pathya,durationoftreatment,sevanakala,shelflife,researchupd atesandclinicalevidencesofDashamoolaKwatha,Pushyanuga Churna,SanjivaniVati,ChitrakadiGutika,SimhanadaGuggulu, YogarajaGuggulu,Chyavanaprashavaleha,GandhakadyaMal ahara,Ashokarishta,Kutajarishta,PanchagavyaGhrita,Bilvadi Gutika.	CAP	MK	KH	L&P PT	T- EW,P- VIVA	F&S	III	
CO1,CO2,CO3,CO4	DescribeIngredients,indications,dose,anupana,pathyapathya ,durationoftreatment,sevanakala,shelflife,andclinicaleviden cesofMahamanjistadikwatha,SudarshanaChurna,VyoshadiV ati,BalaChaturbhadraRasa,LavanaBhaskaraChurna, Narayana Taila,, NeeliringadiTaila Aravindasava,Kumaryasava.	CAP	NK	KH	L&P PT,D IS	P-VIVA	S	III	
CO1,CO2,CO4,CO5	DescribeIngredients,indications,dose,anupana,pathyapathya ,durationoftreatment,sevanakala,shelflife,andclinicaleviden cesofPanchagunaTaila,Dadimavaleha,BramhiGhrita	CK	DK	K	L&P PT	P-VIVA,TT- Theory	S	III	
CO1,CO2,CO3	Undersand&Recitefollowingclassicalkalpas.DescribeAmayi kaprayogaofeachformulation.Understandprobablemodeofac tionasperAyurvedaSearchandRecordrelevantreasercharticle s.Createchartsdescribingdetailsofthesedrugs.Reviewmarketa vaibility&poplularitiesofthesedrugsamongpracticingvaidya s&nearbypopulation.	CAP	MK	KH	L&P PT,D IS ,BS, IBL, PBL	P-EXAM,CO M,TT-Theory	F&S	III	V-KC ,V-SH ,V-PC ,V-SH L,V-S P,V -BL

CO3,CO4	Explainethicalaspectofadministrationofcompounddrugsmainlyregardingdurationofthetreatmentgiven.	AFT - VAL	DK	K	PBL	CL-PR	F	III	
CO1,CO2,CO4,CO6	Describeingredients,withitsdose,therapeuticimportance,anupanaandpathya-apathyaalongwithitsclinicalevidencesandResearchupdates	CK	MK	KH	L&P PT	T- EW,P- VIVA	F&S	III	
CO1,CO2,CO4,CO6	Enlisttheformulationswithitsdose,anupanaandindications	CK	NK	K	L	T-EMI	S	III	
Topic 66.Dosage Forms & Cosmetic Products (Lecture :5 hours, Non lecture: 2 hours)									
CO2,CO3,CO7	Definetheterm-Dosageforms.	CK	MK	K	L&P PT	TT-Theory	F&S	III	
CO2,CO3,CO7	Discusssthe need of different dosage forms.	CK	MK	K	L&P PT	TT-Theory	F&S	III	
CO2,CO3,CO7	Explainthe classification of different dosage forms.	CK	DK	K	L&P PT	TT-Theory	F&S	III	
CO2,CO3,CO7	Enlistthesolid/liquid/semisolid dosage forms.	CK	MK	K	L&P PT	T-EMI	F&S	III	
CO2,CO3,CO7	Discuss theroutes of administration of different dosage forms.	CK	MK	K	L&P PT	T-EW	F&S	III	
CO2,CO3,CO7	Describe the advantages and disadvantages of currently available dosage forms.	CK	MK	K	L&P PT	TT-Theory	F&S	III	
CO2,CO3,CO7	Discuss the research updates about modification of classical Ayurvedic dosage forms.	CK	DK	K	L&P PT	CL-PR	F	III	
CO2,CO3,CO7	Discuss the relevant case studies of different dosage forms.	CK	NK	K	L&P PT	P-SUR	F	III	

CO2,CO3,C O7	DefinethetermCosmetics.	CK	DK	K	L	TT-Theory	F&S	III	
CO2,CO3,C O7	Explaintheclassificationofcosmeticsbasedontheirapplicationo nthespecificbodyparts.	CK	DK	K	L&P PT	CL-PR	F&S	III	
CO2,CO3,C O7	Differentiatebetweentheancientcosmeticsandmoderndaycos metics.	CK	DK	K	L&P PT	TT-Theory	F&S	II	
CO5	compareandappraiseherbalcosmeticsvssyntheticproducts	AFT - VAL	DK	KH	PBL	PRN	F	III	
Topic 77.Nutraceuticals (Lecture :6 hours, Non lecture: 1 hours)									
CO1	Describeimportanceofcombinationofaaharaandaushadha	CK	MK	K	L&P PT	T-EW	F&S	III	H-SW
CO2,CO6	ExplainNutraceuticalswithitstypes	CK	MK	K	L&P PT	TT-Theory	F&S	III	H-SW
CO2,CO6	Corelaterasayanaandnutraceuticalwithexamples	CAN	DK	KH	DIS,P rBL	T-OBT	F	III	H-SW
CO2	DescribewithexamplesmodeofactionofAyurvedicnutraceuti cals	CAP	MK	KH	SDL ,LS	PRN	F	III	H-Sa mhita ,H- SW
CO2,CO6,C O7	EnlistatleasttwodieterypreparationsfromAyurvedicclassics whichcanserveasrasayana/nutraceuticalin- 1)GeneralHealth2)PediatricHealth3)GeriatricHealth4)Wom en(Garbhini/Sutika)Health5)Cardio- protection6)Chronicillness-recoverystage	CAP	MK	K	DIS, BS,S Y	CL-PR	F	III	H-SW

CO1,CO2,CO6,CO7	Describe potential of Ayurvedic diet and Rasayan in sports and endeavor	CAP	DK	KH	BS,Pr BL,P S	DEB	F	III	H-SW

					M				
CO7	Explain research updates about nutraceuticals	CK	NK	K	SDL ,PL	M-POS	F	III	
CO2	Enlist at least two examples of Aushadhi Siddhaaahara with its indications for each category-- >(Aharadravya belonging to following category and kalpa prepared from that aharadravya and other aushadhi ingredients) 1) Jalavarga 2) Dugdha Varga 3) Ikshu Varga 4) Sukadhanya Varga 5) Shimbi Dhanya Varga 6) Shaka Varga 7) Phala Varga 8) Lavana Varga 9) Spices	CC	DK	K	L&G D,Pr BL	CL-PR	F	III	H-Sa mhita ,H- SW
CO3,CO4	create list of unique features of Ayurvedic nutraceuticals and appraise their current need	AFT - VAL	DK	KH	DIS	PRN	F	III	

Topic 88. Anupana Prayoga for Aushadhi Kalpa (Lecture :4 hours, Non lecture: 1 hours)

CO1	Define and classify Anupana and Sahapana	CK	MK	K	L	T-EW	F&S	III	
CO1,CO2	Explain different factors to be considered for selection of Anupana as per Disease and Patients	CC	MK	KH	L	T-EW	F&S	III	
CO1,CO2	Enlist different anupana for a single drug based on the condition of patient and disease. Elaborate with the help of examples of kalpas.	CC	MK	KH	L	T-EW	S	III	
CO4	Describe value of proper selection of Anupana with examples	AFT - VAL	DK	K	SDL	M-CHT	F	III	

Topic 99.Aushadhi Prayoga Marga (Lecture :5 hours, Non lecture: 1 hours)									
CO2,CO4	Discuss the various types of Aushadhi Prayog Marga (route of drug administration).	CK	MK	K	L&P PT	T-EW	F&S	II	
CO2,CO4	Describe the advantages and disadvantages of each Aushadhi Prayog Marga.	CK	DK	K	L&P PT,BS	P-SUR,PM,TT-Theory	F&S	II	

CO2,CO4	Enlist the dosage forms used in the specific Aushadhi Prayog Marga.	CK	DK	K	L&P PT	T-EMI	F&S	II	
CO2	Discuss the nature of drug(s) administered in various routes of drug administration.	CAP	NK	KH	L&GD	CL-PR	F	II	
CO4,CO5	Appraise administration of drugs through various routes mentioned in Ayurvedic treatment	AFT-VAL	MK	K	L&GD	T-EW	F&S	III	

Topic 1010.Rational prescription along with safe dispensing of Ayurvedic formulations. (Lecture :1 hours, Non lecture: 4 hours)									
CO2,CO4	Describe and write down ideal prescription.	CAP	MK	SH	L&GD,CBL	CR-W,CHK	F&S	III	V-KC,V-SP,V-BL
CO1,CO3,CO4	Explain the safe dispensing and efficacious use of Ayurvedic drugs.	CAP	MK	KH	L&GD,BS,TPW	T-CS,PM	F&S	III	V-KC,V-BL
CO2,CO4	Explain the importance of rational prescribing of drugs and the concept of essential drugs.	CK	DK	K	L&GD,IBL	QZ,CHK	F	III	V-KC
CO2,CO4,CO5	Describe the standard protocol for safe dispensing of Ayurvedic drugs.	CK	DK	KH	L&GD	T-OBT	F	III	

CO2,CO4	Demonstrate and educate home remedies to small group of population.	CAP	DK	SH	PrBL,TPW	TR	F	III	H-SW
CO5	explain ethical aspects related to prescription writing	AFT-RES	MK	KH	TPW	INT	F	III	
Topic 1111.Traditional & Local health Practices (Lecture :2 hours, Non lecture: 4 hours)									
CO1	Identify Local Health Traditions and Healing Knowledge,	CC	DK	K	DIS,PrBL	P-SUR,INT	F	III	

CO1,CO5	Recognise the possible potential of product development and research based on Traditional knowledge	CK	DK	KH	IBL	INT	F	III	
CO1,CO4	Identify the factors responsible for grant of patent and erroneous grant of patent on Indian traditional knowledge.?	CK	DK	K	BS	INT	F&S	III	
CO5	Appraise traditional knowledge of Ayurvedic medicines	AFT-VAL	DK	K	TPW	CR-W	F	III	
Topic 1212.Pharmacovigilance for Ayurveda drugs (Lecture :1 hours, Non lecture: 4 hours)									
CO2,CO4,CO5	Describe the term Pharmacovigilance and explain importance of Pharmacovigilance for Ayurvedic drugs.	CK	DK	K	L&PPT,IBL	M-POS,C-INT,RK	F	III	V-KC,V-BL,H-DG,H-AT
CO4,CO5	Explain the status and central sector scheme of Pharmacovigilance for Ayurveda, Siddha, Unani, and Homeopathy (ASU&H) drugs.	CK	MK	K	L&PPT,DIS	INT,TT-Theory	F	III	V-KC,H-DG,H-AT

CO4,CO5	DefineAdverseDrugReactions(ADR)anditstypes.	CE	DK	K	L&G D,IB L	QZ,TT- Theory,VV- Viva	S	III	V-KC ,V-BL ,H-D G,H -AT
CO2,CO4,C O5	IdentifyandmonitorADRs.	AFT - VAL	DK	KH	L&G D,BS ,IBL	PRN,RK	F	III	V-KC ,V-BL ,H-D G,H -AT

CO2,CO4	DiscussandmakecriticalcommentsonthesafeandefficacioususeofAyurvedicdrugs.	CAP	DK	KH	L&G D,Pr BL,T UT	QZ ,CL- PR,INT	F	III	V-KC ,H-D G,H -AT
CO4,CO5	DebateonADRoFASUdrugs	AFT - RES	DK	K	DIS	DEB	F	III	

List of Practicals **(Term and Hours)**

PRACTICALS(Marks-100)			
S.No	List of Topics	Term	Hours
1	1.ParibhashaconceptbasedPracticals	1	20
2	2.PanchavidhaKashayaKalpana&theirUpakalpanaPracticals	1	24
3	3.RasaDravyaAushadhiNirmanaPracticals	1	20
4	4.BheshajaKalpanaPracticals-I	2	24
5	5.BheshajaKalpanaPracticals-II	2	22
6	6.DosageForms&Self-careProductsPracticals	2	22
7	7.FieldVisit/StudyTour	3	24
8	8.HospitalIPDPractical	3	10
9	9.DrugDispensingPractical	3	6
10	10.QualityControlPracticals	2	38

Table 4: Learning objectives (Practical)

A4 Course outcome	B4 Learning Objective (At the end of the session, the student should be able to)	C4 Domain/sub	D4 Must to know / desirable to know / Nice to know	E4 Level Does/ Show show/ Know show/ Know	F4 T-L method	G4 Assessment (Refer abbreviations)	H4 Formative/summative	I4 Term	K4 Integration
Topic 11. Paribhasha concept based Practicals									
CO1	Identify the drugs and recite classical name, English name and chemical composition and varga (class) Recite Maharasa, uparasa, Sadharanarasashlokas from Rasaratnasamuchchaya.	PSY - SET	MK	KH	GBL, REC	P-VIVA, P-ID	F&S	I	
CO1, CO2	Demonstrate the correct procedure/SOP and assess the changes observed after the procedure. Discuss the relevant samskara and its role in that procedure. Interpret the Physical, Chemical and Biological alterations.	PSY - MEC	MK	D	GBL, PT	P-PRF, CHK, OSPE	S	I	
CO1, CO2	Observe and describe the pharmaceutical preparation of Gandhakadruti. Explain the thermalotropism. Recite melting, boiling and evaporating temperature of Gandhaka.	PSY - MEC	DK	KH	DIS, D_L	P-VIVA	S	II	
CO1, CO2	Observe the procedure of Vanga Jarana. Explain the difference between Jarana and Jaranaa. Discuss chemical process of oxidation and reduction. Recall the information about melting points of all the metals.	CAP	DK	KH	PT, D	P-VIVA	S	III	
CO1, CO2	Demonstrate preparation of Kajjali. Recite its classical shloka. Prepare a checklist of parameters for its siddhilakshana. Interpret	PSY - ME	MK	D	PBL, TPW, ,	P-REC, P-EXAM, P-PS	F&S	I	

		C							

	law of definite proportion to explain and calculate amount of free sulfur in the prepared amount of kajjali. Calculate the expected weight of frasa sindura from the given amount of kajjali.				D_L				
CO1, CO2	Identify relevant Bhasmapariksha and demonstrate samanya and vishesha Bhasmapariksha. Interpret physical/chemical laws relevant to classical bhasmapariksha.	PSY - ME C	MK	D	DIS, GBL, LRI, DA, D_L	P-VIVA, CHK	F&S	I	
CO1	Identify various weights and recite essential measures from conversion chart of AFI. Recognise weighing machines and their weighing capacity.	CAP	DK	KH	BS, PrBL, TPW, PL	PRN, P-SUR	F	I	
CO3, CO4	Identify and value SOP of each procedure of the practical conducted.	AFT - VAL	MK	KH	D_L	P-EXAM	S	II	
CO2	Appraise ancient indications mentioned in classics for confirmation of end point of the pharmaceutical process (Siddhilakshana)	AFT - RES	MK	K	PrBL	P-VIVA	S	III	

Topic 22. Panchavidha Kashaya Kalpana & their Upakalpana Practicals

CO1, CO2	Recall, Identify and authenticate the raw materials required as per the dosage form/formulations	PSY - SET	MK	KH	DIS, D	P-VIVA	F&S	II	
CO1, CO2	Demonstrate the method of preparation to get the desired dosage form following SOP	PSY - ME C	MK	SH	DIS, PT	P-VIVA, P-EXAM	F&S	II	
CO1, CO2, CO5	Assess and explain different parameters to achieve desired characters/endpoints (siddhilakshana) as per classical and contemporary parameters	PSY - ME	MK	KH	DIS, D	P-VIVA, P-EXAM	F&S	II	

		C							
CO1,CO2	DescribeethicalresponsibilityexpectedduringPharmaceutical	AFT-	MK	K	SDL	P-PRF	F&S	III	

	preparation of Ayurvedic Formulations	REC							
Topic 33. Rasa Dravya Aushadhi Nirmana Practicals									
CO1, CO2, CO3	Explain reference Shloka of kalpas & write with interpretation - list of ingredients, their proportion, principles of yoga-yoga samyojanadravya	CC	MK	KH	L	P-VIVA, P-EXAM	F&S	I	
CO1, CO2, CO3	Identify raw Dravya, used part with classical Mana and interpret its metrics system....	CAP	MK	D	DIS, BS	P-EXAM	F&S	I	
CO2, CO3	Identify, Utilize & know mechanism of Yantra used for drug preparation	CAP	MK	KH	DIS, BS	VV-Viva	F&S	I	
CO2, CO3	Observe & Record various parameters responsible for good manufacturing which are done during process of pharmaceutical preparation	CE	MK	SH	DIS, BS, PT	P-EXAM	F	I	
CO2	Demonstrate Sidhdhi Lakshna	CAP	MK	SH	D	P-VIVA	S	III	
CO2, CO3	Assess finished product as per classics.	CE	MK	SH	DIS, PT	P-VIVA, P-EXAM	S	I	
CO1, CO2, CO3	Appraise peculiarities of chaturvidha rasayan preparation	AFT-	DK	KH	PER	M-POS	F	III	

4		VAL							
Topic 44. Bhesaja Kalpana Practicals -I									
CO1,CO3	Demonstrate Arkapreparation method, along with its packaging technique and therapeutic importance.	PSY - SET	MK	SH	DIS,D -M	P-VIVA,P- EXAM	F&S	II	
CO1,CO3	Demonstrate preparation of Vati along with drying techniques	PSY - ME C	MK	KH	DIS,D	P-VIVA,P- EXAM	F&S	II	
CO1,CO3	Identify the genuine sample of Guggulu and demonstrate preparation of different types of Guggulu along with drying techniques	PSY - SET	MK	K	DIS, PT	P-VIVA,P- EXAM	F&S	II	
CO1,CO3	Identify the useful part of the raw material and demonstrate Sattva preparation method.	PSY - SET	MK	K	DIS,D	P-VIVA,P- EXAM	F	II	
CO1,CO3	Demonstrate preparation of Vati along with drying and packaging techniques.	PSY - SET	MK	KH	PT	P-VIVA,P- EXAM	F	II	
CO1,CO3	Demonstrate Lavanapreparation methods, along with its packaging techniques.	PSY - SET	DK	SH	PT	P-VIVA,P- EXAM	F	II	
CO1,CO3	Identify the internal and external applications of different ksharakalpana along with importance of ksharasutra through surgical aspects.	PSY - ADT	MK	K	PT	P-VIVA,P- EXAM	F	II	V- SH L
CO1,CO3	Demonstrate and Explain preparation methods of Masikalpana and its internal or external application in clinical practice.	PSY - ADT	DK	K	DIS, PT	P-VIVA,P- EXAM	F	II	

CO1,CO3	DemonstratepreparationandapplicationaspectsofUpanahakal pana.	PSY - ME C	DK	K	DIS, PT	P-EXAM	F&S	II	V-KC
CO1,CO3	DemonstratepreparationsofSiktatailaalongwithidentifythegen uinesampleofSikta.PerformandDescribeMalaharakalpanaprep arationmethodwithitsconfirmatorytestsofendpoint..	PSY - SET	DK	K	DIS, PT	P-VIVA,P- EXAM	F&S	II	

CO2,CO3	DemonstratepreparationofdifferenttypesofMalaharawithitsa ppliedaspect.	PSY - SET	NK	K	PT	P-SUR	F	II	V-KC
CO2,CO3	DemonstratepreparationofdifferenttypesofLepaandpreparati onofShatadhoutaghrita.	PSY - SET	NK	KH	DIS, PT	PRN	F	II	V-KC ,V-PC
CO2,CO3	PerformandDescribeLepakalpanapreparationmethodwithits confirmatorytestsandprecautionsExplaintherapeuticimporta nceofpreparedLepakalpana,integrationwithKayachikitsaand Panchakarmadepartmentalongwithitsshelflifeandpackagingt echniques.	PSY - ME C	DK	SH	L& GD	P-VIVA,P- EXAM	F&S	II	V-KC
CO2,CO3	ObservedemonstrationofformulationofDantamanjana	CAP	NK	KH	L& GD	PRN	F	II	

Topic 55.Bheshaja Kalpana Practicals -II

CO1,CO2	DemonstraetheSoPinvolvedinthedrugselection,measuringth eappropriatequantityofingredients,preparation,observethePh ysicalChanges,Siddhilakshana,enlistingthe results,packingandstorage ofGhritaMurchanaandTaila Murchana	PSY - ME C	MK	D	PT,D	P-REC,P- EXAM,OSPE	F&S	II	

CO1,CO2	DemonstraetheSoPinvolvedinthedrugselection,measuringthe appropriatequantityofingredients,preparation,observethePhy sicalChanges,Siddhilakshana,enlistingtheresults,packingand storageofJatyadiGritha/TriphalaGritha/KsheeraShatphalaGri tha/PhalaGritha,	PSY - ME C	MK	D	PT,D	P- EXAM,OSP E	F&S	II	
CO1,CO2	DemonstraetheSoPinvolvedinthedrugselection,measuringthe appropriatequantityofingredients,preparation,observethePhy sicalChanges,Siddhilakshana,enlistingtheresults,packingand storageKsheeraBalaTaila/KasisadiTaila/PanchagunaTaila/A rkaTaila/Kutajasuryapakitaila	PSY - ME C	MK	SH	D	P- EXAM,OSP E	F&S	II	

CO1,CO2	DemonstraetheSoPinvolvedinthedrugselection,measuringthe appropriatequantityofingredients,preparation,observethePhy sicalChanges,Siddhilakshana,enlistingtheresults,packingand storageBhallatakaTailaPatana/JayapalaTailaPatana/Vishvam itraKalpaSneha	PSY - ME C	DK	KH	D	P-VIVA,P- EXAM,OSPE	F	II	
CO2	DemonstraetheSoPinvolvedinthedrugselection,measuringthe appropriatequantityofingredients,preparation,observethePhy sicalChanges,Siddhilakshana,enlistingtheresults,packingand storageofVasavaleha/ChavanaPrashaAvaleha/KushmandaA valeha	PSY - ME C	MK	KH	D	P-VIVA,P- REC,P- EXAM	F&S	II	
CO2	DemonstraetheSoPinvolvedinthedrugselection,measuringthe appropriatequantityofingredients,preparation,observethePhy sicalChanges,Siddhilakshana,enlistingtheresults,packingand storageofNimbuSharkara	PSY - ME C	NK	SH	D	P- EXAM,OSP E	F	II	

CO2	DemonstraetheSoPinvolvedinthedrugselection,measuringthe appropriatequantityofingredients,preparation,observethePhy sicalChanges,Siddhilakshana,enlistingtheresults,packingand storageofDaruharidraRasakriya	PSY - ME C	NK	SH	D	PRN	F	II	
CO2	DemonstraetheSoPinvolvedinthedrugselection,measuringthe appropriatequantityofingredients,preparation,observethePhy sicalChanges,Siddhilakshana,enlistingtheresults,packingand storageofHaridraKhanda/NarikelaKhanada	PSY - ME C	MK	D	D	P-VIVA,P- EXAM,OSPE	F&S	II	
CO1	DemonstraetheSoPinvolvedinthedrugselection,measuringth eappropriatequantityofingredients,preparation,observethe	PSY - ME C	MK	KH	D	T- EW,P- VIVA	F&S	II	

	PhysicalChanges,Siddhilakshana,enlistingtheresults,packinga ndstorageofKumaryasava/Drakshasava								
CO1,CO2	DemonstraetheSoPinvolvedinthedrugselection,measuringthe appropriatequantityofingredients,preparation,observethePhy sicalChanges,Siddhilakshana,enlistingtheresults,packingand storageofKutajarista/Ashokarishta/Takrarishta	PSY - ME C	MK	KH	D	P-VIVA	F&S	II	
CO2	.DemonstratetheSoPinvolvedinthedrugselection,measuringt heappropriatequantityofingredients,preparation,observetheP hysicalChanges,Siddhilakshana,enlisttheresults,packingtech niquesandstorageofuniqueformulationsfore.g.Kanji/Madush ukta	CC	DK	KH	D	P- VIVA,COM	F&S	II	
Topic 66.Dosage Forms & Self-care Products Practicals									

CO1,CO2,C O6	Observe instruments used to prepare solid dosage form, liquid dosage form and Semisolid Dosage Form with one example for each, their method of preparation, ingredients used with their quantity and Quality control Parameters.	AFT - RES	DK	KH	W,PT ,D	P-VIVA,CHK	F&S	III	
CO1,CO2,C O6	Observe instruments used to prepare with one example for each, their method of preparation, ingredients used with their quantity and Quality control Parameters. of following self care products Hair care: Shampoo Body care: Soap, Perfume Face care: Face Pack/Talcum Powder Lip Care: Lip Balm, Lipstick Oral care: Tooth Paste/ Mouth Wash Foot Care: Foot Cream Hand Disinfectant: Hand Sanitizer Skin Care: Moisturizer, Sunscreen Lotion following self care products	PSY - ADT	DK	KH	L_VC ,PT,D	P-VIVA,P- EXAM,CHK	F&S	III	
Topic 77. Field Visit/ Study Tour									
CO1,CO3,CO 4,CO5,CO6	Field Visit-Record the storage condition of the raw/in-process	CK	DK	K	DIS, FV	M-POS,COM	F	III	

	/finishedgoodspreparedintheapprovedsections.								
CO1,CO3,CO4,CO5,CO6	DeterminetheroleofvariousYantras/machineriesusedintheapprovedsectionsofthePharmacy	CK	DK	KH	DIS, RLE	INT	F	III	
CO1,CO3,CO4,CO5,CO6	Differentiatebetweentheancientandcontemporarymethodsof drugpreparation.	CC	DK	K	DIS, FV	PRN	F	III	
CO1,CO3,CO4,CO5,CO6	EnlistthedocumentsrequiredinBatchManufacturingofAyurvedicmedicines.	CK	NK	K	DIS	P-SUR	F	III	
CO1,CO3,CO4,CO5,CO6	IdentifytheroleofQualityControlinstrumentsandequipmentsinensuringaqualityAyurvedicproduct.	CK	DK	K	L&P PT,D IS	DEB	F	III	
CO1,CO3,CO4,CO5,CO6	AppreciatetheimportanceofGoodManufacturingPracticesand GoodPackagingPracticesrequiredinAyurvedicDrugmanufacturing.	AFT - VAL	DK	K	DIS	PRN,DEB	F	III	
CO1,CO3,CO4,CO5,CO6	PrepareownproductsasperprevalentFDAguidelines.	PSY - GUID	DK	D	L_VC ,DIS	P-EXAM	F	III	
Topic 88.Hospital IPD Practical									
CO1,CO2,CO3,CO4	Review&Observe thecaseSheets.	CC	NK	KH	DIS	P-SUR	F	III	V-KC ,V-SH ,V-PC ,V-SH L,V-S

									P,V -BL
CO1,CO2	Discussforformulationprescriptionmanner.	CC	DK	KH	L& GD	T-CS	F&S	III	V-KC
CO1,CO2,C O3	Demonstrate&Explainprescriptionmethod.	CAP	DK	SH	CD	P-PS	F&S	III	V-KC
CO1,CO2,C O4	Measuredoseofprescribeddrug.	CAP	MK	KH	PrBL	SP	F	III	
CO1,CO2,C O3	EnlistTime,Duration,Pathya,Apathyawhileprescribingdrugs.	CAP	DK	KH	L& GD	P-PRF	F	III	
CO4,CO5	valuedetailsandmethodicalwrittingofcaserecordsofhospitalI PDpatients	AFT - VAL	MK	KH	RLE	P-CASE	F	III	
Topic 99. Drug Dispensing Practical									
CO1,CO3	AssessthearrangementofAyurvedicdrugsaccordingtonaturea ndtypeindispensingroomorpharmacy.	CAP	NK	D	RLE	P-PRF	F	III	V-KC ,V-PC ,V-BL
CO1,CO3,C O4	Assesspracticeofprescriptionprocessingandlabellingofthedr ugs.	CE	DK	KH	PrBL	INT	F	III	
CO3,CO4	Determineandidentifythecauseofcommonerrorsoccurred	CC	DK	KH	RLE	CL-PR	F	III	

	during dispensing of Ayurvedic drugs.								
CO2, CO4	Explain use of correct drug supply to the right patients, in the required dosage, quantities and clear drug information.	CAP	DK	SH	L & GD	PRN	F	III	V-KC, V-BL
Topic 1010. Quality Control Practicals									
CO2	Develop analytical skills for understanding Identity, Purity and Strength of raw materials and finished products as per the standard guidelines of the Ayurvedic Pharmacopoeia of India.	CK	MK	KH	L & GD, BS, W, PT, D_L	P-VIVA	F	II	
CO2, CO5	Identify the geological description of minerals: physical parameters.	CK	DK	K	L_VC, W, D_L, FV	P-ID	F&S	II	
CO2	Describe Ayurvedic perspectives of quality control parameters applying for solid, semisolid and liquid dosage forms.	CAP	MK	SH	L & GD, T, UT, DA	P-VIVA, Log book	F&S	II	
CO2, CO5	Demonstrate the calibration techniques used for Weighing Balance (chemical and physical), pH Meter, Hot Air Oven and Electric Muffle Furnace to ensure the accuracy of the instrument what it is intended to measure.	CC	DK	KH	D_L	P-VIVA, PRN	F	II	
CO2		CAP	MK	SH	PT, D	P-EXAM, Log	F	II	

	Demonstrate bulk density, loss on drying, total ash, pH and water soluble extractives of Churna.				A	book			
CO2	Perform the analytical tests of tablets/vati/gutika for hardness, uniformity of weight and friability.	AFT - CHR	MK	SH	PT, DA	P-EXAM, Log book	F&S	II	
CO2	Estimate specific gravity, alcohol content and total solids of Asava & Arishta.	AFT - CHR	MK	SH	PT	P-EXAM, P-PRF	F	II	
CO2, CO5	Determine iodine value, acid value and saponification value of oils/ghee.	CAP	MK	KH	D_L	P-VIVA	F&S	II	
CO2, CO3	Calculate the dose of various dosage forms and their dispensing methods.	CE	MK	SH	L&G D, Pr BL, B L, RL E, D_L	P-SUR, P-CASE	F&S	II	
CO4, CO5	Appraise quality control procedures done for Ayurvedic formulations	AFT - VAL	DK	K	DIS	CL-PR	F	III	

Table 4a: List of Practical

S.No	Name of practical	Term	Activity	Practical hrs
1	1.Paribhashaconcept basedPracticals	1	A)DravyaParibhasha-Identificationof drugsandtheirrespectiveclass(varga) B)PrakriyaParibhasha- 1.Swedana:GodantiShodhana (A.F.I.-1,18:4(Rasatarangini11/238) ShankhaShodhana (A.F.I.-1,18:18(Rasatarangini12/12/2) Kapardikashodhana(Rasatarangini12/89) GugguluShodhana(RasendraSara Sangraha1/386,Pg.117 2.Mardana:ParadaSamanyaShodhana (AyurvedaPrakasha1/165) 3.Dhalana:GandhakaShodhana(A.F.I. 2Parishishta-2,9Shodhana(Rasamrita2, 3)VangaShodhana(A.F.I.-1,18:15 (SharangadharaM.11/2)Yashadashodhana (Rasatarangini19/99) 4.Nirvapa:AbhrakaShodhana (A.F.I.- 1,18:1(Rasatarangini10/20)Tamra Shodhana(A.F.I.-1,18:5(Ayurveda Prakasha3/118) 5.Nirjaleekarana:TankanaShodhana (A.F.I.2Parishishta-2,15Shodhana(AyurvedaPrakasha2/244)Kankshi shodhana(A.F.I.-2,14:3(Ayurveda Prakasha2/258) 6.Bhavana:HingulaShodhana(A.F.I.2 Parishishta-2Shodhana(Rasamruta 1/54) 7.Bharjana:GairikaShodhana(A.F.I.2 Parishishta-2,11Shodhana(Rasaratna Samuchchaya3/49)HinguShodhana (BhavprakashNighantu,Haritakyadi Varga,1/101,Pg.42) 8.Nimajjana/Sthapana:Vatsanabha shodhana(A.F.I.2Parishishta-2,25 Shodhana(Rasamritaparishishta8:145) 9.Jarana:VangaJaran (Ayurved Prakash3/159)VangaBhasma (A.F.I.-1,18:15(Rasamruta3/94) 10.Murchana:MugdhaRasa (Rasatarangini6/9)Kajjali(A.F.I.-1 Parishishta- 1,Paribhasha21(Rasatarangini 2/27) 11.Druti-GandhakaDruti(RasaRatna Samuchchaya3/29) C)PramanikaranaParibhasha-	20

			1)BhasmaSamanyaPareeksha -Abhraka Bhasma (Ayurved Prakash2/104)ShankhaBhasma(Rasara tnasamucchaya8/26-30) 2)BhasmaVisheshaPareeksha: TamraBhasma(Dadhi/NimbuPariksha)- (BhaishajyaKalpanaVigyan,Vd. SiddhinandanMishra,Pg.78) D)NamburiPhasedSpotTest(NPST)	
2	2.PanchavidhaKashaya Kalpana&their UpakalpanaPracticals	1	1.SwarasaKalpana: Tulasiswarasa (SharangdharSamhitaMadhyamKhanda 1/2),ArdrakaSwarasa(Sharangdhar SamhitaMadhyamKhanda1/2), VasaputapakaSwarasa (Sharangdhar SamhitaMadhyamKhanda1/22-23&34) 2.KalkaKalpana: Nimbakalka (SharangdharSamhitaMadhyamKhanda 5/1),RasonaKalka(SharangdharSamhita MadhyamKhanda5/1) 3.KwathaKalpana: Punarnavashtaka kwatha (SharangdharSamhita MadhyamKhanda2/1-2,78-79),Rasna SaptakaKwatha (Sharangdhar SamhitaMadhyamKhanda2/1-2,88-89) 4.HimaKalpana: Dhanyaka Hima(SharangdharSamhitaMadhyam Khanda4/1,7-8),SarivadiHima 5.PhantaKalpana: Panchakolaphanta (SharangdharSamhitaMadhyamKhanda 3/1-2),Yashtimadhuphanta(AFI1 Parishishta–1,2/5Paribhasha) 6.ChurnaKalpana: Sitopaladichurna (AFIPart1,Vol.1A,Pg.348), HingwastakaChurna(AFIPart1,Vol.1A, Pg.353) 7.Pramathya: MustadiPramathya (SharangdharSamhitaMadhyamKhanda 2/152-153) 8.PaneeyaKalpana: ShadangaPaneeya (SharangdharSamhitaMadhyamKhanda 2/159-160) 9.ManthaKalpana: KharjuradiMantha (SharangdharSamhitaMadhyamKhanda 3/9-10) 10.PanakaKalpana: Chincha Panaka(BhaishajyaRatnavaliArochaka 18/34-35),ChandanaPanaka 11.KsheerapakaKalpana: (Sharangdhar	24

			SamhitaMadhyamKhanda2/175-176),ArjunaKsheeraPaka-Chakradatta, LashunaKsheerapaka-CharakaChikitsasthana5/95 12. UdakaKalpana: Tandulodaka(Sharan gdharSamhitaMadhyamKhanda1/28) Note: Ineachcategoryifmorethan1practica larethereanyoneorallmaybepreformed.	
3	3.RasaDravyaAushadhiNirmanaPracticals	1	1. Marana: VangaBhasma(A.F.I.- I,Bhasma,18:15,RasataranginiTaranga)/Sankha Bhasma:A.F.I.- I,Bhasma,18:18,Rasataranginitaranga 12/2) 2. Kharaliyarasayana: AnandaBhairavaRasa(A.F.I.- I,Rasayoga,20:3,Rasendrasarasangraha Jwaradhikara 2/103-105)/,TribhuvanaKeertirasa(A.F.I.- I,Rasayoga,20:20,rasamrita9/80-81) 3. Parpati: RasaParpati(A.F.I.- I,Parpati,16:3,Bhaishajyaratnavaligrahanirogadhikara414-416&436-440),SwetaParpati(A.F.I.- II,Parpati,12:2,siddhyogsangrahaashmarimutrakruchhaadhikara) 4. Kupipakwarasayana : Rasasindhura(A.F.I. - I, KupipakwaRasayana, 15:6, rasatarangini taranga6/162-176) 5. Pottalirasayana: Rasagarbhapottali(Rasayogsagardwitiyabhagapottalirahasyapage582) 6. Rasa: Laghusutsekhararasa(Rasat antrasaraavumsiddhaprayogsangraha apart-1,kharaliyarasayanapage274) 7. Loha: Navayasaloha(A.F.I.- II,lauha,17:2,Charakasamhitachi.16/70-71)/,Saptamritaloha(A.F.I.- I,lauha,21:11,Bhaishajyaratnavalishool rogadhikara 83-84)	20

4	4.BheshajaKalpanaPracti cals-I	2	1.ArkaKalpana: YavaniArka(API,Part2,Vol.3,Pg.24) GulabArka(API,Part2,Vol.3,Pg.4)Misrey aArka(AFI,Part1,Vol.1A,Pg.106)	24

2. VatiKalpana:

AgniTundiVati(AFI,Part1,Vol.1A,Pg.497)

ChitrakadiVati(API,Part2,Vol.3,Pg.107)

LavangadiVati(API,Part2,Vol.3,Pg.116)

3. GugguluKalpana:

TriphalaGuggulu(API,Part2,Vol.2,Pg.134)

KaishorGuggulu(API,Part2,Vol.1,Pg.94)

4. SatvaKalpana:

AmrutaSatva(AFI,Part1,Vol.1A,Pg.560)

ArdraSatva

5. VartiKalpana:

PhalaVarti-

(BhaishajyaRatnavali

31/10)

ChandrodayaVarti(AFI,Part1,Vol.1A,Pg.553)

6. LavanaKalpana:

ArkaLavana(API,Part2,Vol.1,Pg.103)

NarikelaLavana(AFI,Part1,Vol.1A,Pg.473)

7. KsharaKalpana:

ApamargaKshara(AFI,Part1,Vol.1A,Pg.466)

KsharaSutraPreparation(AFIPart3,Pg.213)

8. MasiKalpana:

TriphalaMasi(RasendraSaraSangrahaUpadamshaChikitsa)

Mayura Piccha Masi(Yogratnakar,Chhardiroga,Pg.453)

9. Upanaha:

AtasiUpanaha

10. Manjana:

Dashanasamskara

churna(BhaishajyaRatnavaliMukharog,61/97-98)

11. MalaharaKalpana:

SikthaTaila(Rasatarangini4/59)SarjaraMalahara

(Rasatantrasar&SiddharayogSangrahaPart1,Pg.849)Gandhak

Malahara(Rasatarangini8/63-85)

12.LepaKalpana:

DashangaLepa(AFI,Part1,Vol.1A,Pg.

			487) ShatadhoutaGhrita(SushrutSamhitaUttart antra39/283)	
5	5.BheshajaKalpanaPracti cals-II	2	1. SnehaKalpana:GhritaMurcha na(BhaishajyaRatnavali,Jwaradhi kar,1285),TailaMurchana(Bhaish ajyaRatnavali,Jwaradhikar,1286- 1287) 2. GhritaKalpana:TriphalaGhrita(API ,Part2,Vol.1,Pg.90),AmrutaGhrita(Bhai shajyaRatnavaliVatarakta27/126) 3. TailaKalpana:KsheeraBalaTaila (API,Part2,Vol.1,Pg.124),ArkaTail a(SharangdharSamhitaMadhyamK handa9/148) 4. TailaPatana:BhallatakaTailaPata na (SushrutSamhitaChikitsaSthana1 /92) 5. Avaleha Kalpana: Vasavaleha(API,Part2,Vol.1,Pg.32), KushmandaAvaleha(AFI,Part1,Vol.1 A,Pg.35) 6. SharkaraKalpana:NimbuSharkara(Rasatantrasara&SiddhaprayogSangrah aI/PakaAvaleha) 7. Ghana:KutajaGhana(AFIPart2,Pg175 ,GuduchiGhana(AyurvedPrakash3) 8. KhandaKalpana:HaridraKhanda(B haishajyaRatnavaliUdarda,Shitapitta),N arikelaKhanda (AFI,Part1,Vol.1A,Pg.41) 9. Asava:Lohasava(SharangdharSa mhita,MadhyamKhanda10/34- 38),Drakshasava(AFIPart2,1:1) 10. Arishta: Arjunarishta(BhaishajyaRatnavaliHridr og).Takararishta (CharakSamhitaChikitsa15/120) 11. ShuktaKalpana:Kanji(Sharangdh arSamhita,MadhyamKhanda10/12),Ma dushukta(BhaishajyaRatnavaliKarnaro ga62/23-24)	22

6	6.DosageForms&Self-careProductsPracticals	2	1.Solid dosage forms: Granules/Lozenges(PharmaceuticsbyR.M.Mehta)	22

♦

2. Liquid Dosage forms:

Syrup/Suspension/Emulsion/Liniment (Pharmaceutics by R.M. Mehta)

3. Semisolid Dosage:

Cream/Gel/Ointment/Pain Balm (Pharmaceutics by R.M. Mehta)

4. Hair Care:

Shampoo (A Handbook of Cosmetics by B.M. Mithal & R.N. Saha 8th chapter)

5. Body Care:

Soap/Perfume (Pharmaceutics by R.M. Mehta)

6. Face Care:

Facepack/Talcum Powder (A Handbook of Cosmetics by B.M. Mithal & R.N. Saha 3rd chapter)

7. Lip Care:

Lip Balm, Lipstick (A Handbook of Cosmetics by B.M. Mithal & R.N. Saha 4th chapter)

8. Oral Care:

Tooth Paste/Mouth Wash (A Handbook of Cosmetics by B.M. Mithal & R.N. Saha 19th & 20th chapter)

9. Foot Care:

			♦ Foot Cream (A Handbook of Cosmetics by BMMithal & RNSaha 5th chapter) 10. Hand Disinfectant: ♦ Hand Sanitizer ((Pharmaceutics by R.M.Mehta) 11. Skin Care: ♦ Moisturizer/Sunscreen Lotion (A Handbook of Cosmetics by BMMithal & RNSaha 6th chapter) Note: In each category if more than 1 practical are there any one or all may be performed.	
7	7. Field Visit/Study Tour	3	GMP Certified Pharmacy Visit X 2 Pharmacy (1 classical formulations and 1 Proprietary formulations/ Having both Manufacturing facility) NABL Accredited drug Testing Laboratory/ Research and Development Unit Combined out campus/ Field visit may be planned wherever feasible	24
8	8. Hospital IPD Practical	3	Hospital IPD Practical: Formulation prescription, method administration, dose, time, duration, Pathya, Apathya advised - Minimum 10 casesheet record of different dosage forms prescribed for particular case/ disease	10
9	9. Drug Dispensing Practical	3	Drug Dispensing practical for method of Dispensing different dosage forms, their packaging for OPD and IPD patients	6
10	10. Quality Control Practicals	2	♦ 1 Minerals & Metals - Mineral Identification • Physical form – Crystal and	38

Amorphous

- Hardness on Moh's scale
- Brittleness test
- Fracture and Cleavage
- Streak Test
- Luster

2 Plant Material

- Estimation of Foreign matter
- Specific Gravity
- Refractive Index

3. Prepared Dosage forms

A. Solid Dosage Forms Rasaushadhi

- Bhasma and Pishti Pariksha
- Determination of Moisture content

4. Kashtoushadhi

a. Churna

- Particle Size
- Bulk Density
- Determination of Ash Value—
Total Water Soluble/Acid Insoluble ash

b. Tablets

- Uniformity in Weight and Size
- Tablet Hardness

B. Semisolid Dosage forms

- Moisture Content
- Microbial Load

C. Liquid Dosage Forms

- pH Value
- Refractive Index
- Specific Gravity
- Saponification Value
- Iodine Value
- Acid Value
- Viscosity

Note:

- All Practicals should be performed in accordance of Methods published in protocol for testing of ASU Medicines and

			Laboratory Guide for Analysis of Ayurveda & Siddha formulations published by Dept of AYUSH, GOI • Minimum 5 Analytical Practicals are to be written in Practical Record or In Journal	
Total Hr				210

Activity

CO	Topic name	Activity Details	Hours
CO1, CO2	Paper I- 1. Chronological development of Ayurvediya Aushadhi Nirmana	Objective - To orient the students regarding chronological development of Rasashastra & Bhaishajya Kalpana After completing this activity, students will be able to: • Describe the history of Rasashastra & Bhaishajya Kalpana. • Identify the different types of metal-based medicines. • Explain the benefit of metal-based medicines. • Discuss the safety of metal-based medicines. Methodology 1) All students are to be assigned to collect and compile information on chronological	1

		development of Rasashastra & Bhaishajya Kalpana from different books, including Indians are the first, who introduced metal based medicines. 2) Ask to Submit the assignment for signature	
CO1, CO2	Paper I- 2.a) Paribhasha (Terminology)	Rasadravya Objective- To encourage the students to remember rasadravyas and their classification through games Activity Group I- In one big tray all Rasa-Dravyas are to be kept together. Time to be started. In stipulated time, students have to collect drugs belonging to the particular class (rasadravyavarga) allotted to him/her and create a heap in order. This can be given in a group. Group 2.- Word puzzle Various word puzzles can be created for making the students to remember names of rasadravyas along with their class.	1
CO1, CO3	Paper I-2.b) Paribhasha	Mana Paribhasha Objective- After completing this activity, students will be able to:	2

		• weighdry&wetdrugs • Understandthe%ofweightlossafterdryingdifferantvarietyofthewetdrugs • Enjoy(gamebased)learningaboutstrasadravya sandtheirclassification. Methodology- wholebatchneedtobedividedintovariousgroups.(4-5studentsineachgroup). Eachgroupneedtomakeeachart/taskaspertheinstructionswrittenonthepapertheypickup. 1) Collectseedsmentionedinthe classicalmanaparibhashaandpreparechartdescribingdetailsofmana 2) Measurebyweightthegivendrug.(Guduchi Bharad,AmalakiBharad,HaritakiChurna,Nimbapatrachurna,wholemarichaallwillbekept having sameweight)Nowobservehowmuchvolume thesedrugshave. 3) CollectfreshGuduchi.500gmoranyfreshdrugsleaf,bark,floweretc.Keeponobservingthereductionintheweightofthesampletillitdriescompletely.Recordweighteveryday.Discussionaboutobservationwillbedone. DothissameforVasa,Shatavari,Amalakialso.Compareandassesstheresults.Everyyear drugs need to be changed	
CO1,CO2	PaperI- 2.c)ParibhashaTerminology	Shodhana	1

Objective - To enhance ability of the students to recall their knowledge about rasadravyas and their procedures

At the end of Activity, the students should be able to

Recall the different shodhanam methods that are used for rasadravyas.

- Identify the different yantras that are used for shodhana.
- Understand the different procedures that are used for shodhana.
- Correctly answer questions about shodhanam methods, yantras, and procedures.
- Explain the different steps involved in the shodhanam process.
- Discuss the benefits of shodhana for rasadravyas.

Activity-

Rapid Fire quiz online

Questions will be framed based on the knowledge of Yantra, Dravya, Method used for that drug etc and rapid fire round will be carried out. This can be done online

Questions for example-

- 1) Vanga Shodhanam is done by which method?
- 2) Which yantra is used for Shankha Shodhanam?

		3) Lashuna Svarasabhavana is used for shodhana of which drug?	
CO1, CO2	Paper I- 3. Adharabhuta Siddhanta (Fundamental Principles)	Objective: To understand the concept with the help of classical shloka & application of fundamental principles of Ayurvediya aushadhi nirmana. After completing this activity, students will be able to: Identify the different fundamental principles of Ayurvediya Aushadhi Nirmana. Illustrate how these principles are applied in the preparation of Ayurvedic formulations. Interpret classical shlokas related to the application of fundamental principles using Panchavayavakya. Demonstrate the skill of interpreting classical shlokas using Panchavayavakya. Students are to be divided into 5 groups. Each group needs to be given 2 Shlokas from a particular classical textbook. Method of Activity: 1. The students are divided into groups & each group needs to be allotted 1 to 2 shlokas from classical related to application of fundamental principles. 2. To develop skill of interpretation of shloka by applying Panchavayavakya i.e. Pratigya,	2

Hetu, Udhaharana, Upanaya and nigamana

3. They will understand application of basic fundamentals.

4. Every year different set of shlokas are to be given. Repetition of shlokas is not acceptable

Discussion:

After completion of task, discussion need to be held with teacher and students.

Teacher in charge will finally conclude the discussion on application of fundamental principles and understanding the shloka by applying Pancha vayavakya.

Optional Activity Activity-

1 Title: Search references from classical text

Group: Students should be divided into 10 groups.

Reference Text: 1. Chakradatta 2. Yogaratnakara
3. Bhavaprakasha 4. Sharangadhara

1 GP: Dravya Samgraha method

2 GP: Collection Time

3 GP: Collection Part

4 GP: Examples of Samskara

5 GP: Collection Nakshatra

6 GP: Pranjadravya part collection

7 GP: Duplication Yoga

8 GP: Namakara on Mana/Number of Dravya
9 GP: Saveeryata Avadhi

10 GP: Anupana in classical Yoga

CO1,CO5	Paper I -4. Yantropakaranani- I(Equipments and machineries)	Objectives:- After completing this activity, students will be able to: • Identify the different yantras that are used in the preparation of Ayurvedic formulations. • Interpret the different procedures of drug preparation that use yantras. • Collect information on different yantras from classical textbooks. • Present their findings in a clear and concise way. Activity Students need to be divided into 4 groups (15 to 25 students in each group). Each group needs to be given one reference book. They have to collect information on different yantras explained/used for different procedures of drug preparation from that book. Books like Anandakanda, Rasa Tarangini, Rasa Ratna Samuchaya, Rasendra Sara Sangraha, Parada Samhita etc. can be given. Every year different books are to be given. Each group has to present/submit an assignment on total number of Yantras mentioned, their different uses, Structure/Picture etc. Discussion: In charge teacher will comment on particular group performance and study matter.	4

		collected.	
CO1,CO5	Paper I -5. Yantropakaranani-II (Equipments and machineries)	Objective:- After completing this activity, students will be able to: • Prepare a video/ppt demonstration on Musha, Koshti and Puta. • Model the preparation of Musha, Koshti and Puta. • Collect literature on Musha, Koshti and Puta from classical textbooks as per different authors. • Identify modern/presently available Yantras based on the classical concept of Musha, Koshti and Puta. Activity Students are to be divided into 4 groups Group I- is allotted to prepare video/ppt demonstration Group II- Model preparation of Musha, Koshti and Puta Group III- Literature collection from classical textbooks as per different authors on Musha, Koshti and Puta Group IV- Modern/Presently available Yantras based on the classical concept of four yantra, Musha, Koshti and Puta Note: Every year different yantras/instruments need to be given	4

		Discussion and Conclusion: Each group has to present their activity followed by teacher's remark	
CO1, CO2	Paper I- 6. Kalpana Nirman I (Primary & Secondary dosage forms)	Objective:- After completing this activity, students will be able to: • Identify the different dosage forms that are commonly used in Ayurveda. • Appraise the different methods that are used to prepare these dosage forms. • Document the different activities that are performed at home and in communities/societies related to the preparation of these dosage forms. • Prepare two dosage forms in the laboratory from their observation of home preparations. Methodology: 1. Every student will document different activities performed at home and in societies/communities related to the preparation of different dosage forms which come under Panchavidhakashayakalpana, Upakalpana and their household applications. (for example- fruit juices belong to svarasakalpana, chutney to kalka etc.) Discussion: 1. The students will be assessed based on their documentation 2. A group containing 10 number of students will be asked to collect the raw materials and prepare	4

		minimum two numbers of dosage forms in the laboratory from their observation of home preparations. 3. Finally an interactive session will be held to discuss the learning experiences and to clear doubts	
CO5	Paper I-7&11. Kalpana Nirman I & III (Method of preparation of different dosage forms & dietary supplements)	objective:- After completing this activity, students will be able to: • Identify the different dosage forms that are commonly used in Ayurveda. • Appraise the different methods that are used to prepare these dosage forms. • Document the different activities/researches related to the preparation of these dosage forms. Methodology:- 1. Students need to be divided into 4 different groups. 2. Group 1- Directed to collect information on different varieties of proprietary Ayurvedic and contemporary solid dosage forms available in the market through e-resources (e.g. tablets, capsules, lozenges etc) 3. Group 2- Directed to collect information on different varieties of proprietary Ayurvedic and contemporary liquid dosage forms available in the market through e-resources (e.g. Oils, syrups, suspension etc) 4. Group 3- Directed to collect information on	10

		different varieties of proprietary Ayurvedic and contemporary semi-solid dosage forms available in the market through the resources (e.g. ointments, gels, jellies etc) 5. Group 4- Directed to collect research articles published on modification of classical Ayurvedic dosage forms through the resources on solid, liquid and semi-solid dosage forms. Discussion: -Finally Students have to present the collected information in the form of power point presentation and submit the assignment. In charge teacher has to conclude by stressing upon scope for research and development in modification of classical dosage forms. The mentioned activity is an example. Note: Every year different formulations/ dosage forms/ activity need to be given.	

CO1,CO2,CO3	Paper I- 8.RasaDravyaParichaya-IMK	Objectives:- After completing this activity, students will be able to: • Justify the importance of identifying genuine RasaDravyas. • Learn to interpret classical and mineralogical criteria for identifying RasaDravyas. • Communicate findings effectively Method of Activity: 1. Students are to be divided into 4 to 5 groups 2. Each group is to be given 5 Rasa dravyas (from	4

		must know dravya list). 3. Students will be instructed to collect raw samples/ Pictures / Photos of assigned Rasa Dravya 4. Students have to interpret classical as well as mineralogical criteria for identifying that Rasa Dravya. 5. Encourage them to develop the skill of identification of various Rasa Dravyas and to understand its necessity. Discussion & Conclusion Each Group has to share the presentation. Finally, teacher has to give concluding remarks. Note: The mentioned activity is an example. Every year different set of drugs/activity need to be given.	
CO1, CO2, CO3	Paper I- 9. Rasa Dravya Parichaya aII-DK	Objectives:- After completing this activity, students will be able to: • Document the different rasa dravyas that are considered to be desirable to know. • Gather information about each rasa dravya, such as its Sanskrit name, English name, synonyms, botanical name, physical appearance, taste, and medicinal properties. • Present the findings in a clear and concise way.	6

		• Debate and justify that their drug is more superior than other drugs in the same group. Method of Activity: 1. Students are to be divided into 4 groups 2. The students will be instructed to refer and collect photos, general information, medicinal uses from classical textbooks and other resources. 3. Each group is to be given 2 drugs. 4. The mentioned activity is an example. Every year different rasa dravya/activity needs to be given. Discussion: After the completion of compilation of desirable to know Rasa Dravya, each group will present short review of their work in front of the class and they have to debate and justify that their drug is more superior than other drugs in the same group. Finally, teacher has to give concluding remark on debate.	
CO3	Paper I- 10. Rasa Dravya Parichaya-III NK	Objectives:- After completing this activity, students will be able to: • Document the different rasa dravya that are considered to be desirable to know. • Gather information about each rasa dravya, such as its Sanskrit name, English name, synonyms, botanical name, physical appearance,	6

		taste, and medicinal properties. • Present the findings in a clear and concise way. • Debate and justify that their drug is more superior than other drugs in the same group. To compile, understand and document basic information about certain Rasa Dravyas. (this activity is for nicetoknow dravyas) Methodology: 1. Students are to be divided into 4 groups 2. The students will be instructed to refer and collect photos, general information, medicinal uses of given dravyas from classical textbooks and resources. 3. Each group is to be given 4 drugs. 4. The mentioned activity is an example. Every year different drugs/activity need to be given. Discussion: After the completion of compilation of nicetoknow Rasa Dravya, each group will present short review of their findings, in front of class and they have to debate and justify that their drugs are more superior than other drugs. Finally, teacher has to give concluding remark on debate. Note: Every year different drugs are to be given.	

CO1,CO2,CO3,CO5	Paper I- 12.Chaturvidha Rasayana -MK	Objectives:- • Collect information on different Chaturvidha Rasa formulations. • Identify the different manufacturing companies that produce Chaturvidha Rasa formulations. • Appraise the different classical references that are used to manufacture Chaturvidha Rasa formulations. • Compare the MRP (prices) of different Chaturvidha Rasa formulations. • Identify the indications for different Chaturvidha Rasa formulations. • Analyze the different Chaturvidha Rasa formulations and develop critical thinking skills. • Communicate their findings effectively to the class. Method of Activity: (Survey) Students are to be divided into 5 groups 1. Group 1- Need to be assigned to collect information on Swarna Bhasma manufacturing companies, classical references they follow to manufacture it, MRP (prices) and indications 2. Group 2- Need to be assigned to collect varieties of Paripatita containing Suvarna Bhasma as one ingredient in it, their manufacturing companies, classical references they follow to manufacture it, MRP (prices) and indications 3. Group 3-	4

		Need to be assigned to collect varieties of kup ipak warasayan containing suvarna bhas ma as one ingredient in it,	

		manufacturing companies, classical references they follow to manufacture it, MRP (prices) and indications 4. Group 4- Need to be assigned to collect varieties of pottalir asayanas containing suvarna bhasma as one ingredient in it, manufacturing companies, classical references they follow to manufacture it, MRP (prices) and indications 5. Group 5- Need to be assigned to collect varieties of kharali yarayanas containing suvarna bhasma as one ingredient in it, manufacturing companies, classical references they follow to manufacture it, MRP (prices) and indications 6. The mentioned activity is an example. Every year different formulations/activity need to be given. Discussion: All groups have to present their assignment and finally in charge teacher has to give conclusion of importance of swarna kalpa, rationality behind following different references and probable variation in their cost.	
CO1	Paper I- 13. Current and Emerging Trends in Ayurvedic Pharmaceuticals	Objectives:- • Identify the current and emerging trends in Ayurvedic Pharmaceuticals. • Analyze the potential impact of these trends on the future of Ayurvedic Pharmaceuticals. • Review and record the commonly used modified dosage forms of Ayurvedic	4

		formulations. • Evaluate the potential of these modified dosage forms to improve the efficacy and safety of Ayurvedic formulations. Method of Activity Students need to be divided into 3 groups Group 1. List the current and emerging trends in Ayurvedic Pharmaceuticals viz. cosmetics, Neutraceuticals, Herbaceuticals Group 2. Review and record the commonly used modified dosage forms of Ayurvedic formulations Group 3. Generate a folder on computer about relevant research articles on modified Ayurvedic dosage forms Discussion: All the above groups will present their assignment with their team and Exchange of Knowledge will take place followed by conclusion by faculty in charge	
CO4	Paper I- 14. GMP & Drug and Cosmetic Act 1940 and rules 1945	Objective: After completing this activity, students will be able to: • Identify misleading advertisements under the Drug & Magic Remedies (Objectionable Advertisements) Act, 1954. • Analyze misleading advertisements and identify the specific provisions of the Act that are being violated.	4

		• Communicate their findings in a clear and concise way. Methodology:- Students are to be divided into 5 students in each group 1. Each group needs to report two misleading advertisements under Drug & Magic Remedies-objectionable advertisements Act, 1954 advertising through TV channels, print media or electronic media etc. 2. The students will ask to submit details of objectionable advertisements in the prescribed format. Discussion:- After the submission of reports, the students will be asked to present and an interaction will be held between students and the concerned teacher(s) to understand the act & rules of objectionable advertisements as a learning experience.	
CO1	Paper II- 1. Aushadhi Prayoga Vigyana	Objective: After completing this activity, students will be able to: • Understand the concept of Prashasta Bhesajalakshana. • Identify the different aspects of Prashasta Bhesajalakshana, such as bahukalpam, bahugunam, and sampannam.	2

		• Gather information about a given drug/formulation and justify whether it is a Prashashta Bhesaja. • Communicate their findings in a clear and concise way. Method of Activity Students will be divided into groups consisting of 10 students in each group. Each group will be given one drug/Formulation. They have to search information about Prashashta Bhesaja on following aspects- 1. Bahu Kalpam 2. Bahugu nam 3. Sampannam Justify that the drug which they are allotted drug/formulation. Each team will present their justification followed by conclusion by designated faculty.	
CO1, CO3	Paper II- 2. Single drug (Herbal & Mineral)	Objective: After completing this activity, students will be able to demonstrate their knowledge of herbal and mineral drugs by: • Identifying and differentiating between	2

		different types of herbal and mineral drugs, with at least 5 examples of each. • Understanding the different formulations of herbal and mineral drugs, with at least 3 examples of each formulation. • Learning about the different indications for herbal and mineral drugs, with at least 3 examples of each indication. • Learning about the different anupana that can be used with herbal and mineral drugs, with at least 3 examples of each anupana. • Understanding the importance of pathyaapatya, sevana kala, and saveerya tavadhi in the administration of herbal and mineral drugs. • Communicating their findings in a clear and concise way, including a presentation to the class that is clear, concise, and answers questions about the drugs. Method of Activity 1. Students need to be divided into groups as per convenience 2. Each group needs to be assigned with one herbal or mineral drug or from both categories 3. Advised to collect information on assigned single drug/drugs variety of formulations, different indications when given in different form, with different anupana, Pathyaapatya, sevana kala, saveerya tavadhi and research updates and clinical evidences for each of the formulations 4. Every year different drugs are to be allotted to avoid repetition.	

CO1,CO2,CO3	Paper II- 3.Single Drug(Bhasma,Shuudha&Pishti)-Mk	Objective After completing this activity, students will be able to demonstrate their knowledge of market research by: • Conducting a market survey of one or two bhasmas in a particular city. • Collecting and documenting information about the market demand for the bhasma, such as the price, the dosage, and the frequency of use. • Analyzing the data collected to determine the market trends for the bhasma. • Communicating their findings in a clear and concise way, including a presentation to the class. Method of Activity: 1. The students are instructed to visit an Ayurvedic drug store and collect information as given in the format. 2. Students need to be divided into 4 to 5 groups. Each group needs to be given 1 to 2 drugs. (Every year different drugs are to be allotted to avoid repetition.) 3. Each group has to visit one or two Ayurvedic drug stores. Number of stores can be increased based on the number of drug stores in the city or around the city. (based on information of online survey) After collecting information, students have to submit survey forms to the department.	6

CO1,CO2	PaperII- 4.AushadhiKalpa- I(CompoundFormu lations)	HorizontalIntegrationActivitywith DepartmentofAgadaTantraObjecti ve Aftercompletingthisactivity, • Studentswillbeabletodemonstratetheirknowl edgeofthepreparationandusesofagadasby: • Preparingfivedifferentagadasundertheg uidanceofRasashastra&BkDeptfaculty.. • Presentingtheirfindingsontheingredients, methodofpreparation,uses,dosage,anupana, andmodeofactionoftheagadas. • Communicatingtheutilityoftheagadasindiff erentconditions,researchupdateswithcasestu dies,anddosage,anupana,anddurationofagad akalpaprayeroga. MethodofActivity Studentswillbedividedinto5groups Eachgroupwillgethandsontrainingtoprepareo nepeculiaragada(mentionedinfollowinglist)a ndfacultyfromAgadaTantradepartmentwillgi veinformationaboutitsutilityindifferentVisha Laxana/orStagesofvishadushta.Alldetailsabo utagadakalpaprayerogaviz.Dosage,Anupana,D urationwillbediscussed-2hrs Team1:BilavdiAgada Team2:DooshivishariAgada Team3:DashangaAgadaTea m4:MurvadiAgada Team5:PanchaShireeshaAgada PresentationwillbedonebyallTeamson	4

		Ingredients, Method of Preparation, Video/Photos of ingredients, preparation, uses, dosage, Anupana Every year different topics are to be selected for integrated activity. Repetitions should be avoided. Discussion will be done on mode of action, utility of above prepared Agada in different conditions, Research updates with Case studies by Agada Tantra Faculty	
CO3	Paper II - 5. Aushadhi Kalpa -II(Compound drugs/formulations)	Objective After completing this activity, students will be able to: • Identify the different types of research updates and clinical evidences that are available for the formulations listed in the syllabus Aushadhi Kalpa -II(Compound drugs/formulations). • Collect and compile research updates and clinical evidences for the formulations assigned to them. • Review the research updates and clinical evidences to determine their relevance and significance. • Communicate their findings in a clear and concise way. Methodology of Activity: 1. Students are to be divided into 5 to 6 groups 2. Each group is to be assigned 2 to 3 formulations in the syllabus.	2

		3. Groups are instructed to collect Research updates and clinical evidences for formulations assigned to them 4. Every year different formulations are to be allotted to avoid repetition. Submission of Assignment: After the completion of compilation group should submit the assignment for correction.	
CO4	Paper II - 6 Dosage forms & cosmetic products Paper II- 7. Nutraceuticals	objective After completing this activity, students will be able to: • Identify the different types of cosmetic and nutraceutical products. • Understand the legal and regulatory requirements for these products. • Research the market for these products. • Analyze the quality control tests that are recommended for these products. • Prepare a report/assignment on the selected products. • Communicate their findings in a clear and concise way. • Answer questions about their findings. • Communicate the significance of various guidelines used for testing of food products and cosmetics in brief.	3

Methodology:-

1. Students are to be divided into 5-6 groups
2. Each group needs to be given one to two cosmetic or nutraceutical products for eg. Lipstick, lip balm, Energy drink, Nutritional supplement for children, working women, pregnant women etc.
3. The students will be asked to prepare a report/assignment on number of companies selling such products. Information should be compiled about their major ingredients, preservatives, price, market value, quality control tests recommended etc.
4. For that Nutritional Product, the students will be asked to go through the quality parameters and nutritional values displayed on packages of food products as per the guidelines of Food Safety and Standards Authority of India (FSSAI).
5. Every year different products are to be allotted to avoid repetition

Discussion:-

After the submission of reports, a discussion will be held among the students and the teacher(s) to understand the significance of various guidelines used for testing of food products and cosmetics in brief.

Optional**Activity Objectives-**

After completion of the course students should be able to prepare dosage forms and self care products in the syllabus.

Shorttermcourse/Module	

		Online/offlinemodeincollaborationwithPharmacycollege DosageForms&Self-careProductsAssessmentthroughMCQ's Durationofthecoursemaybe22hrsincludingonlineassessment	
CO1,CO3,CO6	PaperII-8AnupanaPrayogaforAushadhiKalpaPaperII-9. AushadhiPrayogaMarga	Objective Afterthecompletionofthisactivity • Studentsshouldbeabletoexplain/presenttheprobablepharmacokineticandpharmacodynamicprinciplesofassignedAyurvedicdrugs&Anupanaindifferentconditionorindication MethodofActivity:- 1. Studentswillbedividedinto5to6groups 2. Eachgroupneedtobeallottedformulations/singledrug/Bhasma/Pishtietc 3. StudentsareaskedtoexplainthetherapeuticimportanceoffiveformulationswithrespecttodifferentAnupana,AushadhiprayogamargaandtheirutilityindifferentdisorderswiththeprobablepharmacokineticandpharmacodynamicprinciplesinvolvedintheuseofassignedAyurvedicdrugs. 4. studentshavetosubmitassignment/sharingpptpresentationintheactivitygroup Discussion:- Afterthecompletionofthistask,studentsshouldbeabletoexplain/presenttheprobablepharmacokineticandpharmacodynamicprinciplesofassignedAyurvedicdrugs.Incharge teacherhastoconcludeoncollectionofcompiledmatteranddrugaction.	2

CO3	Paper II 10. Rational prescription along with safe dispensing of Ayurvedic formulations.	Objective After completing this activity, students will be able to: • Identify the different components of a prescription. • Analyse the prescription to determine whether they are rational. • Discuss the significance of ideal prescription and rationality of use of drugs in Ayurveda. Methodology:- 1. Students are to be divided into 4 to 5 groups 2. Each group is advised to collect 4 to 5 prescriptions from different departments of the hospital. 3. The students are asked to visit the hospital together and randomly select five prescriptions for promoting them to know the ideal prescription and rational use of drugs. 4. The students will be asked to present their review of this activity during the non-lecture hours. 5. Strictly instructions should be given to maintain confidentiality about patient's name and consultant's name. Discussion:- After the completion of the task, an interaction will be held among the students and the concerned teacher(s) to understand the	4

		significance of ideal prescription and rationality of use of drugs in Ayurvedic practices.	
CO1, CO5	Paper II 11. Traditional and local health practices	Objective After completing this activity, students will be able to: • Identify different types of traditional healers in their local area/region. • Interview traditional healers to understand their practices. • Document the practices of traditional healers in a way that is respectful and preserves their knowledge. • Communicate the findings of their research to others. Methodology: 1. To understand the practices of traditional healers/Folklore healers- the students are instructed to visit and meet some of the folk healers/traditional healers who have been practicing since ages in their local area/region. During their holiday/vacation students can complete this survey in and around the institute or near their residential place. 2. The students may act as a bridge between Ayurveda and traditional/local healers by making them understand the beneficial effect of technology and how this can help the healers to expand their treatment to a larger mass. Because many a times it has been observed that the healers are reluctant or they don't entertain the students who come to meet them for fear of exploitation or theft of their knowledge.	4

		3. By doing this practice, the healers will develop confidence on students which helps in collecting/documenting practices, through which a new horizon may open in the field of medicinal research. Discussion: After the completion of the visit, an interaction needs to be held among the concerned teachers and students to discuss the learning experiences, and try to find out difficulties so that in future those things can be managed or avoided to make things easier.	
CO4	Paper II 12. Pharmacovigilance for Ayurveda drugs	Objective After completing this activity, students will be able to: • Identify the different types of adverse drug reactions (ADRs). • Describe the detection criteria for ADRs. • Explain the assessment techniques for ADRs. • Discuss the prevention criteria for ADRs. • Able to fill out an ADR reporting format Methodology:- The students will be asked to visit the hospital or go through the previously reported cases to discuss for detection criteria, assessment techniques, understanding and prevention criteria of ADRs. Every student is assigned to fill up the ADR reporting format by allotting imaginary situation/real case	4

		Discussion:- After the visit, an interaction will be held among the concerned teacher(s) and the students to discuss their learning experiences, and the importance of AD Rs, their assessment and reporting techniques.	

Table 5- Teaching learning method

Sr No	Teaching learning methods in the course	No of Activities
1	Lecture	15
2	Lecture with Powerpoint presentation	82
3	Lecture & Group Discussion	25
4	Lecture with Video clips	14
5	Discussions	46
6	Brainstorming	29
7	Inquiry-Based Learning	25
8	PBL	1
9	CBL	1
10	Project-Based Learning	15
11	Team project work	12
12	Blended Learning	1
13	Edutainment	1
14	Mobile learning	2
15	Self-directed learning	23
16	Problem solving method	2
17	Workshops	1
18	Game-Based Learning	2
19	Demoon Model	2
20	Library Session	7

21	Peerlearning	1
22	Reallifeexperience	5
23	Recitation	2
24	Symposium	1
25	Tutorial	2
26	Presentations	2
27	Practical	7
28	Druganalysis	1
29	Demonstration	2
30	DemonstrationLab	4
31	Fieldvisit	2

These are overall teaching learning methods listed in Table 3 and 4. Teachers can select the best possible method among the given methods as per objective, available time etc.

Table 6: Assessment Summary: Assessment is subdivided in A to H points

6 A-Number of Papers and Marks Distribution

Subject Code	Papers	Theory	Practical/Clinical Assessment					Grand Total
			Practical	Viva	Elective	IA	Sub Total	
AyUG-RB	2	200	100	70	-	30	200	400

6 B - Scheme of Assessment (formative and Summative)

PROFESSIONAL COURSE	DURATION OF PROFESSIONAL COURSE		
	First Term (1-6Months)	Second Term (7-12Months)	Third Term (13-18Months)
Second	3PA&FirstTT	3PA&SecondTT	3PA&UE

PA:PeriodicalAssessment;**TT:**TermTest;**UE:**UniversityExaminations.

6 C - Calculation Method for Internal assessment Marks

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERMASS ESSMENT	
	A 2	B	C	D	E	F	G	H
	1(15 Marks)	2(15 Marks)	3(15 Marks)	Average(A+B+C/3)	Converted to 30 Marks(D/15*30)	Term Test(Marks converted to 30)	SubTotal_/60 Marks	Term Assessment(.../30)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. **Conduct Theory (100 Marks) (MCQ (20*1 Marks), SAQ (8*5), LAQ (4*10)) and Practical (100 Marks) Then convert to 30 marks.							

6 D - Evaluation Methods for Periodical Assessment

S. No	Evaluation Methods
1	Activities Indicated in Table 3-Column G 3 as per Indicated I, II or III term in column I 3

Evaluation Methods in MSE

1. Practical / Clinical Performance
2. Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3. Open Book Test (Problem Based)
4. Summary Writing (Research Papers/ Samhitas)
5. Class Presentations; Work Book Maintenance
6. Problem Based Assignment
7. Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8. Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9. Small Project etc.

6 E Question Paper Pattern

II PROFESSIONAL BAMS EXAMINATIONS AyUG-RB PAPER-1

Time: 3 Hours Maximum Marks: 100 INSTRUCTIONS:

All questions compulsory

		Number of Questions	Marks per question	Total Marks
Q1	MULTIPLE CHOICE QUESTIONS (MCQ)	20	1	20
Q2	SHORT ANSWER QUESTIONS (SAQ)	8	5	40
Q3	LONG ANSWER QUESTIONS (LAQ)	4	10	40
				100

Similar for Paper II

6 F Distribution of theory examination

Paper1AyurvediyaAushadhiNirmanavigyana						
Sr. No	A List of Topics	B Term	C Marks	MCQ (1 Mark)	SAQ (5 Marks)	LAQ (10 Marks)
1	1.ChronologicaldevelopmentofAyurvediyaAushadhiNirmana	1	05	No	Yes	No
2	2.Paribhasha(Terminology)	1	10	Yes	Yes	No
3	3.AdharbhutaSiddhanta(Applicationoffundamentalprinciples)	1	05	Yes	Yes	No
4	4.Yantropakaranani-I(Equipmentsandmachineries)	1	05	Yes	Yes	No
5	5.Yantropakaranani-II(Equipments,fuelandHeatingDevices)	1	05	Yes	Yes	No
6	6.KalpanaNirmanai(Primary&Secondary dosageforms)	1	10	Yes	Yes	Yes
7	7.KalpanaNirmana-II(MethodofPreparationofdifferentdosage forms&DietarySupplements))	1	10	Yes	Yes	Yes
8	8.RasaDravyaParichaya-I	2	10	Yes	Yes	Yes
9	9.RasaDravyaParichayaII	2	5	Yes	Yes	No
10	10.RasadravyaParichayaIII	2	5	Yes	No	No
11	11.KalpanaNirman-III(MethodofPreparationofdifferentdosageforms)	2	10	Yes	Yes	Yes
12	12.ChaturvidhaRasayana	2	10	Yes	Yes	Yes
13	13.CurrentandemergingtrendinAyurvedic pharmaceuticals	3	5	No	Yes	No

14	14.GMP(ScheduleT)&Regulatoryaspectsof Ayurvedicdrugs	3	5	Yes	Yes	No
Total Marks			100			

Paper2AyurvediyaAushadhiPrayogaVigyana						
Sr. No	A List of Topics	B Term	C Marks	MCQ (1 Mark)	SAQ (5 Marks)	LAQ (10 Marks)
15	1.AushadhiPrayogaVigyana	1	5	Yes	Yes	No
16	2.Singledrug(Herbal&Mineral)	1	10	Yes	Yes	Yes
17	3.Singledrug(Bhasma,Shuddha&Pishti)	2	15	Yes	Yes	Yes
18	4.AushadhiKalpa-I(Compoundformulations)	2	15	Yes	Yes	Yes
19	5.AushadhiKalpa-II(CompoundDrugs/Formulations)	3	15	Yes	Yes	Yes
20	6.DosageForms&CosmeticProducts	3	5	Yes	Yes	No
21	7.Nutraceuticals	3	5	Yes	Yes	No
22	8.AnupanaPrayogaforAushadhiKalpa	3	5	Yes	Yes	No
23	9.AushadhiPrayogaMarga	3	10	Yes	Yes	Yes
24	10.RationalprescriptionalongwithsafedispenensingofAyurvedicformulations.	3	5	No	Yes	No
25	11.Traditional&LocalhealthPractices	3	5	No	Yes	No
26	12.PharmacovigilanceforAyurvedadrugs	3	5	Yes	Yes	No
Total Marks			100			

Paper No:1		
Question No	Type of Question	Question Paper Format
Q1	Multiple choice Questions 20 Questions 1 mark each All compulsory Must know part- 15 MCQ Desirable to know- 3 MCQ Nice to know part- 2 MCQ	1. 2. Paribhasha (Terminology) 2. 2. Paribhasha (Terminology) 3. 2. Paribhasha (Terminology) 4. 4. Yantropakaranani-I (Equipments and machineries) 5. 5. Yantropakaranani-II (Equipments, fuel and Heating Devices) 6. 6. Kalpana Nirman I (Primary & Secondary dosage forms) 7. 6. Kalpana Nirman I (Primary & Secondary dosage forms) 8. 6. Kalpana Nirman I (Primary & Secondary dosage forms) 9. 7. Kalpana Nirman II (Method of Preparation of different dosage forms & Dietary Supplements) 10. 7. Kalpana Nirman II (Method of Preparation of different dosage forms & Dietary Supplements) 11. 8. Rasa Dravya Parichaya-I 12. 8. Rasa Dravya Parichaya-I 13. 8. Rasa Dravya Parichaya-I 14. 8. Rasa Dravya Parichaya-I 15. 9. Rasa Dravya Parichaya II 16. 10. Rasa dravya Parichaya III 17. 11. Kalpana Nirman-III (Method of Preparation of different dosage forms) 18. 12. Chaturvidha Rasayana 19. 12. Chaturvidha Rasayana 20. 14. GMP (Schedule T) & Regulatory aspects of Ayurvedic drugs
Q2	Short answer Questions Eight Questions 5 Marks Each All compulsory Must know- 7 SAQ Desirable to know- 1 SAQ No question on Nice to know	1. 1. Chronological development of Ayurvediya Aushadhi Nirmana 2. 3. Adharbhuta Siddhanta (Application of fundamental principles) / 2. Paribhasha (Terminology) 3. 9. Rasa Dravya Parichaya II / 4. Yantropakaranani-I (Equipments and machineries) / 5. Yantropakaranani-II (Equipments, fuel and Heating Devices)

5. 7.KalpanaNirmana-II(MethodofPreparation

		of different dosage forms & Dietary Supplements)) 6. 9. Rasa Dravya Parichaya II / 8. Rasa Dravya Parichaya-I 7. 12. Chaturvidha Rasayana 8. 14. GMP (Schedule T) & Regulatory aspects of Ayurvedic drugs / 13. Current and emerging trends in Ayurvedic pharmaceuticals
Q3	Long answer Questions Four Questions 10 marks each All compulsory All questions on must know . No Questions on Nicetoknow and Desirable to know	1. 6. Kalpana Nirman I (Primary & Secondary dosage forms) 2. 7. Kalpana Nirman II (Method of Preparation of different dosage forms & Dietary Supplements)) 3. 8. Rasa Dravya Parichaya-I 4. 11. Kalpana Nirman III (Method of Preparation of different dosage forms) / 12. Chaturvidha Rasayana
Paper No: 2		
Question No	Type of Question	Question Paper Format
Q1	Multiple choice Questions 20 Questions 1 mark each All compulsory Must know part- 15 MCQ Desirable to know- 3 MCQ Nicetoknow part- 2 MCQ	1. 1. Aushadhi Prayoga Vigyana 2. 2. Single drug (Herbal & Mineral) 3. 2. Single drug (Herbal & Mineral) 4. 3. Single drug (Bhasma, Shuddha & Pishti) 5. 3. Single drug (Bhasma, Shuddha & Pishti) 6. 3. Single drug (Bhasma, Shuddha & Pishti) 7. 3. Single drug (Bhasma, Shuddha & Pishti) 8. 4. Aushadhi Kalpa-I (Compound formulations) 9. 4. Aushadhi Kalpa-I (Compound formulations) 10. 4. Aushadhi Kalpa-I (Compound formulations) 11. 4. Aushadhi Kalpa-I (Compound formulations) 12. 5. Aushadhi Kalpa-II (Compound Drugs/Formulations) 13. 5. Aushadhi Kalpa-II (Compound Drugs/Formulations) 14. 5. Aushadhi Kalpa-II (Compound Drugs/Formulations) 15. 5. Aushadhi Kalpa-II (Compound Drugs/Formulations) 16. 6. Dosage Forms & Cosmetic Products

		17. 7.Nutraceuticals 18. 8.AnupanaPrayogaforAushadhiKalpa 19. 9.AushadhiPrayogaMarga 20. 12.PharmacovigilanceforAyurvedadrugs
Q2	ShortanswerQuestionsEightQuestions 5MarksEachAllcompulsory Mustknow-7SAQDesirabletoknow-1SAQNoquestionsonNicetoknow	1.8.AnupanaPrayogaforAushadhiKalpa/ 1. AushadhiPrayogaVigyana 2. 2.Singledrug(Herbal&Mineral) 3. 3.Singledrug(Bhasma,Shuddha&Pishti) 4. 4.AushadhiKalpa- I(Compoundformulations) 5. 5.AushadhiKalpa- II(CompoundDrugs/Formulations) 6. 7.Nutraceuticals 7. 9.AushadhiPrayogaMarga 8. 12.PharmacovigilanceforAyurvedadrugs /10.RationalprescriptionalongwithsafedispensingofAyurvedicformulations./ 6.DosageForms&CosmeticProducts/ 11.Traditional&LocalhealthPractices
Q3	LonganswerQuestionsFourQuestions 10markseachAllcompulsory Allquestionsonmustknow.NoQuestionsonNicetoknowandDesirabletoknow	1. 2.Singledrug(Herbal&Mineral)/9.Aushadhi PrayogaMarga 2. 3.Singledrug(Bhasma,Shuddha&Pishti) 3. 4.AushadhiKalpa- I(Compoundformulations) 4. 5.AushadhiKalpa- II(CompoundDrugs/Formulations)

6 H Distribution of Practical Exam

S.No	Heads	Marks
1	1. Spotting(10sample+5Instruments/equipments) Identification(1mark)answeringsubquestionrelatedtopotter(1 mark)15x2=30marks Choose spotterfrombelowmentionedlist 1. Parada(mercury), 2. Abhraka(BiotiteMica), 3. Makshika(Chalco-pyrite), 4. Shilajatu(AsphaltumPunjabianum) 5. Gandhaka(Sulfur) 6. Gairika(RedOchre) 7. Kankshi(Alum) 8. Haratala(Orpiment) 9. Manahshila(Realgar) 10. Kampillaka(MallotusPhilippinensis) 11. Navasadara(Ammoniumchloride) 12. Hingula(RedCinnabar) 13. Tamra(Copper) 14. Loha(iron) 15. Mandur(rustiron) 16. Vanga(Tin) 17. Naga(Lead) 18. Yashada(Zinc) 19. Pravala(Coral) 20. Kaparda(Cowries) 21. Shukti(OysterShell) 22. Shankh(ConchShell) 23. Godanti(Gypsum) 24. Samudraphena(CattleFishbone) 25. Kukkutandatwak(Hen'sEggShell), 26. Tankanakshara(Borax) 27. Sasyaka(Peacockore) 28. Kasisa(GreenVitriol), 29. Gauripashana(Arsenicoxide) 30. Akika(Agate), 31. Sudha(Limestone) 32. Khatika 33. Dugdhapashana(Talc) 34. Vimala 35. Rasaka 36. Yantra	30

	37. Dola Yantra 38. Damaru Yantra 39. Valuka Yantra 40. Puta Yantra 41. Khalwa Yantra 42. Patana Yantra 43. Darvika Yantra 44. Ulukhala Yantra 45. Patala Yantra 46. Kupa Yantra 47. Arkapatana Yantra 48. Pithara Yantra 49. Sharava Yantra 50. Palika Yantra 51. Sthali Yantra 52. Swedana Yantra 53. Moh's scale 54. Tablet Hardness Tester 55. pH Meter 56. Muffle Furnace 57. Electronic Weighing machine 58. Pycnometer 59. Large scale manufacturing instruments & equipments in the syllabus Photos/Pictures may be used for spotting	
2	2. Long Practical ♦ Selection of Ingredients with proportion (10 Marks) ♦ Preparation following SOP (15 marks) Demonstration ♦ on of Siddhilakshana (05 Marks) ♦ on site viva (10 Marks) List of Long Practicals 1. Sitopaladi Churna 2. Hingwastaka Churn 3. Agni Tundi Vati 4. Chitrakadi Vati 5. Lavangadi Vati 6. Triphala Guggulu 7. Kaishor Guggulu 8. Phala Vati 9. Chandrodaya Vati	40

	10. ArkaLavana 11. NarikelaLavana 12. AtasiUpanaha 13. Dashanasamskarachurna 14. GandhakaMalahara 15. DashangaLepa 16. MustadiPramathya 17. ShadangaPaneeya 18. KharjuradiMantha 19. Chinchapanaka 20. ChandanaPanaka 21. GhritaMurchana 22. TailaMurchana 23. TriphalaGhrita 24. AmrutaGhrita 25. KsheeraBalaTaila 26. ArkaTaila 27. Vasavaleha 28. NimbuSharkara 29. KutajaGhana 30. GuduchiGhana 31. HaridraKhanda 32. NarikelaKhanda 33. AnandaBhairavaRasa 34. TribhuvanaKeertirasa 35. RasaParpati 36. SwetaParpati 37. Laghusutsekhararasa 38. Navayasalooha 39. Saptamritalooha Note:forpreparationshuddhadravya,decoction,murchitagritha,murchitailaetcaretobeprovidedforlongpractical	
3	3.ShortPractical ♦ ♦ SelectionofIngredientswithproportion(5Marks) ♦ PreparationfollowingSOP(5marks)Demonstrati ♦ onofSiddhilakshana(5Marks) onsiteviva(5Marks)List ofShortPracticals 1. GodantiShodhana 2. ShankhaShodhana	20

	3. Kapardikashodhana 4. GugguluShodhana 5. GandhakaShodhana 6. VangaShodhana 7. Yashadashodhana 8. AbhrakaShodhana 9. TamraShodhana 10. TankanaShodhana 11. Kankshishodhana 12. HingulaShodhana 13. GairikaShodhana 14. HinguShodhana 15. MugdhaRasa 16. TamraBhasma(Dadhi/NimbuPariksha) 17. TriphalaMasi 18. MayuraPicchaMasi 19. VasaputapakaSwarasa 20. AmrutaSatva 21. ArjunaKsheeraPaka 22. LashunaKsheerapaka 23. Punarnavashtakakwatha 24. RasnaSaptakaKwatha 25. SpecificGravity 26. RefractiveIndex 27. PH	
4	4. Practical Record Four Record books - for each record book 2.5 Marks	10
5	5. Viva- Voice Structure of Viva 1. Paribhasha—(2 questions 3 marks each)-6 Marks 2. Shodhana, marana—(1 question from each 5 marks each)-10 Marks 3. Yantropakarana—(2 questions 3 marks each)-6 Marks 4. Chemical composition Raasadravya—(1 question 2 marks each)-2 Marks 5. Therapeutic application of single drugs—(2 questions 3 marks each)-6 marks 6. Yoga-(Shloka-3 marks; ingredients-5 marks; indications-5 marks)	70

	dose&anupana-2Marks)- 15Marks(Selecttheyogahavingatleast5ingredients) 7. Siddhilakshana&qualitycontroltests–(2questions5markseach)-10Marks 8. D&Cact,GMP,FSSAI-2Marks 9. VivaonNonLecturehouractivitybook-8Marks 10. Communicationskills-5Marks	
6	6.Internalassessment	30
Total Marks		200

References Books/ Resources

S.No	Book	Resources
1	1.AdyatanRasaShastra	R.K.GoyalChaukhambaSurbharatiPrakashan, Varanasi
2	2.AyurvediyaAushadhigunadharma shastra	VolI,II,III,IV,V,GuneGangadharashastri,GuneBandhuPrakashan
3	3.AsavaArishtaVigyanam	Dr.PakshdharJha,ChaukhambhaSanskritSansthan, Varanasi
4	4.AyurvediyaRasaShastra	(Sachitra)ChandrabhusanJhabyChaukhambaSurbharatiPrakashanVaranasi,Reprint2012
5	5.AyurvediyaRasaShastra	Prof.SiddhiNandanMishra,ChaukhambaOrientalia, Varanasi
6	6.AyurvedPrakash	VaidyaGulrajMishra.ChaukhambhaBharatiAcademy, Varanasi
7	7.DrugsandCosmeticAct-1940	VijayMalik,EasternBookCompanyDelhi
8	8.PratyakshaAushadhNirmanam	AcharyaVishwanathDwivedi
9	9.RasaTarangini	SadanandSharma,MotilalBanarasidas, Varanasi
10	10.RasaBhaishajyaKalpanaVigyan	VaidyaSantoshKumarKhandal,ChoukhambaPublishers,NewDelhi
11	11.RasaRatnaSamuchchaya(Hindi)	DattatreyaAnantaKulkarni,MeharchandLachamdasPublications,NewDelhi
12	12.RasendraSaraSangraha	VaidyaGopalKrishna,ChaukhambhaSanskritSeriesofVaranasi
13	13.AyurvediyaParibhasha	IndradevTripathiChaukhambaOrientalia, Varanasi
14	14.SharangadharaSamhita	RadhakrishnaParasharVaidyanathAyurvedBhavanPvt
15	15.BharatiyaBhaishajyaKalpanaVigyan	GananathVishwanathDwivediKrishnadasAcademy, Varanasi
16	16.AyurvedicformularyofIndia	Govt.ofIndiaMinistryofHealth&FamilywelfareNewDelhi
17	17.AyurvedicPharmacopieaofIndia	CCRASGovt.ofIndiaMinistryofHealth&FamilywelfareNewDelhi
18	18.AbhinavaBhaishajyaKalpana	SiddhiNandanMishra,ChaukhambaSurbharatiPrakasha, Varanasi
19	19.BhaishjyaRatnawali	ProfSNMishraChoukhambaPublishers, Varanasi
20	20.AyurvediyaRasashastraKaUdbhavaEvamVikas	SatyendrakumarArya,KrishnadasAcademy,1984

21	21.YogaRatnakar	ShriLaxmipathiShastri,ChaukhambhaPrakashanaVaranasi,Reprint2018
22	22.ATextbookofRasashastra	Prof.ParimiSureshChaukhambhaPrakashak,Varanasi
23	23.Siddhoushadisangraha	VaidyaratnaG.A.Phadke,Ayurvedacharya,Satara,N.HKolhatkar,MaharashtramitraMudranalaya,Shukravarapeth,Satara
24	24.ApplicationonstandardisedNamburiphasedspottestinidentificationofBhasmaandSindurapreparationsofAyurvedapublished	NamburiHanumanthaRao,CCRAS.,NewDelhi
25	25.EvidencebasedsafetyofAyurvedicherbo-mineralformulations	KumarAnhimanyupublishedbyCCRAS,NewDelhi
26	26.IntroductiontoAyurvedicPharmaceutics	DrDevendraJoshi&DrGeetaJoshiChaukhambhaOrientalia
27	27.AHandbookofCosmetics	B.M.Mithal&R.N.SahaPublishedbyDelhiVallabhPrakashana
28	28.Sahasrayoga(SanskritandHindi)	ReprintbyCCRAS,NewDelhi
29	29.ManualonQualityParametersforAyurveda&Siddhadrugs	CCRAS,NewDelhi
30	30.SafetyandPrescriptionTrendsofRasaushadhis	Critical appraisal of Reported Medical Practices of Ayurveda Herbomineral formulations from CCRAS experience.
31	31.GeneralGuidelinesforDrugDevelopmentofAyurvedicFormulations	CCRASNewDelhi,VolumeI1 st Edn.2018
32	32.GeneralGuidelinesforSafety/ToxicityEvaluationofAyurvedicFormulations	CCRASNewDelhi,VolumeII1 st Edn.2018
33	33.GeneralGuidelinesforClinicalEvaluationofAyurvedicInterventions	CCRASNewDelhi,VolumeIII1 st Edn.2018
34	34.WHOinternationalstandardterminologiesonAyurveda	WHOInternationalStandardTerminologyonAyurveda,WHO2022
35	35.InorganicPharmaceuticalChemistry	GunduRaoP,VallabhaPrakashana
36	36,OrganicPharmaceuticalChemistry	SinghHarkishan;KapoorVK,VallabhaPrakashana

37	37ShlokavaliofRasashastraBhaishajyaKalpana	NinadSathye;ShivajiWavhal,ShantanuPrakashanPune,2009
38	38.Ansel"sPharmaceuticalDosageFormsandDrugDeliverySystems	LoydVAllen:Others,9thvolume,LippincottWilliams&WillkinsWoltersKluwerCo.2011
39	39.LaboratoryGuidefortheAnalysisofAyurvedaandSiddhaFormulations	LavekarGS,CentralCouncilForResearchinAyurveda&Siddha,2010
40	40.PharmaceuticsI&II	MehtaRM,VallabhaPrakashana,2014
41	41.CentralDrugsStandardControlOrganizationDirectorateGeneralofHealthServicesMinistryofHealth&FamilyWelfareGovernmentofIndia	https://cdsco.gov.in/opencms/opencms/en/Home/
42	42.FSSAIofficialwebsite	https://www.fssai.gov.in/
43	43.PHARMACOPOEIA COMMISSION FOR INDIAN MEDICINE & HOMOEOPATHY OFFICIAL WEBSITE	https://pcimh.gov.in/

Abbreviations

Assessment

S.No	Short form	Discription
1	T-EMI	Theoryextendedmatchingitem
2	T-EW	TheoryEssaywriting
3	T-MEQs	TheoryMEQs
4	T-CRQs	TheoryCRQs
5	T-CS	Theorycasestudy
6	T-OBT	Theoryopenbooktest
7	P-VIVA	PracticalViva
8	P-REC	PracticalRecitation
9	P-EXAM	Practicalexam
10	PRN	Presentation
11	P-PRF	PracticalPerformance
12	P-SUR	PracticalSurvey
13	P-EN	Practicalenact
14	P-RP	PracticalRoleplay
15	P-MOD	PracticalModel
16	P-POS	PracticalPoster
17	P-CASE	PracticalCasetaking
18	P-ID	Practicalidentification
19	P-PS	PracticalProblemsolving
20	QZ	Quiz
21	PUZ	Puzzles
22	CL-PR	ClassPresentation,
23	DEB	Debate
24	WP	Wordpuzzle
25	O-QZ	Onlinequiz

26	O-GAME	Onlinegame-basedassessment
27	M-MOD	MakingofModel
28	M-CHT	MakingofCharts
29	M-POS	MakingofPosters
30	C-INT	Conductinginterview
31	INT	Interactions
32	CR-RED	Criticalreadingpapers
33	CR-W	CreativityWriting
34	C-VC	Clinicalvideocases,
35	SP	Simulatedpatients
36	PM	Patientmanagementproblems
37	CHK	Checklists
38	OSCE	OSCE
39	OSPE	OSPE,
40	Mini-CEX	Mini-CEX
41	DOPS	DOPS
42	CWS	CWS
43	RS	Ratingscales
44	RK	Recordkeeping
45	COM	Compilations
46	Portfolios	Portfolios
47	Logbook	Logbook
48	TR	Trainersreport
49	SA	Self-assessment
50	PA	Peerassessment
51	360D	360-degreeevaluation
52	TT-Theory	Theory
53	PP-Practical	Practical
54	VV-Viva	Viva

Domain

S.No	Short form	Discription
1	CK	Cognitive/Knowledge
2	CC	Cognitive/Comprehension
3	CAP	Cognitive/Application
4	CAN	Cognitive/Analysis
5	CS	Cognitive/Synthesis
6	CE	Cognitive/Evaluation
7	PSY-SET	Psychomotor/Set
8	PSY-GUD	Psychomotor/Guided response
9	PSY-MEC	Psychomotor/Mechanism
10	PSY-ADT	Psychomotor Adaptation
11	PSY-ORG	Psychomotor/Origination
12	AFT-REC	Affective/ Receiving
13	AFT-RES	Affective/Responding
14	AFT-VAL	Affective/Valuing
15	AFT-SET	Affective/Organization
16	AFT-CHR	Affective/ characterization

T L method

S.No	Short form	Discription
1	L	Lecture
2	L&PPT	Lecture with Power point presentation
3	L&GD	Lecture & Group Discussion
4	L_VC	Lecture with Video clips
5	DIS	Discussions
6	BS	Brainstorming
7	IBL	Inquiry-Based Learning
8	PBL	PBL
9	CBL	CBL
10	PrBL	Project-Based Learning
11	TBL	TBL
12	TPW	Team project work
13	FC	Flipped classroom
14	BL	Blended Learning
15	EDU	Edutainment
16	ML	Mobile learning
17	ECE	ECE
18	SIM	Simulation
19	RP	Role plays
20	SDL	Self-directed learning
21	PSM	Problem solving method
22	KL	Kinesthetic Learning
23	W	Workshops
24	GBL	Game-Based Learning
25	D-M	Demo on Model

26	LS	Library Session
27	PL	Peer learning
28	RLE	Real life experience
29	REC	Recitation
30	SY	Symposium
31	TUT	Tutorial
32	PER	Presentations
33	PT	Practical
34	XRay	X ray identification
35	CD	Case diagnosis
36	LRI	Lab report interpretation
37	DA	Drug analysis
38	D	Demonstration
39	D_BED	Demonstration bedside
40	D_L	Demonstration Lab
41	DG	Demonstration Garden
42	FV	Field visit
43	PRA	Practical

Roga Nidan evam Vikriti

Table 2 : Contents of Course

Paper1FundamentalPrinciplesofVikritiVigyan					
Sr. No	A2 List of Topics	B2 Term	C2 Marks	D2 Lecture hours	E2 Non- Lecture hours
1	1.Roganidana–Pathophysiologyandclinicaldiagnosis	1	43	1	0
2	2.Pareeksha RogaandRogiPareeksha	1		1	0
3	3.MethodsofRogipareeksha	1		4	3
4	4.Sapekshanidana-Vyavacchedakanidana Sapekshanidana- VyavacchedakanidanaofUkta/Anuktavyadhi:Methodsofd ifferentialdiagnosis	1		1	0
5	5.Upashaya/Anupashaya	1		1	0

6	6. DoshaVikriti A.Nidana(Vyadhijanakahetu)B.AgnibhedaandVikriti C.DoshaVriddhi,KshayaandDushtaKarma,Ashyapak arsha,Avarana,Samsargaja,Sannipataja.D.Doshaswab hava- Nityasamshleshita(Leena)doshaandPariccheditadosh aE.Paridhavamanaadosha	1		3	2
7	7.DoshagatiandRogamarga	1		1	0
8	8.Srotodushti Samanyasrotodustinidanaandlakshana	1		1	0
9	9. ConceptofAma A.Samanyanidana,andSamanyalakshanaB.Bheda(Annar asa.Malasanchaya(Dhatwagnimandyajanit).Doshadushti)	1		2	0
10	10.AssessmentofAma Samaandniramadoshalakshana,Pureeshalakshana	1		0	1
11	11.Sthanasamshraya–Poorvaroop	1	49	1	0
12	12. Dushyadushti A.DhatuandmalavridhikshayalakshanaB.SpecificSroto dustilakshanainrelationtoDosha,Upadhatu,Mala,Indriya, Avayava,andManadushtilakshana	1		9	9
13	13. Samprapti A.SampraptibhedaB.VyadhijanmaandVyadhijanya	1		1	0

14	14.Rupa Pratyatma/Samanya/VishishtaRupa	1		1	0
15	15.Vyadhinamakarana	1		1	1
16	16. Vyadhi A.Definition,B.Classification– Dwividha/Trividha/Chaturvidha/Saptavidha(Adibala/Sahaja-Genetic,Janmabala/Garbhaja-Congenital,Doshabala/Jataja-Acquired,Sanghatabala/Peedaja-Traumatic,Daivabala/Prabhavaja-Iatrogenic,Kalabala/Kalaja– EnvironmentalandGeriatric,Swabhavabalapravruttha),etc.	1		4	0
17	17.Ashtanindita(Endocrinedisorders)	1		1	0
18	18.Janapadodhwamsavikara(Pandemicdisorders)	1		1	0
19	19.NidanarthakaraVyadhi,Vyadhisankara	1		1	0
20	20. Vyadhikshamatva A.VikaravighataBhava&Abhava,SatmyaB.Ojus-Bheda – TwotypesandFourtypesC.DoshaPakaD.ImmunityE.Healing/repair	1		2	0
21	21.RogibalaPareeksha	1		2	1
22	22. DhatuPaka A.DhatupakaB.OjodustilakshanaC.Asatmya- ImmunepathologyD.CellInjuryandCellularadaptationsE.InflammationF.HaemodynamicdisordersG.Neoplasia	1		12	1
23	23.InfectionandNutritionaldisorders	1	8	4	1
24	24.Upadrava	2		1	0
25	25.Arishta	2		1	0
26	26.Vyadhibalapareeksha	2		1	0
27	27.Sadhyasadhyatva–Prognosis	2		1	0

28	28.DigitalhealthandArtificialintelligenceinthecont extofRoganidana	2		1	1

Total Marks	100	60 hr	20 hr

Paper2VyadhiVigyan,contemporaryunderstandingandupdates					
Sr. No	A2 List of Topics	B2 Term	C2 Marks	D2 Lecture hours	E2 Non- Lecture hours
29	1.Agnimandya–Ajeerna,Anaha,Adhmana,Atopa	2	43	1	0
30	2.Chhardi	2		1	0
31	3.Amlapitta	2		2	0
32	4.Shoola ParinamaShoola,AnnadravaShoola	2		1	0
33	5.Atisara,andPravahika	2		3	1
34	6.Grahani	2		2	1
35	7.Visuchika,Alasaka,Vilambika	2		1	0
36	8.CommonGITdiseases UlcerativedyspepsiaandNon-ulcerativedyspepsia,IrritableBowelSyndrome,InflammatoryBowelDiseases	2		1	4
37	9.Mutrakrichhra	2		2	1
38	10.Mutraghata	2		3	1
39	11.CommonUrinarydiseases UrinaryTractInfection,Prostatomegaly,Nephroticsyndrome,Nephritis syndrome,AcuteKidneyInjuryandChronicKidneyDisease	2		1	6
40	12.Hikka	2		1	0
41	13.Shwasa	2		2	1
42	14.Kasa	2		2	0

43	15.Rajyakshma&Shosha	2		3	0
44	16.Commonlungdisorders Pneumonia,ChronicObstructivePulmonaryDisease,Pl eural effusion,Bronchiectasis	2		1	4
45	17.Jwara Jwarabheda- DoshajaandAgantuja(Abhishangajwara),VishamaJwara, PunaravartakaJwara,Jwaraavastha- Ama,PachyamanaandNiramaJwara	2		4	1
46	18.Masurika–Romantika	2		1	0
47	19. Fever A.GeneralmechanismofFever.B.IntroductiontoEruptivef evers- Measles,Chickenpox,Rubella,Handfootmouthdisease,H erpeszosterC.Parasiticfevers– Filariasis,Malaria,D.DetaileddescriptionofCommoninfe ctivefevers– Typhoid,Dengue,Influenza,Chikungunya,E.Commonreg ionaldisorderspresentingwithfever	2		1	6
48	20.Pandu	2		2	0
49	21.Raktapitta	2	25	1	1
50	22.Hematopoieticdiseases Anaemia,Nutritionalanaemia,Thalassemia,SicklecellAna emia,Leukaemia,Thrombocytopenia	2		1	6
51	23.Hridroga	2		1	1
52	24.Shotha	2		2	0
53	25.Cardiovasculardisorders CoronaryArteryDisease(IschemicHeartDisease,andMyoc ardialInfarction)andCongestivecardiacfailure	2		1	5
54	26.Kamala	2		2	0
55	27.UdaraRoga	2		2	1
56	28.Hepatobiliarydiseases Livercirrhosis,AlcoholicandNon- AlcoholicLiverDisease,Hepatitis,JaundiceandAscites	2		1	2

57	29.Kushtha-MahaKushtha&KshudraKushtha	3		3	1

	(AccordingtoCharaka)				
58	30.Sheetapitta	3		1	0
59	31.Shwitra	3		1	0
60	32.Visarpa	3		2	0
61	33.Skindiseases Allergicdisorders-Eczema,Urticaria;Squamouslesions- Psoriasis,Lichenplanus;Bullouslesion– PemphigusandPemphigoid;Mycoticskindiseases;Leprosy ;Vitiligo;Cellulitis	3		1	6
62	34.Galaganda	3		1	0
63	35.Thyroiddisorders Hypothyroidismandhyperthyroidism	3		1	1
64	36.Sthoulya–Karshya	3	32	1	0
65	37.Obesity	3		1	1
66	38.Prameha	3		2	1
67	39.DiabetesMellitusandPancreatitis	3		1	1
68	40.Vatavyadhi Samanyanidana,Samanyapurvarupa,Samanyalakshana	3		1	0
69	41.Snayugatavata Snayugatavata,Akshepaka– Apatanaka;Ardita,Pakshaghata,Kampavata,Gridhrasi,Vi shwachi,Pangutwa	3		4	2
70	42.Commonneurologicandspinedisorders Commonneurologicdiseases:Parkinson’sdisease,Stroke,B ell’sPalsy,MotorNeuronDisease,Transversemyelitis,Epile psy(Organic).CommonSpinedisorders:Lumbago- Sciaticasyndrome,Brachialneuralgia,CervicalandLumbar Spondylosis	3		2	4

71	43. Sandhigataavata and Asthimajjagataavata Diseases of bone and Joints- ata, Kati graha, Maniasthambha, Vata kantaka, Avabahuka, Osteoarthritis, Osteoporosis. Frozen Shoulder, Calcaneal spur/Pl Amsashosha antar fasciitis, Tennis elbow, Carpel tunnel syndrome; Muscular di	3		1	0
72	44. Diseases of eye, joints, and muscles	3		1	2
73	45. Amavata	3		2	0
74	46. Vatarakta	3		2	1
75	47. Immunological & Metabolic disorders Rheumatic fever, Rheumatoid arthritis, SLE, Ankylosing spondyli tis, Gout	3		1	2
76	48. Klaibya & Vandhyatva	3		1	0
77	49. Sexual dysfunction and Infertility	3		1	1
78	50. Unmada & Apasmara	3		3	0
79	51. Vishada	3		1	0
80	52. Murchha, and Sanyasa	3		1	0
81	53. Common Psychiatric diseases Depression, Anxiety neurosis and Epilepsy (Non-organic)	3		1	0
82	54. Phiranga and Upadamsha	3		1	0
83	55. Syphilis & Gonorrhoea	3		1	1
84	56. Krimi roga	3		1	0
85	57. Clinical presentation of common parasitic disorders Hookworm, Roundworm, Threadworm, Pinworm	3		1	2
86	58. Khalitya & Palitya	3		1	0
87	59. Shleepada	3		1	0
88	60. Tuberculosis	3			
Total Marks			100	90 hr	70 hr

Table 3: Learning objectives (Theory) of Course

Paper1FundamentalPrinciplesofVikritiVigyan									
A3 Courseoutco me	B3 Learning Objective (At the end of the session, the studentsshould be able to)	C3 Doma in/sub	D3 Must to know / desirable toknow / Niceto know	E3 Level Does/ Show show/ Know show/ Know	F3 T-L meth od	G3 Assessment (Refer abbreviations)	H3 Form ative/ summ ative	I3 Term	J3 Integr ation
Topic 11. Roga nidana – Pathophysiology and clinical diagnosis (Lecture :1 hours, Non lecture: 0 hours)									
CO1	ExplaintheconceptofRoganidana	CC	MK	KH	L&P PT	INT	F&S	I	
CO1	Explaintheconceptofpathophysiologyandclinicaldiagnosis	CC	MK	KH	L&P PT	O-QZ	F&S	I	
Topic 22. Pareeksha (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Defineandenlisttypesofpareeksha	CK	MK	K	L&P PT	INT,TT- Theory	F&S	I	
CO1	Describeimportanceofpareeksha	CC	MK	KH	L&P PT	DEB	F&S	I	
CO1	Explaintheconceptofrogipareeksha	CC	MK	KH	L&P PT	INT	F&S	I	
CO1	Enlistrogipareeksha	CK	MK	K	L&P PT	O-QZ,INT	F&S	I	

CO1	Describeimportanceofrogipareeksha	CC	MK	KH	L&GD	DEB	F&S	I	
CO1	Explaintheconceptofrogapareeksha	CC	MK	KH	L&PPT	INT,TT-Theory	F&S	I	
CO1	Enlistrogapareeksha	CK	MK	K	L&PPT	INT	F&S	I	
CO1	Describeimportanceofrogapareeksha	CC	MK	KH	L&GD	T-OBT,DEB	F&S	I	
CO1	Differentiatebetweenrogipareekshaandrogapareeksha	CC	MK	KH	L&GD	T-OBT,M-CHT	F&S	I	
Topic 33. Methods of Rogi pareeksha (Lecture :4 hours, Non lecture: 3 hours)									
CO1,CO3,CO7,CO8	DescribePrashnaPareeksha,ChakshuindriyatahaPareeksha,Sro trendriyatahaPareeksha,SparshanendriyatahaPareeksha,Ghran endriyatahaPareeksha,andRasanendriyatahaPareekshawithitsc linicalinterpretation	CC	MK	SH	L_VC	COM	F&S	I	
CO1,CO3	Describetheimportance,clinicalinterpretationandmethodsofelicitingNadiPareeksha	CAN	MK	KH	L&GD, D_B ED	COM	F&S	I	
CO1	DescribetheimportanceandclinicalinterpretationofMutraPareeksha	CC	MK	KH	L&GD	COM	F&S	I	
CO1	DescribethemethodsofperformingTailabinduPareeksha	CC	MK	KH	L_VC	WP,COM	F&S	I	
CO1,CO3	Describetheimportance&clinicalinterpretationofMalaPareeksha,JihwaPareeksha,ShabdaPareeksha,SparshaPareeksha,Druk Pareeksha,AkritiPareeksha	CAN	MK	KH	L&GD, S DL, D_B ED	COM	F&S	I	

Topic 44. Sapeksha nidana - Vyavacchedaka nidana (Lecture :1 hours, Non lecture: 0 hours)									
CO1,CO2,CO3,CO5	Describe the steps of Vyavacchedaka nidana of Ukta Vyadhi and Anukta vyadhi with suitable examples (Ayurveda and contemporary science incorporating clinical findings and investigations)	CE	MK	KH	L&G D,C BL	T-OBT,M- CHT	F&S	I	V-KC ,V-SH ,V-SH L,V -SP
CO5	Describe scope of developing screening, triage, confirmation, monitoring and prognostic tools in Ayurveda for Emerging diseases along with recent advancements	CC	DK	KH	L&P PT,I BL	INT	F&S	I	
Topic 55. Upashaya/ Anupashaya (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Define Upashaya and enlist synonym of Upashaya	CK	MK	K	L&P PT	INT	F&S	I	
CO1	Define Anupashaya and enlist synonym of Anupashaya	CK	MK	K	L&P PT	INT,TT- Theory	F&S	I	
CO1	Enumerate and explain the eight types of Upashaya with relevant examples	CC	MK	KH	L&P PT	WP,INT	F&S	I	
Topic 66. Dosha Vikriti (Lecture :3 hours, Non lecture: 2 hours)									
CO1	Define Hetu	CK	MK	K	L&P PT	INT,TT- Theory	F&S	I	
CO1	Enlist and define synonym of Hetu	CK	MK	K	L&P PT	QZ	F&S	I	
CO1	Enumerate and enlist classification of Nidana (Vyadhi janaka and Vyadhi bodhaka)	CK	MK	K	L&P PT	M-CHT	F&S	I	
CO1	Enumerate and describe types of Vyadhi Janaka Hetu	CC	MK	KH	L&PP	INT	F&S	I	

					T,R EC				
CO1,CO5	CorrelateVyadhiJanakaHetuwithcontemporaryexamples	CE	MK	KH	CBL ,PrB L	CL-PR	F&S	I	
CO1	DescribethaNidanaofAgnidushti	CC	MK	KH	L&P PT,R EC	T-OBT	F&S	I	
CO1	EnumerateandexplainthetypesandfeaturesofAgnidushti	CC	MK	KH	L&P PT	INT	F&S	I	
CO1	CorrelatetheNidanaofAgnidushtiwithcontemporaryexamples	CE	MK	KH	L& GD	P-SUR	F&S	I	
CO3,CO8	PerformassessmentofAgnidushtiinpatient	PSY - GU D	MK	SH	D_B ED	P-PRF	F&S	I	
CO1	ReciteetiologiesofVata,PittaandKaphadushtakarma	CK	MK	K	REC	P-REC	F&S	I	
CO1,CO5	ApplytheknowledgeofaetiologiesofVata,PittaandKaphadushtakarmaincorrelatingwithcontemporaryetiologies	CAP	MK	KH	L&G D,Pr BL,T PW	P-SUR	F&S	I	
CO1	Recitedushtakarma,kshayaandvridhdhilakshanaofVata,PittaandKaphaDosha	CK	MK	K	REC	P-REC	F&S	I	
CO1	ExplainAshayapakarshaofDoshawithsuitableexamples	CC	MK	KH	L& GD	INT	F&S	I	
CO1	DefineAvarana	CK	MK	K	L&P PT	QZ	F&S	I	
CO1	EnlisttypesofAvarana	CK	MK	K	L&PP	O-GAME	F&S	I	

					T				
CO1	Enlistthe63combinationofDosha	CC	MK	KH	L&P PT	O-GAME	F&S	I	
CO1	DescribeSamsargajaDoshaDushti	CC	MK	KH	L&P PT	INT	F&S	I	
CO1	DescribeSamaSannipataandVishamaSannipatadosha	CC	MK	KH	L&P PT	INT	F&S	I	
CO1	EnlistthedifferentstagesofParidhavamanaDosha	CK	MK	K	L&P PT	INT	F&S	I	
CO1	ExplainParidhavanadoshawithtypesandexamples	CC	MK	KH	L&P PT	COM	F&S	I	
CO1	ExplainNityasamshleshita(Leena)doshaandPariccheditadosha withexamples	CC	MK	KH	L&P PT	INT	F&S	I	
Topic 77. Doshagati and Rogamarga (Lecture :1 hours, Non lecture: 0 hours)									
CO1	EnumerateanddescribeDoshagatianditsutilityinprognosiswit hrelevantexamples	CC	MK	KH	L& GD	INT	F&S	I	
CO1	DescribeUrdhwagati,Adhogati,Tiryagagati,Vriddhi,Kshaya, Sthana,Koshta,Shakha,Sandhiasthimarmawithillustrationsan dexamples	CC	MK	KH	L& GD	COM	F&S	I	
CO1	DescribeKoshtatoShakhagatiofdoshaandShakhatoKoshtagat iofdoshawithillustration	CC	MK	KH	L& GD	COM	F&S	I	
CO1	EnumerateanddescribeRogamargaanditsutilityinprognosiswit hrelevantexamples	CC	MK	KH	L& GD	O-QZ	F&S	I	
Topic 88. Srotodushti (Lecture :1 hours, Non lecture: 0 hours)									

CO1	DefineandenlistSrotas	CK	MK	K	L&P PT	O-QZ	F&S	I	
CO1	DescribethecommonaetiologyforSrotodushti	CC	MK	KH	L& GD	INT	F&S	I	
CO1	ExplainfeaturesofSamanyaSrotodushtiwitexamples	CC	MK	KH	L&P PT	CL-PR	F&S	I	
Topic 99. Concept of Ama (Lecture :2 hours, Non lecture: 0 hours)									
CO1	DescribethedifferentdefinitionsofAma	CC	MK	KH	L&P PT,R EC	P-REC,INT	F&S	I	
CO1	EnlistdifferenttypesofAma	CK	MK	K	L&P PT	INT	F&S	I	
CO1	CorrelatethedifferenttypesofAmawiththecurrentscience	CE	MK	KH	BS,I BL	COM	F&S	I	
CO1	DescribesamanyalakshanaofAma	CC	MK	KH	L&P PT	O-QZ	F&S	I	
CO1	ExplaintheconceptofAmawithreferencetoAnnarasa,Malasanc hayaandDoshadushti	CC	MK	KH	L&P PT	T-OBT,COM	F&S	I	
Topic 1010. Assessment of Ama (Lecture :0 hours, Non lecture: 1 hours)									
CO1	ExplainconceptofSama	CC	MK	KH	L&P PT	INT	F&S	I	
CO1	DescribespecificfeaturesofSamaandNiramaDoshaandPureesh a	CC	MK	KH	L&P PT	O-GAME	F&S	I	
CO5	IdentifyspecificfeaturesofSamadosha,Samapureesha,Nirama	PSY-	MK	SH	L,D_	P-PRF	F&S	I	

	doshaandNiramapureeshainpatient	GUD			BED				
Topic 1111. Sthana samshraya – Poorvaroopa (Lecture :1 hours, Non lecture: 0 hours)									
CO1	DefineSthansamshraya	CK	MK	K	L&P PT	INT	F&S	I	
CO1	DefinePoorvaroopaandenlistitistypes	CK	MK	K	L&P PT	QZ	F&S	I	
CO1	DescribetheimportanceofPoorvaroopa	CC	MK	KH	L&G GD	DEB	F&S	I	
CO1	RelateSthanasamshrayawithPoorvaroopa	CAP	MK	KH	L&G GD	INT	F&S	I	
Topic 1212. Dushya dushti (Lecture :9 hours, Non lecture: 9 hours)									
CO1	EnlistDushya	CK	MK	K	L&P PT	QZ	F&S	I	
CO1	DescribespecificfeaturesofDhatuandMalaVridhdhiandKshaya	CC	MK	KH	DIS	T-OBT	F&S	I	
CO1	DescribethespecificetiologiesofPranavahaSrotodushtiandidentifycontemporaryetiologies	CS	MK	SH	L&G D,R EC	P-REC,INT	F&S	I	
CO1	DescribefeaturesofPranavahaSrotoDushtiinrelationtoDoshaKopa	CC	MK	KH	L&P PT,R EC	P-REC,INT	F&S	I	
CO1	DescribePranavahaSrotoViddhaLakshana	CC	MK	KH	L&P PT	QZ	F&S	I	
CO1	DescribethespecificetiologiesofUdakavahaSrotodushtiand	CC	MK	KH	L&G	P-SUR	F&S	I	

	identify contemporary etiologies				D, Pr BL				
CO1	Describe features of Uda-kavaha Sroto Dushti in relation to Dosha Kopa	CC	MK	KH	L&P PT	INT	F&S	I	
CO1	Describe Uda-kavaha Sroto Viddha Lakshana	CC	MK	KH	L&P PT	INT	F&S	I	
CO1	Describe the specific etiologies of Anna-vaha Sroto dushti and identify contemporary etiologies	CC	MK	KH	L&G D, R EC	P-REC, INT	F&S	I	
CO1	Describe features of Anna-vaha Sroto Dushti in relation to Dosha Kopa	CC	MK	KH	L&G D, R EC	P-REC, INT	F&S	I	
CO1	Describe Anna-vaha Sroto Viddha Lakshana	CC	MK	KH	L&P PT	WP	F&S	I	
CO1	Describe the specific etiologies of Rasa-vaha Sroto dushti and identify contemporary etiologies	CC	MK	KH	L&G D, Pr BL, R EC	P-REC, INT	F&S	I	
CO1	Describe features of Rasa-vaha Sroto Dushti in relation to Dosha Kopa	CC	MK	KH	L&P PT, R EC	P-REC, INT	F&S	I	
CO1	Describe Rasa-vaha Sroto Viddha Lakshana	CC	MK	KH	L&P PT	QZ	F&S	I	
CO1	Describe the specific etiologies of Rakta-vaha Sroto dushti and identify contemporary etiologies	CC	MK	KH	L&G D, Pr BL, R E	P-REC, INT	F&S	I	

					C				
CO1	Describe features of Raktavaha Sroto Dushti in relation to Dosha Kopa	CC	MK	KH	L&G D, R EC	P-REC, INT	F&S	I	
CO1	Describe Raktavaha Sroto Viddha Lakshana	CC	MK	KH	L&P PT	INT	F&S	I	
CO1	Describe the specific etiologies of Mamsavaha Sroto dushti and identify contemporary etiologies	CC	MK	KH	L&G D, Pr BL, R EC	P-REC, INT	F&S	I	
CO1	Describe features of Mamsavaha Sroto Dushti in relation to Dosha Kopa	CC	MK	KH	L&G D, R EC	P-REC, INT	F&S	I	
CO1	Describe Mamsavaha Sroto Viddha Lakshana	CC	MK	KH	L&P PT	QZ	F&S	I	
CO1	Describe the specific etiologies of Medovaha Sroto dushti and identify contemporary etiologies	CC	MK	KH	L&G D, Pr BL, R EC	P-REC, INT	F&S	I	
CO1	Describe features of Medovaha Sroto Dushti in relation to Dosha Kopa	CC	MK	KH	L&G D, R EC	P-REC, INT	F&S	I	
CO1	Describe Medovaha Sroto Viddha Lakshana	CC	MK	KH	L&P PT	QZ	F&S	I	
CO1	Describe the specific etiologies of Asthivaha Sroto dushti and identify contemporary etiologies	CC	MK	KH	L&G D, Pr B	P-REC, P- SUR	F&S	I	

					L,R EC				
CO1	Describe features of Asthivaha Sroto Dushti in relation to Dosha Kopa	CC	MK	KH	L&G D,R EC	P-REC,INT	F&S	I	
CO1	Describe the specific etiologies of Majjavaha Sroto dushti and identify contemporary etiologies	CC	MK	KH	L&G D,Pr BL,R EC	P-REC,INT	F&S	I	
CO1	Describe features of Majjavaha Sroto Dushti in relation to Dosha Kopa	CC	MK	KH	L&G D,R EC	P-REC,INT	F&S	I	
CO1	Describe the specific etiologies of Shukravaha Sroto dushti and identify contemporary etiologies	CC	MK	KH	L&G D,Pr BL,R EC	P-REC,INT	F&S	I	
CO1	Describe features of Shukravaha Sroto Dushti in relation to Dosha Kopa	CC	MK	KH	L&P PT,R EC	P-REC,INT	F&S	I	
CO1	Describe Shukravaha Sroto Viddha Lakshana	CC	MK	KH	L&P PT	QZ	F&S	I	
CO1	Describe the specific etiologies of Mutravaha Sroto dushti and identify contemporary etiologies	CC	MK	KH	L&G D,Pr BL,R EC	P-REC,P- SUR	F&S	I	
CO1	Describe features of Mutravaha Sroto Dushti in relation to Dosha Kopa	CC	MK	KH	L&G D,R E	P-REC,INT	F&S	I	

					C				
CO1	DescribeMutravahaSrotoViddhaLakshana	CC	MK	KH	L&P PT	QZ	F&S	I	
CO1	DescribethespecificetiologiesofPureeshavahaSrotodushtiandi dentifycontemporaryetiologies	CC	MK	KH	L&G D,Pr BL,R EC	P-REC,P- SUR	F&S	I	
CO1	DescribefeaturesofPureeshavahaSrotoDushtiinrelationtoDosh aKopa	CC	MK	KH	L&G D,R EC	P-REC,INT	F&S	I	
CO1	DescribePureeshavahaSrotoViddhaLakshana	CC	MK	KH	L&P PT	QZ	F&S	I	
CO1	DescribethespecificetiologiesofSwedavahaSrotodushtiandide ntifycontemporaryetiologies	CC	MK	KH	L&G D,Pr BL,R EC	P-REC,P- SUR	F&S	I	
CO1	DescribefeaturesofSwedavahaSrotoDushtiinrelationtoDosh aKopa	CC	MK	KH	L&G D,R EC	P-REC,INT	F&S	I	
CO1	DescribethespecificetiologiesofArtavavahaSrotodushtiandide ntifycontemporaryetiologies	CC	MK	KH	L&G D,Pr BL,R EC	P-REC,P- SUR	F&S	I	
CO1	DescribefeaturesofArtavavahaSrotoDushtiinrelationtoDosh aKopa	CC	MK	KH	L&P PT,R EC	P-REC,INT	F&S	I	

CO1	DescribeArtavavahaSrotoViddhaLakshana	CC	MK	KH	L&P PT	QZ	F&S	I	
CO1	DescribefeaturesofUpadhatudushti,Maladushti,Indriyadushti ,andManasdushti	CC	MK	KH	L& GD	INT	F&S	I	
CO1	DescribefeaturesofAvayavadustiwithrelevantexamples	CC	MK	KH	L&P PT	INT	F&S	I	
CO5	IdentifyandinterpretthespecificSrotoDushtiinthepatients	PSY - GU D	MK	SH	SDL	T-CS	F&S	I	
Topic 1313. Samprapti (Lecture :1 hours, Non lecture: 0 hours)									
CO1	DefineSampraptiandenumeratesynonyms	CK	MK	K	L&P PT	WP	F&S	I	
CO1	EnlistanddescribetypesofSampraptiwithexamples	CK	MK	K	L&P PT	INT	F&S	I	
CO1	DescribeVyadhiJanmaandVyadhiJanyaSampraptiwithexampl es	CC	MK	KH	L&P PT	INT	F&S	I	
Topic 1414. Rupa (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Define,enlistanddescribedifferenttypesofRoopa	CC	MK	KH	L&P PT	INT	F&S	I	
CO1	DescribetheimportanceofRoopa	CC	MK	KH	L& GD	DEB	F&S	I	
CO1	DefinePratyatmaLakshanawithsuitableexamples	CK	MK	K	L&P PT	INT	F&S	I	
CO1	DifferentiatebetweenVyadhiandLakshana.	CC	MK	KH	L& GD	INT	F&S	I	

Topic 1515. Vyadhinamakarana (Lecture :1 hours, Non lecture: 1 hours)									
CO1	Describe the basis of Vyadhi Namakaranawith suitable examples	CK	MK	K	L	QZ	F&S	I	
CO6	Describe the importance of ICD, DSM and NAMASTE (National AYUSH Morbidity and Standardized Terminologies Electronic Portal) portal classification and terminology of diseases	CC	DK	KH	L & GD, D	INT	F&S	I	
CO6	Operate NAMASTE (National AYUSH Morbidity and Standardized Terminologies Electronic Portal) portal	PSY - GUID	DK	SH	D	P-PRF	F&S	I	
Topic 1616. Vyadhi (Lecture :4 hours, Non lecture: 0 hours)									
CO1	Define & enlist synonyms of Vyadhi	CK	MK	K	L & P PT	INT	F&S	I	
CO1	Enlist types of Vyadhi	CK	MK	K	L & P PT	INT	F&S	I	
CO1, CO2	Explain Adibala/Sahaja and Hereditary disorders, Janmabala/Garbha ja and Congenital disorders, Doshabala/Jataja and Acquired disorders, Sanghatabala/Peedaja and Traumatic disorders, Daivabala/Prabhavaja and Iatrogenic disorders, Kalabala/Kalaja and Environmental and Geriatric disorders, Swabhavabhavavyadhi with suitable examples	CC	MK	KH	L & P PT	CL-PR	F&S	I	
Topic 1717. Ashtanindita (Endocrine disorders) (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Enlist and explain the Ashtanindita	CC	DK	KH	L & P PT	INT	F&S	I	
CO1	Describe the importance of Ashtanindita	CC	DK	KH	L & GD	DEB	F&S	I	
CO1, CO2	Correlate and describe the features of Hormonal/Endocrinal	CE	DK	KH	L & G	COM	F&S	I	V-BL

	diseases(Pituitarydisorders,Parathyroiddisorders,Adrenaldisordersetc.)withAshtanindita				D,T PW				
Topic 1818. Janapadodhwamsa vikara (Pandemic disorders) (Lecture :1 hours, Non lecture: 0 hours)									
CO1	DescribesadharanaandasadharanahetuforJanapadodhwamsaVikaraandcorrelatewithcontemporaryetiologies	CC	DK	KH	L&GD	DEB	F&S	I	V-KC ,H-S W
Topic 1919. Nidanarthakara Vyadhi, Vyadhisankara (Lecture :1 hours, Non lecture: 0 hours)									
CO1	DefineandenlisttypesofNidanarthakaraVyadhiwithexamplesalongwithitsconcept	CC	DK	KH	L&GD	INT	F&S	I	
CO1	ExplaintheconceptofVyadhiSankarawithspecificNidanaandrelevantexamples	CC	DK	KH	L&P PT	INT	F&S	I	
Topic 2020. Vyadhikshamatva (Lecture :2 hours, Non lecture: 0 hours)									
CO1	DefineVyadhikshamatva	CK	MK	K	L&P PT	INT	F&S	I	
CO1	DescribeTrividhabalaandrelatetoBalavruddhikaraBhavaandShareeravruddhikaraBhava	CC	MK	K	L&P PT	M-CHT	F&S	I	
CO1	DescribeVikaraVighataBhavaandAbhavaalongwithitsrelationtoVyadhikshamatva	CC	MK	KH	DIS	INT	F&S	I	
CO1	AnalyzeSatmyainrelationwithhealthanddisease	CAN	MK	KH	L&GD	INT	F&S	I	
CO1	DefineandexplainDwividhaandChaturvidhaOjas	CK	MK	K	L&P PT	INT	F&S	I	
CO1	DescribeDoshaPakafeatureswithexamples	CC	MK	KH	L&P PT	INT	F&S	I	

CO2	Describe pathophysiology of Healing with primary and secondary intention and Repair mechanism.	CC	MK	KH	L_VC	CL-PR	F&S	I	
CO1	Define Satmya and explain its types	CC	MK	KH	L&P PT	INT	F&S	I	
CO2	Define Immunity and describe classification of Immunity	CC	MK	KH	SDL	CL-PR	F&S	I	
CO2	Explain different mechanisms involved in Immunity	CC	MK	KH	SDL	CL-PR	F&S	I	
Topic 2121. Rogi bala Pareeksha (Lecture :2 hours, Non lecture: 1 hours)									
CO1	Describe the importance of Rogi bala Pareeksha	CC	MK	KH	L&G D	DEB	F&S	I	
CO1,CO8	Describe the parameters of Rogi bala Pareeksha- Prakruti, Sara, Samhanana, Pramana, Satmya, Satwa, Aaharashakti, Vyayamashakti, Vaya and other factors such as Aushadhaksha madehatva, Yuvajatva, Pumjatvam, Vishayanasaktaindriyajatva, Padasampadbhavatvam, and Anukoolagrahatva, etc.	CC	MK	KH	L&P PT	INT	F&S	I	
Topic 2222. Dhatu Paka (Lecture :12 hours, Non lecture: 1 hours)									
CO1	Describe Dhatu pak features with examples	CC	MK	KH	L&P PT	INT	F&S	I	
CO1	Describe different stages of Ojodusti	CK	MK	K	L&P PT	INT	F&S	I	
CO2	Define Asatmya	CK	MK	K	L&P PT	O-QZ	F&S	I	
CO2	Define Hypersensitivity	CK	MK	K	L&P PT	QZ	F&S	I	
CO2	Describe four types of Hypersensitivity with suitable examples	CC	MK	KH	L_VC	CL-PR	F&S	I	

CO2	DefineAutoimmunity	CK	MK	K	L&P PT	O-QZ	F&S	I	
CO2	DescribemechanismandclassificationofAutoimmunitywithsuitableexamples	CC	MK	KH	L_VC	CL-PR	F&S	I	
CO2	DefineImmunodeficiency.	CK	MK	K	L&P PT	CL-PR	F&S	I	
CO2	DescribeclassificationofImmunodeficiencywithsuitableexamples.	CC	MK	KH	L&P PT	M-CHT	F&S	I	
CO2	DefineCellInjury	CK	MK	K	L&P PT	QZ	F&S	I	
CO2	DescribecausesandmechanismofReversibleandIrreversibleCellInjurywithmicroscopicandmacroscopicfeatures.	CC	MK	KH	L_VC	CL-PR	F&S	I	
CO2	DefineCellularAdaptation	CK	MK	K	L&P PT	QZ	F&S	I	
CO2	DescribetypesandmechanismsofCellularAdaptationswithsuitableexamples.	CC	MK	KH	L_VC	CL-PR	F&S	I	
CO2	DescribeanddiscusstypesofCellDeath(includingapoptosis)andthethemechanismwithsuitableexamples.	CC	MK	KH	L_VC	CL-PR	F&S	I	
CO2	Define, classify and describe mechanism of Inflammation,Septicaemia, Oedema, Shock, Haemorrhage, Thrombosis,Embolism,IschemiaandInfarction	CC	MK	KH	L_VC	CL-PR	F&S	I	
CO2	DefineanddescribeTumors	CC	MK	KH	L&P PT	CL-PR	F&S	I	
CO2	DescribenomenclatureofTumors	CC	MK	KH	L&P PT,S D	CL-PR	F&S	I	

					L				
CO2	Differentiate Benign and Malignant Tumours	CC	MK	KH	L & GD	M-CHT	F&S	I	
CO2	Describe mechanism of Metastasis	CC	MK	KH	L & P PT	CL-PR	F&S	I	
Topic 2323. Infection and Nutritional disorders (Lecture :4 hours, Non lecture: 1 hours)									
CO2	Define and classify Viruses, Bacteria, and Fungi	CC	DK	KH	L & P PT, S DL	COM	F&S	I	
CO2	Describe components of Nutrition, and classify nutritional disorders	CC	DK	KH	PER	QZ	F&S	I	H-SW
CO2	Describe Macronutritional disorders, Water soluble vitamins deficiency disorders and Fat soluble vitamins deficiency disorders	CC	DK	KH	PER	QZ	F&S	I	V-KC ,H-S W
CO2	Describe Protein Energy Malnutrition in adults and differentiate Kwashiorkor and Marasmus	CC	DK	KH	PER	QZ	F&S	I	V-KC ,V-BL
Topic 2424. Upadrava (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Define and explain the concept and importance of Upadrava	CC	MK	KH	L & GD	DEB	F&S	II	
Topic 2525. Arishta (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Define Arishta and Ristaabhasa	CK	NK	K	L & P PT	INT	F&S	II	
CO1	Enumerate and describe types of Arishta with its importance	CC	NK	KH	L & GD	DEB	F&S	II	

Topic 2626. Vyadhi bala pareeksha (Lecture :1 hours, Non lecture: 0 hours)									
CO1	DescribeVikrititahaPareekshawithitsimportance	CC	DK	KH	L&GD	DEB	F&S	II	
CO1	DescribethetheparameterstobeassessedforVyadhibala-ExposuretoNidana,Samprapti,Poorvaroop,Roopa,Upadrava,Tulyadosha-dushyatvam,Atulyaritu,Numberofdoshainvolved,NumberofRogamargainvolved,Kala,Desha,Prakruti,InvolvementofMarmaaandotherfactors	CC	DK	KH	L&GD	DEB	F&S	II	
Topic 2727. Sadhyasadyatva – Prognosis (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Enumerateanddescribethethefeaturesofsadhyasadyatva	CC	MK	KH	L&PPT	INT	F&S	II	
CO1	AnalysethecomponentsofVyadhifromSadhyasadyatva	CAN	MK	KH	L&GD	INT	F&S	II	
Topic 2828. Digital health and Artificial intelligence in the context of Roganidana (Lecture :1 hours, Non lecture: 1 hours)									
CO6	DefineanddescribethescopeofDigitalhealthandArtificialintelligenceinAyurvedaDiagnosisandPrognosis	CC	NK	KH	BL	COM	F&S	II	
CO6	ExplainneedofInstrumentationandBiosensorsfordiagnosisandprognosisinAyurveda.	CC	NK	KH	BL	INT	F&S	II	
CO6	JustifyscopeofDiagnostictooldevelopmentinAyurvedaandtheirimplementation.	CE	NK	KH	BL	INT	F&S	II	

Paper2VyadhiVigyan,contemporaryunderstandingandupdates									
A3 Course	B3 Learning Objective (At the end of the session, the students	C3 Doma	D3 Must to know	E3 Level	F3 T-L	G3 Assessment	H3 Form	I3 Term	J3 Integr

outcome	should be able to)	in/sub	/ desirable to know / Nice to know	Does/ Show show/ Know show/ Know	meth od	(Refer abbreviations)	ative/ summ ative		ation
Topic 11. Agnimandya – Ajeerna, Anaha, Adhmana, Atopa (Lecture :1 hours, Non lecture: 0 hours)									
CO1	DefineAnaha	CK	MK	K	L&P PT	QZ	F&S	II	
CO1	EnlisttypesofAnaha	CK	MK	K	L&P PT	QZ	F&S	II	
CO1,CO5	DescribeAdhmanaandAtopa	CC	MK	KH	L&P PT	INT	F&S	II	
Topic 22. Chhardi (Lecture :1 hours, Non lecture: 0 hours)									
CO1	DefineChhardi	CK	DK	K	L&P PT	QZ	F&S	II	
CO1	DescribehetuandsampraptiofChhardi.	CC	DK	KH	L& GD	INT	F&S	II	
CO1	EnlistbhedaofChhardi	CK	DK	K	L&P PT	QZ	F&S	II	
CO1	Describepurvaroop,samanyalakshana,vishistalakshana,upa dravaandsadhyasadyataofChhardi	CC	DK	KH	L&P PT	INT	F&S	II	
Topic 33. Amlapitta (Lecture :2 hours, Non lecture: 0 hours)									

CO1	DefineAmlapitta	CK	MK	K	L&P PT	QZ	F&S	II	
CO1	DescribehetuandsampraptiofAmlapitta	CC	MK	KH	L& GD	M-CHT	F&S	II	
CO1	EnlistbhedaofAmlapitta	CK	MK	K	L&P PT	QZ	F&S	II	
CO1	Describepurvaroopasamanyalakshana,vishishtalakshana,andsadhyataofAmlapitta	CC	MK	KH	L&P PT	INT	F&S	II	
Topic 44. Shoola (Lecture :1 hours, Non lecture: 0 hours)									
CO1	DefineShoola	CK	MK	K	L&P PT	QZ	F&S	II	
CO1	EnlistShoolabheda	CK	MK	K	L&P PT	QZ	F&S	II	
CO1,CO5	DescribeanddifferentiateParinamashoolaandAnnadravashoola	CC	MK	KH	L&P PT	INT	F&S	II	
Topic 55. Atisara, and Pravahika (Lecture :3 hours, Non lecture: 1 hours)									
CO1	DescribepratyatmalakshanaofAtisara	CC	MK	KH	L&P PT	QZ	F&S	II	
CO1	DescribehetuandsampraptiofAtisara	CC	MK	KH	L& GD	INT	F&S	II	
CO1	EnlistbhedaofAtisara	CK	MK	KH	L&P PT	QZ	F&S	II	
CO1	DescribepurvaroopaoofAtisara	CC	MK	KH	L&P PT,C B	INT	F&S	II	

					L				
CO1	EnlistanddescribeupadravaofAtisara	CK	MK	K	L&P PT	INT	F&S	II	
CO1	DescribesadhyaasadyataofAtisara	CC	MK	KH	L&P PT	T-CS,INT	F&S	II	
CO1	DescribenivruttaAtisarakshanaorvigataAtisarakshana	CC	MK	KH	L&P PT	INT	F&S	II	
CO1	DescribesampraptiofPravahika	CC	MK	KH	L& GD	M-CHT	F&S	II	
CO1	EnlistbhedaofPravahika	CK	MK	KH	L&P PT	QZ	F&S	II	
CO1	DescribesamanyaaandvishishtalakshanaofPravahika	CC	MK	KH	L&P PT,C BL	T-CS	F&S	II	
CO1	DifferentiatebetweenAtisaraandPravahika	CC	MK	KH	L& GD, PBL	CL-PR	F&S	II	
CO1	DifferentiateDoshajaAtisara	CC	MK	KH	L& GD, PBL	CL-PR	F&S	II	
CO1	ExplainBhayajaatisara,ShokajaatisaraandRaktajaatisarakshana	CC	MK	KH	L& GD, PBL	CL-PR	F&S	II	
Topic 66. Grahani (Lecture :2 hours, Non lecture: 1 hours)									
CO1	DescribepratyatmalakshanaofGrahani	CC	MK	KH	L&PP	PUZ	F&S	II	

					T				
CO1	DescribehetuandsampraptiofGrahani	CC	MK	KH	L&GD	M-CHT	F&S	II	
CO1	EnlistbhedaofGrahani	CK	MK	KH	L&PPT	QZ	F&S	II	
CO1	Describepurvaroop,andsamanyalakshanaofGrahani	CC	MK	KH	L&PPT	T-CS,INT	F&S	II	
CO1	ExplainSangrahagrahaniandGhatiyantragrahani	CC	MK	KH	L&PPT,CBL	INT	F&S	II	
CO1	ExplainsadhyasadyataofGrahani	CC	MK	KH	L&PPT	T-CS,INT	F&S	II	
CO1	DifferentiateAtisaraandGrahaniRoga	CC	MK	KH	L&GD,PBL	T-CS	F&S	II	
CO1	DifferentiateGrahanidoshaandGrahaniroga	CC	MK	KH	L&GD,PBL	T-CS,CL-PR	F&S	II	
CO1	DifferentiateDoshajaGrahani	CC	MK	KH	L&GD,PBL	CL-PR	F&S	II	
Topic 77. Visuchika, Alasaka, Vilambika (Lecture :1 hours, Non lecture: 0 hours)									
CO1	DefineVisuchika	CK	MK	K	L&PPT	QZ	F&S	II	
CO1	Describelakshana,upadrava,andsadhyasadyataofVisuchika,	CC	MK	KH	L&PP	INT	F&S	II	

	AlasakaandVilambika				T				
Topic 88. Common GIT diseases (Lecture :1 hours, Non lecture: 4 hours)									
CO2	Describe the clinical features of Ulcerative dyspepsia and Non-ulcerative dyspepsia, Irritable Bowel Syndrome, and Inflammatory Bowel Diseases	CC	DK	KH	RP, TUT	INT	F&S	II	
CO3	Perform relevant clinical examination of Ulcerative dyspepsia and Non-ulcerative dyspepsia, Irritable Bowel Syndrome, and Inflammatory Bowel Diseases	PSY - GU D	DK	SH	L_VC	OSCE	F&S	II	
CO4	Order and interpret relevant investigations of Ulcerative dyspepsia and Non-ulcerative dyspepsia, Irritable Bowel Syndrome, and Inflammatory Bowel Diseases	CAP	DK	SH	L&G D,LR I ,D_L	T-CS	F&S	II	
Topic 99. Mutrakrichhra (Lecture :2 hours, Non lecture: 1 hours)									
CO1	Explain pratyatmalakshana of Mutrakrichhra	CC	MK	KH	L&P PT	PUZ	F&S	II	
CO1	Describe hetu and samprapti of Mutrakrichhra	CC	MK	KH	L&GD	INT	F&S	II	
CO1	Enlist bheda of Mutrakrichhra	CK	MK	KH	L&P PT	QZ	F&S	II	
CO1,CO5	Describe vishishtalakshana of Mutrakrichhra	CC	MK	KH	L&P PT,C BL	INT	F&S	II	
Topic 1010. Mutraghata (Lecture :3 hours, Non lecture: 1 hours)									
CO1	Define Mutraghata	CK	MK	K	L&P PT	QZ	F&S	II	

CO1	EnlistconditionsofMutrashoshanaandMutrapratihanyateamongo differenttypesofMutraghata	CK	MK	K	L&GD	INT	F&S	II	
CO1	DescribedifferenttypesofMutraghata	CC	MK	KH	L&P PT,P BL	INT	F&S	II	
CO1	DifferentiateMutrakrichraandMutraghata	CC	MK	KH	L&GD, PBL	T-CS	F&S	II	
Topic 1111. Common Urinary diseases (Lecture :1 hours, Non lecture: 6 hours)									
CO2	Describe the clinical features of Urinary Tract Infection, Prostatomegaly, Nephrotic syndrome, Nephritic syndrome, Acute Kidney Injury and Chronic Kidney Disease	CC	DK	KH	L&GD, RP	T-CS	F&S	II	
CO3	Perform relevant clinical examination of Urinary Tract Infection, Prostatomegaly, Nephrotic syndrome, Nephritic syndrome, Acute Kidney Injury and Chronic Kidney Disease	PSY - GU D	DK	SH	L_VC	T-CS	F&S	II	
CO4	Order and interpret relevant investigations of Urinary Tract Infection, Prostatomegaly, Nephrotic syndrome, Nephritic syndrome, Acute Kidney Injury and Chronic Kidney Disease	CAP	DK	SH	L&GD, LR I	T-CS	F&S	II	
Topic 1212. Hikka (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Describe pratyatmalakshana, hetu, and samprapti of Hikka	CC	NK	KH	L&P PT	PUZ	F&S	II	
CO1	Describe cardinal features of Pancha Hikka	CC	NK	KH	L&P PT	INT	F&S	II	
Topic 1313. Shwasa (Lecture :2 hours, Non lecture: 1 hours)									

CO1	DefineShwasa	CK	MK	K	L&P PT	QZ	F&S	II	
CO1	DescribehetuandsamanyasampraptiofShwasa	CC	MK	KH	L& GD	T-CS	F&S	II	
CO1	EnlistbhedaofShwasa	CK	MK	K	L&P PT	P-VIVA,QZ	F&S	II	
CO1	Describepurvaroop,andsadhyasadyataofShwasa	CC	MK	KH	L&P PT	T-CS	F&S	II	
CO1	DescribevishishtalakshanaofTamakashwasawithitsavasthabhe da	CC	MK	KH	L&P PT	T-CS	F&S	II	
CO1	DescribedoshapredominanceinShwasa	CC	MK	KH	DIS	INT	F&S	II	
CO1	IdentifycardinalfeaturesofPanchashwasaandcorrelatewithth ecurrentscience	CAN	MK	KH	L&P PT	INT	F&S	II	
CO1	DifferentiatePanchashwasa	CC	MK	KH	PBL	CL-PR	F&S	II	
Topic 14. Kasa (Lecture :2 hours, Non lecture: 0 hours)									
CO1	DefineKasa	CK	MK	K	L&P PT	QZ	F&S	II	
CO1	DescribehetuandsampraptiofKasa	CC	MK	KH	L& GD	INT	F&S	II	
CO1	EnlistbhedaofKasa	CK	MK	K	L&P PT	QZ	F&S	II	
CO1	DescribepurvaroopandsadhyasadyataofKasa	CC	MK	KH	L&P PT	T-CS	F&S	II	
CO1	DescribethedifferentialdiagnosisofKasabasedonkapha	CC	MK	KH	L&PP	T-CS	F&S	II	

	lakshana				T				
CO1	Describe the differential diagnosis of Kshaya jakasa and Rajayakshma	CC	MK	KH	L&GD	T-CS	F&S	II	
CO1	Describe the differential diagnosis of Kshata jakasa and kshatakshena	CC	MK	KH	L&GD	T-CS	F&S	II	
CO1	Differentiate Doshajakasa	CC	MK	KH	DIS	INT	F&S	II	
Topic 1515. Rajayakshma & Shosha (Lecture :3 hours, Non lecture: 0 hours)									
CO1	Describe Rajayakshma vyadhiswabhava	CC	DK	KH	L&PPT	INT	F&S	II	
CO1	Describe hetu and samprapti of Rajayakshma	CC	DK	KH	L&GD	M-CHT	F&S	II	
CO1	Enlist bheda of Rajayakshma	CK	DK	K	L&PPT	QZ	F&S	II	
CO1	Explain triroopa, shadroopa, ekadasharoopa, and sadhyasadhya of Rajayakshma	CC	DK	KH	L&PPT	INT	F&S	II	
CO1	Classify and describe Ashtashosha	CC	DK	KH	L&PPT	INT	F&S	II	
Topic 1616. Common lung disorders (Lecture :1 hours, Non lecture: 4 hours)									
CO2	Describe the clinical features of Pneumonia, Chronic Obstructive Pulmonary Disease, Pleural effusion, and Bronchiectasis	CC	DK	KH	L_VC,RP,D_BED	INT	F&S	II	
CO3	Perform relevant clinical examination of Pneumonia, Chronic Obstructive Pulmonary Disease, Pleural effusion, and Bronchiectasis	PSY - GUID	DK	SH	L_VC	OSCE	F&S	II	

CO4	Order and interpret relevant investigations of Pneumonia, Chronic Obstructive Pulmonary Disease, Pleural effusion, and Bronchiectasis	CAP	DK	KH	XRay, LRI	T-CS	F&S	II	
Topic 17. Jwara (Lecture :4 hours, Non lecture: 1 hours)									
CO1	Define and enlist types of Jwara based on vidhisamprapti	CK	MK	K	L&P PT	QZ	F&S	II	
CO1	Describe nidana, samprapti, samanyapoorvaroopta, vishishtapoorvaroopta, pratyatmalakshana and samprapti of Doshajwara	CC	MK	KH	L&GD	PUZ, INT	F&S	II	
CO1	Describe Doshajwara along with sannipatajwara according to Charaka	CC	MK	KH	L&GD	PUZ, INT	F&S	II	
CO1	Describe Abhishangajwara, Vishamajwara, and Punaravartakajwara	CC	MK	KH	L&P PT	T-CS	F&S	II	
CO1	Explain Antarvega, Bhahirvegajwara, Vatabalasaka and Pralepakajwara	CC	MK	KH	L&P PT	INT	F&S	II	
CO1	Differentiate Ama, Pachyamana and Niramajwaralakshana	CC	MK	KH	L&GD	CL-PR	F&S	II	
CO1	Analyze Agantu and Doshajwara with reference to Jwarasamprapti	CAN	MK	KH	DIS	INT	F&S	II	
CO1	Describe sadhyasadhya of Jwara	CC	MK	KH	L&P PT	INT	F&S	II	
CO1	Enlist Jwaramuktalakshana	CK	MK	K	L&P PT	QZ	F&S	II	
Topic 1818. Masurika – Romantika (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Enlist nidana of Masurika	CK	NK	K	L&PP	QZ	F&S	II	

					T				
CO1	DescribesampraptiofMasurika	CC	NK	KH	L&GD	INT	F&S	II	
CO1	EnlistbhedaofofMasurika	CC	NK	KH	L&PPT	QZ	F&S	II	
CO1	ExplaintheavasthikalakshanaofMasurika	CC	NK	KH	L&PPT	INT	F&S	II	
CO1	EnlistfeaturesofRomantika	CK	NK	K	L&PPT	QZ	F&S	II	
Topic 1919. Fever (Lecture :1 hours, Non lecture: 6 hours)									
CO2	Describetheorganism,incubationperiod,andmodeoftransmissionofMeaslesvirus,Varicella-zostervirusandHerpeszoster,Coxsackievirus,Rubellavirus,variousMalariaparasites,Influenzavirus,Denguevirus,Leptospira,Chikungunyavirus,Salmonellaandcausativeagentsofothercommonregionaldisorderspresentingwithfever	CC	DK	KH	L_VC,FC	WP,INT	F&S	II	
CO2	DescribetheclinicalfeaturesofMeasles,ChickenpoxandHerpeszoster,Handfootmouthdisease,Rubella,Malaria,Filariasis,Influenza,Dengue,Leptospirosis,Chikungunya,andTyphoid	CC	DK	KH	L_VC,RP	T-CS	F&S	II	
CO2	Describethecommonregionaldisorderspresentingwithfever	CC	DK	KH	L&GD	T-CS	F&S	II	
CO2	DescribethecomplicationsofMeasles,ChickenpoxandHerpeszoster,Handfootmouthdisease,Rubella,Malaria,Filariasis,Influenza,Dengue,Leptospirosis,Chikungunya,Typhoid,andothercommonregionaldisorderspresentingwithfever	CC	DK	KH	TUT	INT	F&S	II	

CO3	Perform relevant clinical examination related to Measles, Chickenpox and Herpes zoster, Hand foot mouth disease, Rubella, Malaria, Filariasis, Influenza, Dengue, Leptospirosis, Chikungunya, Typhoid, and other common regional disorders presenting with fever	PSY - GUID	DK	SH	L_VC	OSCE	F&S	II	
CO4	Order and interpret relevant investigations related to Measles, Chickenpox and Herpes zoster, Hand foot mouth disease, Rubella, Malaria, Filariasis, Influenza, Dengue, Leptospirosis, Chikungunya, Typhoid, and other common regional disorders presenting with fever	CAP	DK	SH	LRI	T-CS	F&S	II	
Topic 2020. Pandu (Lecture :2 hours, Non lecture: 0 hours)									
CO1	Describe pratyatmalakshana of Pandu	CC	MK	KH	L&P PT	PUZ	F&S	II	
CO1	Describe hetu and samprapti of Pandu	CC	MK	KH	L&P PT	INT	F&S	II	
CO1	Enlist bheda of Pandu	CC	MK	KH	L&P PT	QZ	F&S	II	
CO1	Describe purvaroop of Pandu	CC	MK	KH	L&P PT	INT	F&S	II	
CO1	Enlist upadrava of Pandu	CK	MK	K	L&P PT	QZ	F&S	II	
CO1	Describe sadhya asadhyata of Pandu	CC	MK	KH	L&P PT	INT	F&S	II	
CO1	Explain Panchapandu	CC	MK	KH	L&P PT	T-CS	F&S	II	

CO1	DifferentiateDoshajapandu	CC	MK	KH	L&GD	CL-PR	F&S	II	
Topic 2121. Raktapitta (Lecture :1 hours, Non lecture: 1 hours)									
CO1	DefineRaktapittaandmentiontheraktapravruttimarga	CK	MK	K	L&PPT	QZ	F&S	II	
CO1	ExplaintheswabhavaofRaktapitta	CC	MK	KH	DIS	INT	F&S	II	
CO1	EnlistbhedaofRaktapitta	CK	MK	KH	L&PPT	QZ	F&S	II	
CO1	Describenidana,samprapti,purvaroop,vishishtalakshanaofRaktapitta	CC	MK	KH	L&GD	T-CS	F&S	II	
CO1	EnlistupadravaofRaktapitta	CK	MK	KH	L&PPT	PUZ	F&S	II	
CO1	DescribesadhyaasadhyataofRaktapitta	CC	MK	KH	DIS	INT	F&S	II	
Topic 2222. Hematopoietic diseases (Lecture :1 hours, Non lecture: 6 hours)									
CO2	Describe the clinical features of anaemia, nutritional anaemia, thalassemia, sickle cell anaemia, leukaemia, and thrombocytopenia	CC	DK	KH	L_VC,RP	WP	F&S	II	
CO4	Order and interpret relevant investigations of anaemia, nutritional anaemia, thalassemia, sickle cell anaemia, leukaemia, and thrombocytopenia	CAP	DK	KH	L&GD,LR I	T-CS	F&S	II	
CO2	Describe the differential diagnosis of anaemia, nutritional anaemia, thalassemia, sickle cell anaemia, leukaemia, and thrombocytopenia	CC	DK	KH	L&GD, PBL	PRN	F&S	II	
Topic 2323. Hridroga (Lecture :1 hours, Non lecture: 1 hours)									

CO1	DescribehetuandsampraptiofHridroga	CC	DK	KH	L&GD	QZ	F&S	II	
CO1	EnlistbhedaofHridroga	CK	DK	KH	L&PPT	PUZ	F&S	II	
CO1	AnalyzesamanyalakshanaofHridroga	CAN	DK	KH	DIS	T-CS	F&S	II	
CO1	DescribevishishtalakshanaofHridroga	CC	DK	KH	L&PPT	INT	F&S	II	
CO1	EnlistupadravaofHridroga	CK	DK	KH	L&PPT	WP	F&S	II	
Topic 2424. Shotha (Lecture :2 hours, Non lecture: 0 hours)									
CO1	DescribehetuofShotha	CC	MK	KH	L&GD	O-QZ	F&S	II	
CO1	EnlistbhedaofShotha	CK	MK	KH	L&PPT	O-QZ	F&S	II	
CO1	Describevidhisampratiofshotha	CC	MK	KH	DIS	O-GAME	F&S	II	
CO1	Describepurvaroopta,vishishtalakshana,sampraptiandsadhyas adhyataofNijashotha	CC	MK	KH	L&GD	INT	F&S	II	
CO1	DifferentiateDoshajashotha	CC	MK	KH	L&GD	INT	F&S	II	
Topic 2525. Cardiovascular disorders (Lecture :1 hours, Non lecture: 5 hours)									
CO2	Describe the clinical features of Coronary Artery Disease(Ischemic Heart Disease, and Myocardial Infarction) andCongestivecardiacfailure	CC	DK	KH	L_VC,RP	C-VC	F&S	II	V-KC

CO3	Perform relevant clinical examination of Coronary Artery Disease (Ischemic Heart Disease, and Myocardial Infarction) and Congestive cardiac failure	PSY - GUID	DK	SH	L_VC, SIM	OSCE	F&S	I	
CO4	Order and interpret relevant investigations of Coronary Artery Disease (Ischemic Heart Disease, and Myocardial Infarction) and Congestive cardiac failure	CAP	DK	KH	L&G D, LR I	O-QZ	F&S	II	
Topic 2626. Kamala (Lecture :2 hours, Non lecture: 0 hours)									
CO1	Define Kamala	CK	MK	K	L&P PT	QZ	F&S	II	
CO1	Describe hetu and samprapti of Kamala	CC	MK	KH	L&G D	INT	F&S	II	
CO1	Classify Kamala on the basis of vidhi samprapti of Kamala	CC	MK	KH	L&P PT	INT	F&S	II	
CO1	Differentiate Koshtashakhashrita and Shakhashrita Kamala	CC	MK	KH	DIS	PRN	F&S	II	
CO1	Enlist upadrava of Kamala	CK	MK	KH	L&P PT	QZ	F&S	II	
CO1	Describe sadhya and adhyata of Kamala	CC	MK	KH	TUT	M-CHT	F&S	II	
CO1, CO5	Describe Swatantra-Paratantra Kamala, Alpapitta-Bahupitta Kamala	CC	MK	KH	L&P PT	INT	F&S	II	
Topic 2727. Udara Roga (Lecture :2 hours, Non lecture: 1 hours)									
CO1	Explain pratyatmalakshana of Udara	CC	MK	KH	L&P PT	PUZ	F&S	II	
CO1	Describe hetu and samprapti of Udara	CC	MK	KH	L&G D	WP	F&S	II	

CO1	EnlistbhedaofUdara	CK	MK	K	L&P PT	QZ	F&S	II	
CO1,CO5	Describepurvaroop,samanyalakshanaandsadhyasadyataof Udara	CC	MK	KH	L&P PT	T-CS	F&S	II	
CO1	ExplainavasthabhedaofUdara	CC	MK	KH	DIS	PRN	F&S	II	
CO1,CO5	DifferentiateDoshajaudara	CC	MK	KH	L& GD	M-CHT	F&S	II	
CO1,CO5	ExplainVishistalakshanaofBaddhagudodara,Pleehodara,Jalo daraandChidrodara	CC	MK	KH	L&P PT	M-CHT	F&S	II	
Topic 2828. Hepatobiliary diseases (Lecture :1 hours, Non lecture: 2 hours)									
CO2,CO5	DescribeclinicalfeaturesofLivercirrhosis,AlcoholicandNo n-AlcoholicLiverDisease,Hepatitis,JaundiceandAscites	CC	DK	KH	L_VC ,RP	C-VC	F&S	II	
CO3	PerformrelevantclinicalexaminationofLivercirrhosis,Alcohol icandNon- AlcoholicLiverDisease,Hepatitis,JaundiceandAscites	PSY - GU D	DK	SH	L_VC ,D_ BED	OSCE	F&S	II	
CO4	OrderandinterpretrelevantinvestigationsofLivercirrhosis,Alco holicandNon- AlcoholicLiverDisease,Hepatitis,JaundiceandAscites	CAP	DK	SH	L&G D,LR I	PRN	F&S	II	
CO2,CO5	Describe differential diagnosis of Liver cirrhosis, Alcoholic and Non- Alcoholic Liver Disease, Hepatitis, Jaundice and Ascites	CC	DK	KH	L& GD, PBL	M-CHT	F&S	II	
Topic 2929. Kushtha - Maha Kushtha & Kshudra Kushtha (According to Charaka) (Lecture :3 hours, Non lecture: 1 hours)									
CO1	DefineKushtha	CK	MK	K	L&P PT	O-QZ	F&S	III	

CO1	DescribehetuandsampraptiofKushtha	CC	MK	KH	L&GD	COM	F&S	III	
CO1	EnlistbhedaofMahaKushtha&KshudraKushtha	CK	MK	K	L&PPT	O-QZ	F&S	III	
CO1	DescribepurvaroopaoofKushtha	CC	MK	KH	L&GD	INT	F&S	III	
CO1,CO5	DescribevishishtalakshanaofMahaKushtha&KshudraKushtha	CC	MK	KH	L&PPT,CD	O-GAME	F&S	III	
CO1,CO5	DescribedoshaanusaraKushthalakshana	CC	MK	KH	L&GD	M-POS	F&S	III	
CO1	DescribesadhyaasadhyataofMahaKushtha&KshudraKushtha	CC	MK	KH	L&PPT	O-QZ	F&S	III	
CO1,CO5	DifferentiateMahakushtha&Kshudrakushtha	CC	MK	KH	DIS	CL-PR	F&S	III	
Topic 3030. Sheetapitta (Lecture :1 hours, Non lecture: 0 hours)									
CO1	DescribeSheetapittasamprapti	CC	MK	KH	L&PPT	M-CHT	F&S	III	
CO1,CO5	DescribeSheetapittaandUdardalakshana	CC	MK	KH	L&PPT	QZ	F&S	III	
CO1	DescribeKothalakshana	CC	MK	KH	L&PPT	QZ	F&S	III	
CO1,CO5	DifferentiateSheetapittaandUdarda	CC	MK	KH	DIS	QZ	F&S	III	
Topic 3131. Shwitra (Lecture :1 hours, Non lecture: 0 hours)									
CO1	EnlisttypesofShwitra	CK	MK	K	L&PP	O-QZ	F&S	III	

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CO1,CO5	Describe lakshana and sadhyaasadyata of Shwitra	CC	MK	KH	L&P PT	INT	F&S	III	
Topic 3232. Visarpa (Lecture :2 hours, Non lecture: 0 hours)									
CO1	Define Visarpa	CK	MK	K	L&P PT	O-QZ	F&S	III	
CO1	Describe hetu and samprapti of Visarpa	CC	MK	KH	L&G D	M-CHT	F&S	III	
CO1	Enlist bheda of Visarpa	CK	MK	K	L&P PT	QZ	F&S	III	
CO1,CO5	Describe purvarupa of visarpa, features of Bahya and Abhyantara visarpa and sadhyaasadyata of Visarpa	CC	MK	KH	L&P PT	PRN	F&S	III	
CO1,CO5	Differentiate Doshaja Visarpa	CC	MK	KH	DIS	INT	F&S	III	
CO1,CO5	Explain Agni, Kardama and Granthi visarpa	CC	MK	KH	L&P PT	T-CS	F&S	III	
Topic 3333. Skin diseases (Lecture :1 hours, Non lecture: 6 hours)									
CO2,CO5	Describe the clinical features of Allergic disorders- Eczema, Urticaria; Squamous lesions- Psoriasis, Lichen planus; Bullous lesion- Pemphigus and Pemphigoid; Mycotic skin diseases; Leprosy; Vitiligo; Cellulitis	CC	DK	KH	L_VC	C-VC	F&S	III	
CO3	Perform relevant clinical examination of Allergic disorders- Eczema, Urticaria; Squamous lesions- Psoriasis, Lichen planus; Bullous lesion- Pemphigus and Pemphigoid; Mycotic skin diseases; Leprosy; Vitiligo; Cellulitis	PSY - GU D	DK	SH	L_VC ,D_ BED	OSCE	F&S	III	

CO4	OrderandinterpretrelevantinvestigationsofAllergicdisorders- Eczema,Urticaria;Squamouslesions- Psoriasis,Lichenplanus;Bullouslesion– PemphigusandPemphigoid;Mycoticskindiseases;Leprosy;Viti ligo;Cellulitis	CAP	DK	SH	L&G D,LR I	INT	F&S	III	
Topic 3434. Galaganda (Lecture :1 hours, Non lecture: 0 hours)									
CO1	DescribepratyatmalakshanaandsampraptiofGalaganda	CC	NK	KH	L&P PT	PUZ	F&S	III	
Topic 3535. Thyroid disorders (Lecture :1 hours, Non lecture: 1 hours)									
CO2,CO5	DescribeclinicalfeaturesofHypothyroidismandhyperthyroi dism	CC	DK	KH	L_VC ,RP	M-POS	F&S	III	
CO3	PerformrelevantclinicalexaminationofHypothyroidismandhyp erthyroidism	PSY - GU D	DK	SH	L_VC ,D_ BED	OSCE	F&S	III	
CO4	OrderandinterpretrelevantinvestigationsofHypothyroidisma ndhyperthyroidism	CAP	DK	SH	L&G D,LR I	SP	F&S	III	
Topic 3636. Sthoulya – Karshya (Lecture :1 hours, Non lecture: 0 hours)									
CO1	DescribenidanaofSthoulyaandKarshya	CC	MK	KH	L&P PT	T-OBT	F&S	III	
CO1	DescribesampraptiofSthoulya	CC	MK	KH	L& GD	M-CHT	F&S	III	
CO1,CO5	DescribesamanyavishistalakshanaofSthoulya	CC	MK	KH	L&P PT	QZ	F&S	III	

CO1,CO5	DescribesamanyalakshanaofKarshya	CC	MK	KH	L&P PT	O-QZ	F&S	III	

CO1	DescribeupadravaofSthoulya	CC	MK	KH	L&P PT	O-QZ	F&S	III	
CO1,CO5	DifferentialdiagnosisofKarshya	CC	MK	KH	DIS	CL-PR	F&S	III	
Topic 3737. Obesity (Lecture :1 hours, Non lecture: 1 hours)									
CO2,CO5	DescribetheclinicalfeaturesofObesity	CC	DK	KH	FC	WP	F&S	III	H-SW
CO3	PerformrelevantclinicalexaminationofObesity	PSY - GU D	DK	SH	L_VC ,D_ BED	OSCE	F&S	III	
CO4	OrderandinterpretrelevantinvestigationsofObesity	CAP	DK	SH	PBL ,LRI	INT	F&S	III	
CO2,CO5	DescribethedifferentialdiagnosisofObesity	CC	DK	KH	L& GD, PBL	INT	F&S	III	
Topic 3838. Prameha (Lecture :2 hours, Non lecture: 1 hours)									
CO1	DescribepratyatmalakshanaofPrameha	CC	MK	KH	L&P PT	PUZ	F&S	III	
CO1	DescribehetuandsampraptiofPrameha	CC	MK	KH	L& GD	M-CHT	F&S	III	
CO1	EnlistbhedaofPrameha	CK	MK	K	L&P PT	QZ	F&S	III	
CO1,CO5	Describepurvaroopavishishtalakshana,upadravaandsadhyaasadhyaofPrameha	CC	MK	KH	L&P PT	PRN	F&S	III	
Topic 3939. Diabetes Mellitus and Pancreatitis (Lecture :1 hours, Non lecture: 1 hours)									

CO2,CO5	Describe the clinical features of Diabetes Mellitus and Pancreatitis	CC	DK	KH	L&G D,C BL	INT	F&S	III	
CO2	Describe the complications of Diabetes Mellitus and Pancreatitis	CC	DK	KH	L_VC	T-CS	F&S	III	
CO3	Perform relevant clinical examination of Diabetes Mellitus and Pancreatitis	PSY - GU D	DK	SH	L_VC ,D_ BED	OSCE	F&S	III	
CO4	Order and interpret relevant investigations of Diabetes Mellitus and Pancreatitis	CAP	DK	SH	L&G D,LR I	SP	F&S	III	
CO2,CO5	Describe Pancreatitis induced Diabetes mellitus (Fibrocalculous pancreatic Diabetes)	CC	DK	KH	L& GD	INT	F&S	III	
Topic 4040. Vatavyadhi (Lecture :1 hours, Non lecture: 0 hours)									
CO1,CO5	Describe nidana, samanyapurvarooapa, and samanyalakshana of Vatavyadhi	CC	MK	KH	L&P PT	QZ	F&S	III	
Topic 4141. Snayugata vata (Lecture :4 hours, Non lecture: 2 hours)									
CO1	Define Akshepaka	CK	MK	K	L&P PT	QZ	F&S	III	
CO1	Enlist Snayugata vata	CK	MK	K	L&P PT	QZ	F&S	III	
CO1,CO5	Describe Akshepaka	CC	MK	KH	L_VC	C-VC	F&S	III	
CO1	Enlist Akshepakabheda	CK	MK	K	L&P PT	QZ	F&S	III	
CO1	Explain Akshepaka Samprapti	CC	MK	KH	L& GD	M-CHT	F&S	III	

CO1,CO5	DescribeApatanaka	CC	MK	KH	L&P PT	INT	F&S	III	
CO1	EnlistApatanakabheda	CK	MK	K	L&P PT	QZ	F&S	III	
CO1,CO5	DescribeDandapatanaka,AntarayamaandBahirayama	CC	MK	KH	L&P PT,C BL	C-VC	F&S	III	
CO1	DefineArdita	CK	MK	K	L&P PT	O-QZ	F&S	III	
CO1,CO5	DescribeArdita,sampraptiofArditaandlakshanaofArdita	CC	MK	KH	L_VC	INT,C-VC	F&S	III	
CO1	CompareArditaaccordingtoCharakaandSushruta	CC	MK	KH	DIS	C-VC	F&S	III	
CO1	EnlistSadyasadyataofArdita	CK	MK	K	L&P PT	INT	F&S	III	
CO1	DefinePakshaghata	CK	MK	K	L&P PT	QZ	F&S	III	
CO1,CO5	DescribePakshaghatasamprapti,andPakshaghatalakshana	CC	MK	KH	L&G D,C D	C-VC	F&S	III	
CO1,CO5	DescribeKampavata	CC	MK	KH	L_VC	C-VC	F&S	III	
CO1,CO5	DescribeGridhrasiandVishwachiwithitslakshana	CC	MK	KH	CBL	T-CS	F&S	III	
CO1,CO5	DescribedifferentialdiagnosisofGridhrasiandViswachi	CC	MK	KH	L& GD	INT	F&S	III	
CO1,CO5	DescribePangutwa	CC	MK	KH	L_VC	C-VC	F&S	III	
CO1,CO5	DifferentiateKhanjawithGridhrasi	CC	MK	KH	L&G	C-VC	F&S	III	

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Topic 4242. Common neurologic and spine disorders (Lecture :2 hours, Non lecture: 4 hours)									
CO2,CO5	Describe the clinical features of Common neurologic diseases: Parkinson's disease, Stroke, Bell's Palsy, Motor Neuron Disease, Transverse myelitis, Epilepsy (Organic) and Common Spine disorders: Lumbago-Sciatica syndrome, Brachial neuralgia, Cervical and Lumbar Spondylosis	CC	DK	KH	L_VC ,RP	C-VC	F&S	III	
CO3	Perform relevant clinical examination of Common neurologic diseases: Parkinson's disease, Stroke, Bell's Palsy, Motor Neuron Disease, Transverse myelitis, Epilepsy (Organic) and Common Spine disorders: Lumbago-Sciatica syndrome, Brachial neuralgia, Cervical and Lumbar Spondylosis	PSY - GU D	DK	SH	L_VC ,D_ BED	OSCE	F&S	III	
CO4	Order and interpret relevant investigations of Common neurologic diseases: Parkinson's disease, Stroke, Bell's Palsy, Motor Neuron Disease, Transverse myelitis, Epilepsy (Organic) and Common Spine disorders: Lumbago-Sciatica syndrome, Brachial neuralgia, Cervical and Lumbar Spondylosis	CAP	DK	SH	L&G D,LR I	INT	F&S	III	
Topic 4343. Sandhigata vata and Asthi majja gata vata (Lecture :1 hours, Non lecture: 0 hours)									
CO1,CO5	Describe Sandhigata vata	CC	MK	KH	L_VC	C-VC	F&S	III	
CO1,CO5	Describe Katigraha and Manyastambha	CC	MK	KH	L&P PT	INT	F&S	III	
CO1,CO5	Explain Vata kantaka	CC	MK	KH	L&P PT	T-CS	F&S	III	
CO1,CO5	Describe Avabahuka and Amsashosha	CC	MK	KH	L&P PT	INT	F&S	III	

CO1,CO5	Describe the differential diagnosis of Avabahukawith Vishwac hi	CC	MK	KH	L&GD	QZ	F&S	III	
CO1,CO5	Describe Asthi-majjagatavata	CC	MK	KH	L&PPT	INT	F&S	III	
Topic 4444. Diseases of bone, joints, and muscles (Lecture :1 hours, Non lecture: 2 hours)									
CO2,CO5	Describe the clinical features of Diseases of bone and Joints- Osteoarthritis, Osteoporosis, Frozen Shoulder, Calcaneal spur/ Plantar fasciitis, Tennis elbow, Carpal tunnel syndrome; Muscular diseases- Muscular Dystrophy	CC	DK	KH	L_VC	C-VC	F&S	III	
CO3	Perform relevant clinical examination of Diseases of bone and Joints- Osteoarthritis, Osteoporosis. Frozen Shoulder, Calcaneal spur/ Plantar fasciitis, Tennis elbow, Carpal tunnel syndrome; Muscular diseases- Muscular Dystrophy	PSY - GUID	DK	SH	L_VC, D_BED	OSCE	F&S	III	
CO4	Order and interpret relevant investigations of Diseases of bone and Joints- Osteoarthritis, Osteoporosis. Frozen Shoulder, Calcaneal spur/ Plantar fasciitis, Tennis elbow, Carpal tunnel syndrome; Muscular diseases- Muscular Dystrophy	CAP	DK	SH	L&G D,X R ay, L RI	INT	F&S	III	
Topic 4545. Amavata (Lecture :2 hours, Non lecture: 0 hours)									
CO1	Describe the etiology and samprapti of Amavata	CC	MK	KH	L&PPT	M-CHT	F&S	III	
CO1	Enlist the bheda of Amavata	CK	MK	K	L&PPT	QZ	F&S	III	
CO1,CO5	Describe the manyalakshana, vishishtalakshana, upadrava and sadhyaasadhya of Amavata	CC	MK	KH	L_VC	C-VC	F&S	III	
Topic 4646. Vatarakta (Lecture :2 hours, Non lecture: 1 hours)									

CO1	Define Vatarakta with its synonyms	CK	MK	K	L&P PT	O-QZ	F&S	III	
CO1	Describe hetu and samprapti of Vatarakta	CC	MK	KH	L&GD	M-CHT	F&S	III	
CO1	Explain Samprapti of Avasthika Vatarakta	CC	MK	KH	L&GD	INT	F&S	III	
CO1,CO5	Enlist and explain vidhisamprapti of Vatarakta	CC	MK	KH	L&GD	INT	F&S	III	
CO1,CO5	Enlist and explain bheda of doshaja Vatarakta	CC	MK	KH	L&GD	T-CS	F&S	III	
CO1,CO5	Describe purvaroopa, upadrava, and sadhya asadhyata of Vatarakta	CC	MK	KH	L&P PT	INT	F&S	III	
CO1,CO5	Describe the differential diagnosis of Sandhigatavata, Amavata and Vatarakta	CC	MK	KH	L&GD	T-CS,INT	F&S	III	
Topic 4747. Immunological & Metabolic disorders (Lecture :1 hours, Non lecture: 2 hours)									
CO2,CO5	Describe the clinical features of Rheumatic fever, Rheumatoid arthritis, SLE, Ankylosing spondylitis, Gout	CC	DK	KH	L_VC ,RP	C-VC	F&S	III	
CO3	Perform relevant clinical examination of Rheumatic fever, Rheumatoid arthritis, SLE, Ankylosing spondylitis, Gout	PSY - GU D	DK	SH	L_VC ,D_ BED	OSCE	F&S	III	
CO4	Order and interpret relevant investigations of Rheumatic fever, Rheumatoid arthritis, SLE, Ankylosing spondylitis, Gout	CAP	DK	SH	L&G D,LR I	T-CS	F&S	III	
CO2,CO5	Describe the differential diagnosis of Arthritis	CC	DK	KH	L&GD, PBL	T-CS	F&S	III	

Topic 4848. Klaibya & Vandhyatva (Lecture :1 hours, Non lecture: 0 hours)									
CO1	DescribeKlaibyaandvandhyatva	CC	NK	KH	L&P PT	QZ	F&S	III	
CO1	EnlisttypesofKlaibyaandVandhyatva	CK	NK	K	L&P PT	QZ	F&S	III	
Topic 4949. Sexual dysfunction and Infertility (Lecture :1 hours, Non lecture: 1 hours)									
CO2	OrderandinterpretrelevantinvestigationsofSexualdysfunctionandInfertility	CAP	NK	SH	L&G D,LR I	T-CS	F&S	III	
CO2	DescribedifferentialdiagnosisofSexualdysfunctionandInfertility	CC	NK	KH	L&G D	INT	F&S	III	V-SP
Topic 5050. Unmada & Apasmara (Lecture :3 hours, Non lecture: 0 hours)									
CO1	ExplainniruktiofUnmadaandApasmara	CC	NK	KH	L&P PT	O-QZ	F&S	III	
CO1	ExplainpratyatmalakshanaofUnmadaandApasmara	CC	NK	KH	L&P PT	PUZ	F&S	III	
CO1	DescribehetuandsampraptiofUnmadaandApasmara	CC	NK	KH	L&G D	M-CHT	F&S	III	
CO1	EnlistbhedaofUnmadaandApasmara	CK	NK	K	L&P PT	QZ	F&S	III	
CO1	DescribesamanyalakshanaofUnmadaandApasmara	CC	NK	KH	L&G D, L_V C	QZ,C-VC	F&S	III	
Topic 5151. Vishada (Lecture :1 hours, Non lecture: 0 hours)									

CO1	DefineVishada	CK	NK	K	L&P PT	QZ	F&S	III	
Topic 5252. Murchha, and Sanyasa (Lecture :1 hours, Non lecture: 0 hours)									
CO1	DescribethetheUtpadakahetuofMurchha,andSanyasa	CC	NK	KH	L&P PT	INT	F&S	III	
CO1	DescribesampraptiofMurchha,andSanyasa	CC	NK	KH	L& GD	M-CHT	F&S	III	
Topic 5353. Common Psychiatric diseases (Lecture :1 hours, Non lecture: 0 hours)									
CO2,CO5	DescribeclinicalmanifestationofDepression,Anxietyneuro sisandEpilepsy(Non-organic)	CC	NK	KH	L&P PT	QZ	F&S	III	
CO2,CO5	DifferentiateDepression,Anxietyneurosis,andEpilepsy(Non- organic)	CC	NK	KH	L& GD	CL-PR	F&S	III	
CO3	PerformmentalstatusexaminationforDepression,Anxietyneuro sis,andEpilepsy(Non-organic)	PSY - GU D	NK	SH	L_VC ,D_ BED	INT	F&S	III	
Topic 5454. Phiranga and Upadamsha (Lecture :1 hours, Non lecture: 0 hours)									
CO1	DescribenidanaofPhirangaandUpadamsha	CC	NK	KH	L&P PT	QZ	F&S	III	
CO1	ExplaintheUpadamshasamprapti	CC	NK	KH	L&P PT	M-CHT	F&S	III	
CO1	EnlistthetypesofPhiranga	CK	NK	K	L&P PT	QZ	F&S	III	
Topic 5555. Syphilis & Gonorrhoea (Lecture :1 hours, Non lecture: 1 hours)									

CO2	Describe causative factors, and clinical features of Syphilis and Gonorrhoea	CC	NK	KH	L&GD	T-CS	F&S	III	
CO2	Describe differential diagnosis of Syphilis and Gonorrhoea	CC	NK	KH	FC	T-CS	F&S	III	
CO4	Order and interpret relevant investigation of Syphilis and Gonorrhoea	CAP	NK	SH	L&GD,LR I	INT	F&S	III	
Topic 5656. Krimiroga (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Describe the etiology of Krimiroga	CC	NK	KH	L&PPT	O-QZ	F&S	III	
CO1	Enlist the signs and symptoms of Krimiroga	CK	NK	K	L&PPT	O-QZ	F&S	III	
CO1	Describe the many clinical features of Krimiroga	CC	NK	KH	L&PPT	O-GAME	F&S	III	
Topic 5757. Clinical presentation of common parasitic disorders (Lecture :1 hours, Non lecture: 2 hours)									
CO2,CO5	Describe the clinical presentation of Hookworm, Roundworm, Threadworm, and Pinworm	CC	DK	KH	L_VC	C-VC	F&S	III	
CO3	Perform relevant examination of clinical presentation of Hookworm, Roundworm, Threadworm, and Pinworm	PSY - GU D	DK	SH	L&PPT	INT	F&S	III	
CO4	Order and interpret relevant investigations of clinical presentation of Hookworm, Roundworm, Threadworm, and Pinworm	CAP	DK	SH	L&GD,LR I	T-CS	F&S	III	
Topic 5858. Khalitya & Palitya (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Describe Khalitya and Palitya	CC	NK	KH	L&PPT	O-QZ	F&S	III	

Topic 5959. Shleepada (Lecture :1 hours, Non lecture: 0 hours)									
CO1	DescribenidanaandsampratiofShleepada	CC	NK	KH	L&P PT	M-CHT	F&S	III	
CO1	EnlistbhedaofShleepada	CK	NK	K	L&P PT	QZ	F&S	III	
CO1	EnlistfeaturesofShleepada	CK	NK	K	L&P PT	O-QZ	F&S	III	
Topic 6060. Tuberculosis (Lecture :1 hours, Non lecture: 2 hours)									
CO2,CO5	DescribetheclinicalpresentationofTuberculosis	CC	DK	KH	L_VC	INT,C-VC	F&S	III	H-SW
CO3	PerformrelevantclinicalexaminationofTuberculosis	PSY - GU D	DK	SH	L&P PT	INT	F&S	III	
CO4	Orderandinterpretrelevantinvestigationsofclinicalpresentati onofTuberculosis	CAP	DK	SH	L&G D,LR I	INT	F&S	III	

List of Practicals [Term and Hours]

PRACTICALS(Marks-100)			
S.No	List of Topics	Term	Hours
1	1.AptopadeshaPareeksha/PrashnaPareeksha	1	10
2	2.Introductiontocasesheet.PratyakshaandAnumanaPareeksha.	1	10
3	3.GeneralclinicalandSystemicexamination-A	1	20
4	4.GeneralclinicalandSystemicexamination-B	1	20
5	5.CommonSymptomatologyofdifferentsystems	2	20
6	6.Vyavachedakanidana/Differentialdiagnosis	2	4
7	7.Casepresentation	2	40
8	8.IntroductiontoDiagnosticprocedures-Hematology,Biochemistry,Microbiology,Urine,Stool	2	26
9	9.IntroductiontoElectroCardioGram(ECG),Differentimagingtechniques	2	10
10	10.IntroductiontoHistopathology	2	4
11	11.StudyofHistopathologySpecimens	3	4
12	12.Retaspareeksha	3	2
13	13.Pathologypractical(Perform/Observation/Interpretation)	3	40

Table 4: Learning objectives (Practical)

A4 Course outcome	B4 Learning Objective (At the end of the session, the student should be able to)	C4 Domain/sub	D4 Must to know / desirable / to know / Niceto know	E4 Level Does/ Show show/ Know show/ Know	F4 T-L method	G4 Assessment (Refer abbreviations)	H4 Formative/summative	I4 Term	K4 Integration
Topic 11. Aptopadesha Pareeksha/Prashna Pareeksha									
CO3,CO5	Perform Aptopadesha pareeksha, Prashna pareeksha or History taking mentioned in Ayurveda and contemporary medical literature for drawing clinical diagnosis and prognosis	PSY - GUID	MK	KH	D_B ED	CHK, RK	F&S	I	
CO7,CO8	Adopt and reflect ward ethics and communication skills while engaging in the process of examination	AFT - RES	MK	SH	SIM	SP, RK	F&S	I	
Topic 22. Introduction to case sheet. Pratyaksha and Anumana Pareeksha.									
CO3,CO5	Perform Darshanendriya, Sparshanendriya, Srotrendriya pareeksha mentioned in Ayurveda and contemporary medical literature for drawing clinical diagnosis and prognosis	PSY - GUID	MK	SH	D_B ED	P-CASE	F&S	I	
CO5	Perform Ghranendriya, & infer Rasanendriya tahapareeksha mentioned in Ayurveda and contemporary medical literature for drawing clinical diagnosis and prognosis	CAN	MK	KH	SIM	P-CASE, RK	F&S	I	
CO5,CO7	Report the findings of patient through structured case sheet	CC	MK	KH	CD	P-CASE, RK	F&S	I	

CO3,CO5	PerformNadipareekshaasperAyurvedaclassicsforidentifyingpredominanceofdosha.	PSY - GU D	MK	SH	D_B ED	P-PRF	F&S	I	

Topic 33. General clinical and Systemic examination -A									
CO3,CO5	Perform general examination and various systemic examination- General physical examination, Nervous system, Musculoskeletal system, Gastrointestinal system, Respiratory system, Integumentary system, Uro-genital system, Cardiovascular system, etc. (Inspection, Palpation, Percussion, Auscultation)	PSY - GU D	MK	SH	SIM, D_B ED	CL-PR, OSCE ,RK	F&S	I	
Topic 44. General clinical and Systemic examination - B									
CO3,CO5	Interpret the findings of general examination and various systemic examination- General physical examination, Nervous system, Musculoskeletal system, Gastrointestinal system, Respiratory system, Integumentary system, Uro-genital system, Cardiovascular system, etc. (Inspection, Palpation, Percussion, Auscultation)	CAP	MK	SH	SIM	SP, RK	F&S	I	
Topic 55. Common Symptomatology of different systems									
CO2,CO5	Describe the causes and mechanism of manifestation of Pain abdomen, Edema, Diarrhea, Dysentery, Dehydration and Constipation, Hiccough, Breathlessness, Cough, Vomiting, Joint pain with or without swelling Differential Diagnosis, Neck and Low back pain radiating to corresponding limb, Hematuria, Stroke in various cases scenarios	CC	DK	KH	L_VC	COM	F&S	II	
CO2,CO5	Investigate the causes and mechanism of manifestation of Pain abdomen, Edema, Diarrhea, Dysentery, Dehydration and Constipation, Hiccough, Breathlessness, Cough, Vomiting, Joint pain with or without swelling, Neck and Low back pain radiating to corresponding limb, Hematuria, Stroke in various cases scenarios	AFT - RES	DK	SH	IBL, PBL	INT	F&S	II	
Topic 66. Vyavachedaka nidana/ Differential diagnosis									

CO5	Infer diagnosis and prognosis based on a given clinical scenario	CAN	MK	KH	PBL, CD	SP	F&S	II	
CO5	Apply hypothetic-deductive model of clinical reasoning, Pattern recognition model, dual process diagnostic reasoning model, pathway for clinical reasoning model, integrative model of clinical reasoning model, model of diagnostic reasoning strategies in primary care for clinical diagnosis	CAP	DK	SH	SIM, CD	INT, SP	F&S	II	
CO5	Apply intuitive and analytical approach in clinical decision making	CAP	DK	SH	PBL, SIM, CD	SP	F&S	II	
CO5	Perform clinical diagnosis using these clinical reasoning models	PSY - GUID	DK	SH	SIM, CD	SP	F&S	II	
Topic 77. Case presentation									
CO5, CO7	Demonstrate case presentation skills	PSY - GUID	MK	SH	L_VC, D_BED	P-CASE, CL-PR	F&S	II	
Topic 88. Introduction to Diagnostic procedures - Hematology, Biochemistry, Microbiology, Urine, Stool									
CO4, CO5, CO6	Order and interpret Diagnostic procedures- Haematology, Biochemistry, Microbiology, Urine, and Stool.	CAP	MK	SH	PBL, LRI	T-CS	F&S	II	
CO3	Suggest patient's preparation for Diagnostic procedures- Haematology, Biochemistry, Microbiology, Urine, and Stool	AFT - RES	MK	SH	L&P PT	SP	F&S	II	
CO3	Perform sample collection for Diagnostic procedures- Haematology, Biochemistry, Microbiology, Urine, and Stool	PSY -	MK	SH	SIM	SP, RK	F&S	II	

		GU D							
Topic 99. Introduction to Electro Cardio Gram (ECG), Different imaging techniques									
CO4,CO5,CO	OrderandinterpretgivenreportforElectroCardioGram(ECG)	CAP	DK	SH	L&PP	P-ID,CL-PR	F&S	II	

6	and different imaging techniques				T, X-ray				
CO3	Suggest patient's preparation for ElectroCardioGram (ECG) and different imaging techniques	AFT - RES	DK	SH	L&P PT	INT, SP	F&S	II	
Topic 1010. Introduction to Histopathology									
CO4, CO5, CO6	Order and interpret tests for Histopathology specimens	CAP	NK	SH	LRI	INT	F&S	III	
Topic 1111. Study of Histopathology Specimens									
CO4, CO5	Distinguish and describe prepared histopathology specimens of Lung and trachea/Blood, Spleen and lymph/Heart and vessels/Glands/Liver (Provide normal and abnormal slides to distinguish while demonstration and spotting)	AFT - RES	NK	SH	D_L	P-ID	F&S	III	
Topic 1212. Retas pareeksha									
CO1, CO5	Describe and interpret retas pareeksha	CC	DK	KH	D_L	INT	F&S	III	
Topic 1313. Pathology practical (Perform/ Observation/ Interpretation)									
CO4, CO5, CO6	Order and interpret Hb, RBC Count, WBC count, Haematocrit, Platelet count, Differential count, RBC indices and ESR* - Haematology Analyser through Flow cytometry technique	CAP	MK	SH	CBL	INT, RK	F&S	III	
CO3	Perform Hb, RBC Count, WBC count, Haematocrit, Platelet count, Differential count, RBC indices procedure through - Haematology Analyser or Cell counter through Flow cytometry technique	PSY - GUID	MK	SH	PT	P-PRF	F&S	III	
CO4, CO5, CO6	Order and interpret Urine physical examination (Appearance, colour, odour)	CAP	MK	SH	LRI	INT	F&S	III	

CO3	Perform Urine physical examination (<u>Appearance, colour, odour</u>) through <u>Visual method</u>	PSY - GUID	MK	SH	CBL, PT	P-PRF	F&S	III	
CO4, CO5, CO6	Order and interpret Urine physical and chemical examination (Urine specific gravity, Urine-ph, Sugar, Albumin, Bile pigment, Bile salt, Occult blood, Ketone, Urobilinogen)-Multistix (Urine test strips)	CAP	MK	SH	CBL, LRI	INT, RK	F&S	III	
CO3	Perform Urine physical and chemical examination (Urine specific gravity, Urine-ph, Sugar, Albumin, Bile pigment, Bile salt, Occult blood, Ketone, Urobilinogen)-Multistix (Urine test strips) (Create or simulate abnormal sample to demonstrate positive results)	PSY - GUID	MK	SH	PRA	P-PRF	F&S	III	
CO4, CO5, CO6	Order and interpret Urine Microscopic Examination (Epithelial cells, RBCs, Leukocytes, Casts, Crystals)-Light microscopy on centrifuged sediment	CAP	MK	SH	CBL, LRI	INT	F&S	III	
CO3	Perform Urine Microscopic Examination (Epithelial cells, RBCs, Leukocytes, Casts, Crystals by Light microscopy on centrifuged sediment)	PSY - GUID	MK	SH	PRA	P-PRF	F&S	III	
CO4, CO5, CO6	Order and interpret Liver Function Test (LFT) (Total Bilirubin, Direct-indirect bilirubin, SGOT, SGPT, ALK Phosphates, TP protein, Albumin, Globulin, A/G Ratio)-Semi-automated/fully automated biochemical analyser through Photometry	CAP	NK	SH	CBL, LRI	INT	F&S	III	

CO2	DescribeLiverFunctionTest(LFT)(TotalBilirubin,Direct–indirectbilirubin,SGOT,SGPT,ALKPhosphates,TProtein,Albumin,Globulin,A/GRatio)procedurethroughdemonstration	CC	DK	KH	D_L	INT	F&S	III	

	-Semi-automated/fullyautomatedbiochemicalanalyserthroughPhotometry								
CO2	Explaintheprincipleandmechanismoffunctioningofbiochemicalanalyser	CC	DK	KH	D_L	QZ	F&S	III	
CO4,CO5,C O6	OrderandinterpretRenalFunctionTest(RFT)(Urea,Creatinine,Uricacid)-Semi-automated/fullyautomatedbiochemicalanalyserthroughPhotometry	CAP	MK	SH	CBL ,LRI	INT,RK	F&S	III	
CO4,CO5,C O6	OrderandinterpretDiabeticprofile(BloodGlucose-FBS,PPBS,RBS,HbA1C,Insulin,C-peptide)-Semi-automated/fullyautomatedbiochemistryanalyser/ELISAreaderthroughPhotometry/immunoturbidometry/ELISATEchnique	CAP	MK	SH	CBL ,LRI	INT,RK	F&S	III	
CO4,CO5,C O6	OrderandinterpretThyroidprofile(TSH,T3,T4,FT3,FT4)-ELISAreader/CLIAthroughELISA/CLIA Technique	CAP	MK	KH	CBL ,LRI	INT	F&S	III	
CO2	DescribeThyroidprofile(TSH,T3,T4,FT3,FT4)procedurethroughdemonstration-ELISAreader/CLIAthroughELISA/CLIA Technique	CAP	DK	KH	D_L	QZ	F&S	III	
CO4,CO5,C O6	OrderandinterpretLipidprofile(Cholesterol,HDL,LDL,TG)-Semi-automated/fullyautomatedbiochemicalanalyserthroughPhotometry	CAP	MK	SH	CBL ,LRI	INT,RK	F&S	III	
CO4,CO5,C O6	OrderandinterpretPeripheralsmear(Malaria,Microfilaria)-MicroscopythroughLeishmansstaining	CAP	MK	SH	CBL ,LRI	INT,RK	F&S	III	

CO2	DescribePeripheral smear(Malaria, Microfilaria) procedure through demonstration-Microscopy through Leishman's staining	CC	DK	KH	D_L	QZ	F&S	III	
CO4, CO5, CO6	Order and interpret RA factor (qualitative), WIDAL (qualitative), VDRL (qualitative), ASO (qualitative) and CRP (qualitative)- Microscopy (if required) through Latex agglutination/	CAP	MK	SH	CBL, LRI	INT, RK	F&S	III	

	Turbidometry								
CO3	Perform RA factor (qualitative), WIDAL (qualitative), VDRL (qualitative), ASO (qualitative) and CRP (qualitative)- Microscopy (if required) through Latex agglutination/Turbidometry	PSY - GUID	MK	SH	PRA	P-PRF	F&S	III	
CO4, CO5, CO6	Order and interpret Stool examination (Colour, Consistency)- Visual method	CAP	NK	SH	CBL, LRI	INT, RK	F&S	III	
CO2	Describe Stool examination (Colour, Consistency)- Visual method	CC	DK	KH	D_L	INT	F&S	III	
CO4, CO5, CO6	Order and interpret Stool examination (Ova, Cyst, Pus cells)- Microscopy through Wet smear (saline and iodine)	CAP	NK	SH	CBL, LRI	INT, RK	F&S	III	
CO2	Describe Stool examination (Ova, Cyst, Pus cells)- Microscopy through Wet smear (saline and iodine)	CC	DK	KH	D_L	INT	F&S	III	
CO4, CO5, CO6	Order and interpret Semen examination (Colour, Liquefaction, Viscosity)- Visual method	CAP	DK	SH	CBL, LRI	INT, RK	F&S	III	
CO2	Describe Semen examination (Colour, Liquefaction, Viscosity) procedure through demonstration- Visual method	CC	DK	KH	D_L	INT	F&S	III	
CO4, CO5, CO6	Order and interpret Semen examination (Sperm count, Motility, Morphology)- Microscopy through Cytometry/Wet smear/stained smear	CAP	DK	SH	CBL, LRI	INT, RK	F&S	III	

CO2	Describe Semen examination (Sperm count, Motility, Morphology) procedure through demonstration - Microscopy through Cytometry/Wet smear/stained smear	CC	DK	KH	D_L	INT, COM	F&S	III	
CO4, CO5, CO6	Order and interpret BT, CT, Prothrombin Time - Coagulometer	CAP	MK	SH	CBL, LRI	INT, RK	F&S	III	

Table 4a: List of Practical

S.No	Name of practical	Term	Activity	Practical hrs
1	1.AptopadeshaPareeksha /PrashnaPareeksha	1	Historytaking/Wardethics/Communicati onskills	10
2	2.Introductiontocaseshe et.PratyakshaandAnum anaPareeksha.	1	Darshanendriya,Sparshanedriya,Srotren driya&Ghranendriya&Rasanendriyatah apareeksha.Generalprincipleofsystemic examination– Inspection,Palpation,Percussion,Auscul tation	10
3	3.GeneralclinicalandSyst emicexamination-A	1	Demonstrationonpatientsandusingsimul ators,softwareorapplications	20
4	4.GeneralclinicalandSyst emicexamination-B	1	GeneralandSystemicexamination	20
5	5.CommonSymptomato logyofdifferentssystem s	2	Painabdomen,Edema,Diarrhea,Dysente ry,Dehydrationandconstipation,Hiccoug h,Breathlessness,Cough,Vomiting,Joint painwithorwithoutswellingDifferential Diagnosis,NeckandLowbackpainradiati ngto correspondinglimb,Hematuria,Stro keDifferentialDiagnosis	20
6	6.Vyavachedakanidana/ Differentialdiagnosis	2	Clinicalreasoningmodels	4
7	7.Casepresentation	2	Demonstratingandpresentingstepsofclin icaldiagnosis	40
8	8.IntroductiontoDiagno sticprocedures- Hematology,Biochemis try,Microbiology,Urine ,Stool	2	A.OrderaninvestigationB.Patient'sprepa rationC.Samplecollection	26
9	9.IntroductiontoElectroC ardioGram(ECG),Differe nt imagingtechniques	2	OrderandinterpretreportsrelatedtoECGa ndDiagnosticimaging	10
10	10.IntroductiontoHistopa thology	2	OrderandInterpret	4

11	11. Study of Histopathology Specimens	3	Prepared histopathology specimen to be demonstrated, observed and studied (Lung and trachea/Blood, Spleen and lymph/Heart and vessels/Glands/Liver)	4
12	12. Retaspareeksha	3	Interpret observations derived from retaspareeksha	2
13	13. Pathology practical (Perform/Observation/Interpretation)	3	13.1 Hematology (Discipline)- Hemogram (Profile) 13.2 Clinical pathology (Discipline)- Urine Physical Examination (Profile) 13.3 Clinical pathology (Discipline)- Urine Physical and Chemical Examination (Profile) 13.4 Clinical pathology (Discipline)- Urine Microscopic Examination (Profile) 13.5 Clinical biochemistry (Discipline)- Liver Function Test (LFT) (Profile) 13.6 Clinical biochemistry (Discipline)- Renal Function Test (RFT) (Profile) 13.7 Clinical biochemistry (Discipline)- Diabetic profile (Profile) 13.8 Clinical biochemistry (Discipline)- Thyroid profile (Profile) 13.9 Clinical biochemistry (Discipline)- Lipid profile (Profile) 13.10 Clinical Pathology/Haematology (Discipline)- Peripheral Smear (Profile) 13.11 Serology (Discipline)- RA Factor/WIDAL (Profile) 13.12 Clinical Pathology (Discipline)- Stool examination (Profile) 13.13 Clinical Pathology (Discipline)- Stool examination (Profile) 13.14 Clinical Pathology (Discipline)- Semen examination (Profile) 13.15 Serology (Discipline)- Coagulation test (Profile)	40
Total Hr				210

CO	Topic name	Activity Details	Hours

CO1,CO2,CO3,CO4,CO6,CO7,CO8	1.AssessmentofDoshaVikriti: A. Nidana(VyadhiJanakaahetu) B. AgnibhedaandVikriti C. DoshaVridhhi,KshayaandDushtaKarma,Samsargaja,Sannipataja. D. Doshaswabhabha-Nityasamshleshita(Leena)doshaandParicheditadosha E. ParidhavamanaDosha	Survey:Afterthecompletionofthetopicthestudentsareinstructedtoidentify: Thecontemporaryetiologiesforthenidanaorhetuarementionedinvariouscontextsasapartofcase diagnosis. IdentifyDoshaVridhhi,KshayaandDushtaKarma,Samsargaja,Sannipatajafeaturesasapartof Case diagnosis. Minimum-5cases	6
CO1,CO2	2.DhatuPakaA.Ojodustilakshana B. Asatmya-Immunopathology, C. CellInjuryandCellularAdaptations D. Inflammation E. Hemodynamicdisorders F. Neoplasia	Creatingvideopresentations(5to7minutes): Afterunderstandingthebasicconcepts: Groupof5studentstogetherareinstructedtoprepareonequalityeducationalvideowithcurrentresearchupdatesinthefieldinastructuredformatandsubmitthesametotheinstructor. Topics of Ayurveda and various contemporary learning objectives defined can be provided for the same. The topics for videopresentation should be selected from the subtopics, it can be regarding a specific point or research update or collection	5

		and summary of scientific articles, etc. which will be assisting in clinical practice. The video presentations should be submitted to create a repository and presented to the department.	
CO2	3. Infection and Nutritional disorders	Class presentations: Group activity with self-directed learning: Students are instructed to compile the subtopics given to the group. Prepare a PPT presentation and present it in class with the groups. 10 min. for presentation and 5 min. for questions and answers for each group. Topics to be covered in the presentation: A) The detailed knowledge of specific organisms, infectious diseases symptomatology, and diagnostic procedures with recent advancements and challenges in diagnosis. B) Nutritional disorders with the thought of understanding the spectrum of signs and symptoms with Ayurvedic literature, methods of diagnosis in contemporary science, complications, etc. Monitored by instructors or mentors assigned for each group.	2
CO6	4. Digital health and Artificial intelligence in the context of Roganidana	Postermaking: After a basic understanding of the topic, the students are instructed to prepare posters regarding the use of Information and Communication Technology and other recent digital developments in understanding diagnosis, prognosis, and developing repositories related to morbidities or Roganidana. Evum Vikriti Vigyan in the current era aiding for academics and	1

		clinical practice. Similarly, the implementation of artificial intelligence in diagnosis and prognosis also can be prepared.	
CO1, CO2, CO3, CO4, CO6, CO7, CO8	5. Methods of Rogipareeksha	Demonstration bedside: After understanding the core concepts of pareeksha the student will be demonstrated regarding various pareeksha before performing the same in practical session. The students are supposed to observe the same, receive, understand and imitate the methods demonstrated. Students will be assigned with the mentioned topics as a part of the activity by the instructor in minimum 5 simulated patients or patients.	5
CO6	6. Vyadhinamakara	Demonstration: The instructor will be demonstrating the operations of the NAMASTE (National AYUSH Morbidity and Standardized Terminologies Electronic Portal) portal. The students should observe and implement the same for reporting terminologies or diagnosis. The instructor can give modified data indicating the disease diagnosis with masked patient details for mentioning the allotted codes of diseases or conditions from NAMASTE portal and WHO international standard terminologies on Ayurveda or A list of common diseases prevailing in the area can be given to the students to search the portal and mention the codes by themselves. Students can be assigned with any of the mentioned topics as a part of the activity by the instructor.	1

CO2,CO3,CO6,CO7,CO8	7.Perform relevant clinical examinations in the following disorders: Gastrointestinal disorders: Ulcerative and Non-ulcerative dyspepsia, Irritable Bowel Syndrome, Inflammatory Bowel Diseases. Urinary disorders: Urinary Tract Infection, Prostatomegaly, Nephrotic syndrome, Nephritic syndrome, Acute Kidney Injury and Chronic Kidney Disease. Respiratory disorders: Pneumonia, Chronic Obstructive Pulmonary Disease, Pleural effusion and Bronchiectasis. Measles, Chickenpox and herpes zoster, Hand foot mouth disease, Rubella, Malaria, Filariasis, Influenza, Dengue, Leptospirosis, Chikungunya, Typhoid, and other common regional disorders presenting with fever. Coronary Artery Disease (Ischemic Heart Disease, and Myocardial Infarction) and Congestive cardiac failure. Hepatobiliary diseases- Liver cirrhosis, Alcoholic and Non-Alcoholic Liver Diseases, Hepatitis, Jaundice, and Ascites.	Demonstration bedside (Simulated patients): The students will be instructed to observe the bedside demonstration activity by the instructor, followed by students imitating or performing the same activity relevant to the condition associated. The case study will be written in the activity book.	8

Allergic disorders- Eczema, Urticaria; Squamous lesions- Psoriasis, Lichen planus; Bullous lesion- Pemphigus and Pemphigoid. Mycotic skin diseases . Leprosy. Vitiligo. Cellulitis. Hypothyroidism and hyperthyroidism. Obesity. Diabetes Mellitus and Pancreatitis. Common neurologic diseases: Parkinson's disease, Stroke, Bell's Palsy, Motor Neuron Disease, Transverse myelitis, Epilepsy (Organic) Common Spinal disorders : Lumbago- Sciatica syndrome, Brachial neuralgia, Cervical and Lumbar Spondylosis. Diseases of bone and Joints- Osteoarthritis, Osteoporosis. Frozen Shoulder, Calcaneal spur/Plantar fasciitis, Tennis elbow, Carpal tunnel syndrome. Muscular diseases- Muscular Dystrophy. Rheumatic fever, Rheumatoid arthritis, SLE, Ankylosing spondylitis, Gout. Mental status examination for Depression, Anxiety neurosis and Epilepsy		

	(Non-organic). Common parasitic infestations: Hookworm, Roundworm, Threadworm, and Pinworm.		
CO4, CO6, CO7, CO8	8. Order and interpret relevant investigations with the clinical correlation of the following disorders: Gastrointestinal disorders: Ulcerative and Non-ulcerative dyspepsia, Irritable Bowel Syndrome, Inflammatory Bowel Diseases. Urinary Tract Infection, Prostatomegaly, Nephrotic syndrome, Nephritic syndrome, Acute Kidney Injury, and Chronic Kidney Disease. Pneumonia, Chronic Obstructive Pulmonary Disease, Pleural effusion, and Bronchiectasis. Measles, Chickenpox and Herpes zoster, Handfoot mouth disease, Rubella, Malaria, Filariasis, Influenza, Dengue, Leptospirosis, Chikungunya, Typhoid, and other common regional disorders presenting with fever. Anaemia, Nutritional anaemia, Thalassemia, Sickle cell anaemia, Leukemia, and	Lab report interpretation: Students will be given a clinical scenario or a case or report in the respective training hour. Based on the training given the students are expected to draw a provisional diagnosis based on the Lab report interpretation. The same has to be recorded in the activity book	8

Thrombocytopenia.

Coronary Artery Disease
(Ischemic Heart Disease,
and Myocardial Infarction) and Congestive cardiac failure.

Hepatobiliary diseases-
Liver cirrhosis, Alcoholic
and Non-
Alcoholic Liver Diseases,
Hepatitis, Jaundice, and Ascites.

Allergic disorders-
Eczema, Urticaria; Squamous lesions-
Psoriasis, Lichen planus;
Bullous lesion-
Pemphigus and Pemphigoid. Mycotic skin diseases
. Leprosy.
Vitiligo. Cellulitis.

Hypothyroidism and hyperthyroidism.
Obesity. Diabetes Mellitus and Pancreatitis. Common neurological diseases
: Parkinson's disease, Stroke, Bell's Palsy, Motor Neuron Disease, Transverse myelitis, Epilepsy (Organic).

Common Spinal disorders:
Lumbago-
Sciatica syndrome, Brachial neuralgia, Cervical and Lumbar Spondylosis.

Diseases of bone and Joints-
Osteoarthritis, Osteoporosis. Frozen Shoulder, Calcaneal spur/Plantar fasciitis, Tennis elbow, Carpal tunnel syndrome.

	Muscular diseases- Muscular Dystrophy. Rheumatic fever, Rheumatoid arthritis, SLE, Ankylosing spondylitis, Gout. Sexual dysfunction and Infertility. Syphilis and Gonorrhea. Parasitic infestations: Hookworm, Roundworm, Threadworm, and Pinworm. Tuberculosis		
CO1, CO2	9. Differential diagnosis: Differentiate between Atisara and Pravahika. Differentiate Atisara and Grahani Roga. Differentiate Grahani dosha and Grahani Roga. Describe the differential diagnosis of Ulcerative and Non-ulcerative dyspepsia, Irritable Bowel Syndrome, and Inflammatory Bowel Diseases. Enlist conditions of Mutras hoshana (Kshaya and Aukasa) and Mutrapratihanta (Avarodha) among different types of Mutraghata. Describe different types of Mutraghata.	Problem-Based Learning: The students will be grouped for PBL sessions with a specific topic from the topic list given. At the end of the session, the groups will present in class. Peer learning will also be achieved with this activity.	10

Differentiate Mootrakric
hra and Mootraghata.

Describe the differential
diagnosis of Pneumonia,
Chronic Obstructive Pul
monary Disease, Pleural
effusion, and Bronchiect
asis.

Describe the differential di
agnosis of Measles, Chic
kenpox and Herpeszoster
, Handfootmouth disease,
Rubella, Malaria, Filarias
is, Influenza, Dengue, Le
ptospirosis, Chikunguny
a, Typhoid and other com
mon regional disorders pr
esenting with fever.

Describe the differential di
agnosis of Anaemia, Nutrit
ional anemia, Thalassemia
, Sick cell anemia, Leuka
emia, and Thrombocytope
nia.

Describe the differential
diagnosis of Coronary Ar
tery Disease (Ischemic H
eart Disease, and Myocar
dial Infarction) and Cong
estive cardiac failure.

Describe the differential di
agnosis of Hepatobiliary di
seases-
Liver cirrhosis, Alcoholic
and Non-
Alcoholic Liver Diseases,
Hepatitis, Jaundice, and As
cites.

Describe the differential di
agnosis of Hypothyroidis
m and hyperthyroidism.

Describe the differential diagnosis of Obesity.

Describe the differential diagnosis of Diabetes Mellitus and Pancreatitis.

Describe the differential diagnosis of Common neurologic diseases: Parkinson's disease, Stroke, Bell's Palsy, Motor Neuron Disease, Transverse myelitis, Epilepsy (Organic), and Common Spinal disorders: Lumbago-Sciatica syndrome, Brachial neuralgia, Cervical, and Lumbar Spondylosis.

Describe the differential diagnosis of Diseases of bone and Joints- Osteoarthritis, Osteoporosis, Frozen Shoulder, Calcaneal spur/Plantar fasciitis, Tennis elbow, Carpal tunnel syndrome, and Muscular diseases- Muscular Dystrophy.

Describe the differential diagnosis of Rheumatic fever, Rheumatoid arthritis, SLE, Ankylosing spondylitis, and Gout.

Describe the differential diagnosis of Sexual dysfunction and Infertility.

Describe the differential diagnosis of Syphilis and Gonorrhea.

Describe the differential

	diagnosis of clinical presentation of Hookworm, Roundworm, Threadworm, and Pinworm. Describe the differential diagnosis of the clinical presentation of Tuberculosis.		
CO2, CO5	10. Clinical features- Role plays in learning: Describe the clinical features of Ulcerative and Non-ulcerative dyspepsia, Irritable Bowel Syndrome, and Inflammatory Bowel Diseases. Describe the clinical features of Urinary Tract Infection, Prostatomegaly, Nephrotic syndrome, Nephritic syndrome, Acute Kidney Injury, and Chronic Kidney Disease. Describe the clinical features of Pneumonia, Chronic Obstructive Pulmonary Disease, Pleural effusion, and Bronchiectasis. Describe the clinical features of Measles, Chicken pox and Herpes zoster, Hand-foot-mouth disease, Rubella, Malaria, Filariasis, Influenza, Dengue, Leptospirosis, Chikungunya, typhoid, and other common regional disorders presenting with fever.	Role plays: Role plays are an effective method of teaching to create a real-world scenario in a controlled manner. In this certain group of students will be trained for pre-class preparation regarding a disease or condition to be presented in the class in front of small cluster groups of students. Further, the groups are asked to interact with the performing student to understand more about a condition and use their clinical acumen to diagnose the condition moderated by an instructor.	10

Describe the complications of Measles, Chickenpox and Herpes zoster, Hand foot mouth disease, Rubella, Malaria, Filariasis, Influenza, Dengue, Leptospirosis, Chikungunya, Typhoid, and other common regional disorders presenting with fever.

Describe the clinical features of Anaemia, Nutritional anemia, Thalassemia, Sick cell anemia, Leukaemia, and Thrombocytopenia.

Describe the clinical features of Coronary Artery Disease (Ischemic Heart Disease, and Myocardial Infarction) and Congestive cardiac failure.

Describe the clinical features of Hepatobiliary diseases - Liver cirrhosis, Alcoholic and Non-Alcoholic Liver Diseases, Hepatitis, Jaundice, and Ascites.

Describe the clinical features of Hypothyroidism and hyperthyroidism.

Describe the clinical features of Diabetes Mellitus and Pancreatitis.

Describe the clinical features of Common neurological diseases: Parkinson's

disease,Stroke,Bell
'sPalsy,

Sr No	Teaching learning methods in the course	No of Activities
	MotorNeuronDisease,T ransversemyelitis,Epile psy(Organic),andComm onSpinedisorders:Lumb ago- Sciaticasyndrome,Brach ialneuralgia,Cervical,an dLumberSpondylosis. Describetheclinicalfeatu resofDiseasesofboneand Joints- Osteoarthritis,Osteoporo sis.FrozenShoulder,Calc anealspur/Plantarfasciiti s,Tenniselbow,Carpeltu nnelsyndrome,andMusc ulardiseases- MuscularDystrophy. Describetheclinicalfeatu resofRheumaticfever,Rh eumatoidarthritis,SLE,A nkylosingspondylitis,an dGout.	
CO4,CO6,CO8	11.Fieldvisits: VisittoPathologylaborato ryandDiagnosticimaging center.	Visit:Studentsareinstructedtovisit atleastonep athologylaboratoryandoneimagingcenter;obs ervetheproceduresfollowed.Recordtheobserv ationsandsubmitthereporttotheinstructor. 10

#Hours indicated are included in calculations of Table 3 and 4

Table 5- Teaching learning method

1	Lecture	2
4	LecturewithVideoclips	45
2	LecturewithPowerpointpresentation	222
5	Discussions	16
3	Lecture&GroupDiscussion	133
6	Brainstorming	3
7	Inquiry-BasedLearning	4
8	PBL	14
9	CBL	9
10	Project-BasedLearning	16
11	Teamprojectwork	2
12	Flippedclassroom	4
13	BlendedLearning	3
14	Edutainment	2
15	Simulation	1
16	Roleplays	10
17	Self-directedlearning	6
18	Problemsolvingmethod	1
19	Recitation	31
20	Tutorial	3
21	Presentations	3
22	Xrayidentification	2
23	Casediagnosis	3
24	Labreportinterpretation	18
25	Demonstration	2
26	Demonstrationbedside	15
27	DemonstrationLab	1

These are overall teaching learning methods listed in Table 3 and 4. Teachers can select the best possible method amongst the given methods as per objective, available time etc.

Table 6: Assessment Summary: Assessment is subdivided in A to H points

6 A-Number of Papers and Marks Distribution

Subject Code	Papers	Theory	Practical/Clinical Assessment					Grand Total
			Practical	Viva	Elective	IA	Sub Total	
AyUG-RN	2	200	100	70		30	200	400

6 B - Scheme of Assessment (formative and Summative)

PROFESSIONAL COURSE	DURATION OF PROFESSIONAL COURSE		
	First Term (1-6Months)	Second Term (7-12Months)	Third Term (13-18Months)
Second	3PA&FirstTT	3PA&SecondTT	3PA&UE

PA:PeriodicalAssessment;**TT:**TermTest;**UE:**UniversityExaminations.

6 C - Calculation Method for Internal assessment Marks

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERMASS ESSMENT	
	A 3	B	C	D	E	F	G	H
	1(15 Marks)	2(15 Marks)	3(15 Marks)	Average(A+B+C/ 3)	Converted to 30 Marks(D/15 *30)	Term Test(Marks converted to 30)	SubTotal _/60 Marks	Term Assessment(... ./30)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. **Conduct Theory (100 Marks) (MCQ (20*1 Marks), SAQ (8*5), LAQ (4*10)) and Practical (100 Marks) Then convert to 30 marks.							

6 D - Evaluation Methods for Periodical Assessment

S. No	Evaluation Methods
1	Activities Indicated in Table 3-Column G 3 as per Indicated I, II or III term in column I 3

Evaluation Methods in MSE

1. Practical / Clinical Performance
2. Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3. Open Book Test (Problem Based)
4. Summary Writing (Research Papers/ Samhitas)
5. Class Presentations; Work Book Maintenance
6. Problem Based Assignment
7. Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8. Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9. Small Project etc.

6 E Question Paper Pattern

II PROFESSIONAL BAMS EXAMINATIONS AyUG-RN PAPER-1

Time: 3 Hours Maximum Marks: 100 INSTRUCTIONS:

All questions compulsory

		Number of Questions	Marks per question	Total Marks
Q1	MULTIPLE CHOICE QUESTIONS (MCQ)	20	1	20
Q2	SHORT ANSWER QUESTIONS (SAQ)	8	5	40
Q3	LONG ANSWER QUESTIONS (LAQ)	4	10	40
				100

Similar for Paper II (I

6 F Distribution of theory examination

Paper1FundamentalPrinciplesofVikritiVigyan						
Sr. No	A List of Topics	B Term	C Marks	MCQ (1 Mark)	SAQ (5 Marks)	LAQ (10 Marks)
1	1.Roganidana– Pathophysiologyandclinicaldiagnosis	1	43	No	Yes	No
2	2.Pareeksha	1		Yes	Yes	Yes
3	3.MethodsofRogipareeksha	1		No	Yes	Yes
4	4.Sapekshanidana-Vyavacchedakanidana	1		No	Yes	Yes
5	5.Upashaya/Anupashaya	1		Yes	Yes	No
6	6.DoshaVikriti	1		Yes	Yes	Yes
7	7.DoshagatiandRogamarga	1		Yes	Yes	Yes
8	8.Srotodushti	1		Yes	Yes	Yes
9	9.ConceptofAma	1		Yes	Yes	Yes
10	10.AssessmentofAma	1		Yes	Yes	No
11	11.Sthanasamshraya–Poorvaroop	1	49	No	Yes	Yes
12	12.Dushyadushti	1		Yes	Yes	Yes
13	13.Samprapti	1		No	Yes	Yes
14	14.Rupa	1		Yes	Yes	Yes
15	15.Vyadhinamakarana	1		Yes	Yes	No
16	16.Vyadhi	1		Yes	Yes	Yes

17	17.Ashtanindita(Endocrinedisorders)	1		Yes	Yes	No
18	18.Janapadodhwamsavikara(Pandemicdisorders)	1		Yes	Yes	No
19	19.NidanarthakaraVyadhi,Vyadhisankara	1		Yes	Yes	No
20	20.Vyadhikshamatva	1		Yes	Yes	Yes
21	21.RogibalaPareeksha	1		Yes	Yes	No
22	22.DhatuPaka	1		Yes	Yes	Yes
23	23.InfectionandNutritionaldisorders	1	8	Yes	Yes	No
24	24.Upadrava	2		Yes	Yes	No
25	25.Arishta	2		Yes	No	No
26	26.Vyadhibalapareeksha	2		Yes	Yes	No
27	27.Sadhyasadhyatva–Prognosis	2		Yes	Yes	No
28	28.DigitalhealthandArtificialintelligencein thecontextofRoganidana	2		Yes	No	No
Total Marks			100			

Paper2VyadhiVigyan,contemporaryunderstandingandupdates						
Sr. No	A List of Topics	B Term	C Marks	MCQ (1 Mark)	SAQ (5 Marks)	LAQ (10 Marks)
29	1.Agnimandya– Ajeerna,Anaha,Adhmana,Atopa	2	43	Yes	Yes	Yes
30	2.Chhardi	2		Yes	Yes	No

31	3.Amlapitta	2	25	Yes	Yes	No
32	4.Shoola	2		Yes	Yes	Yes
33	5.Atisara,andPravahika	2		Yes	Yes	Yes
34	6.Grahani	2		No	Yes	Yes
35	7.Visuchika,Alasaka,Vilambika	2		Yes	Yes	No
36	8.CommonGITdiseases	2		Yes	Yes	No
37	9.Mutrakrichhra	2		Yes	Yes	No
38	10.Mutraghata	2		Yes	Yes	No
39	11.CommonUrinarydiseases	2		Yes	Yes	No
40	12.Hikka	2		Yes	Yes	No
41	13.Shwasa	2		Yes	Yes	Yes
42	14.Kasa	2		Yes	Yes	Yes
43	15.Rajayakshma&Shosha	2		Yes	Yes	No
44	16.Commonlungdisorders	2		Yes	Yes	No
45	17.Jwara	2		Yes	Yes	Yes
46	18.Masurika–Romantika	2		Yes	No	No
47	19.Fever	2		Yes	Yes	No
48	20.Pandu	2		No	Yes	Yes
49	21.Raktapitta	2		Yes	Yes	Yes

50	22.Hematopoieticdiseases	2
51	23.Hridroga	2
52	24.Shotha	2
53	25.Cardiovasculardisorders	2
54	26.Kamala	2
55	27.UdaraRoga	2
56	28.Hepatobiliarydiseases	2
57	29.Kushtha- MahaKushtha&KshudraKushtha(Accordi ngtoCharaka)	3
58	30.Sheetapitta	3
59	31.Shwitra	3
60	32.Visarpa	3
61	33.Skindiseases	3
62	34.Galaganda	3
63	35.Thyroiddisorders	3
64	36.Sthoulya–Karshya	3
65	37.Obesity	3
66	38.Prameha	3
67	39.DiabetesMellitusandPancreatitis	3

Yes	Yes	No
Yes	Yes	No
No	Yes	Yes
Yes	Yes	No
No	Yes	Yes
No	Yes	Yes
Yes	Yes	No
No	Yes	Yes
No	Yes	Yes
No	Yes	Yes
Yes	Yes	No
Yes	No	No
Yes	Yes	No
No	Yes	Yes
Yes	Yes	No
No	Yes	Yes
Yes	Yes	No

32

68	40.Vatavyadhi	3
69	41.Snayugataavata	3
70	42.Commonneurologicandspinedisorders	3
71	43.SandhigataavataandAsthimajjagataavata	3
72	44.Diseasesofbone,joints,andmuscles	3
73	45.Amavata	3
74	46.Vatarakta	3
75	47.Immunological&Metabolicdisorders	3
76	48.Klaibya&Vandhyatva	3
77	49.SexualdysfunctionandInfertility	3
78	50.Unmada&Apasmara	3
79	51.Vishada	3
80	52.Murchha,andSanyasa	3
81	53.CommonPsychiatricdiseases	3
82	54.PhirangaandUpadamsha	3
83	55.Syphilis&Gonorrhoea	3
84	56.Krimiroga	3
85	57.Clinicalpresentationofcommonparasiticdisorders	3

No	Yes	Yes
No	Yes	Yes
Yes	Yes	No
No	Yes	Yes
Yes	Yes	No
No	Yes	Yes
No	Yes	Yes
Yes	Yes	No
Yes	No	No
Yes	No	No
Yes	No	No
Yes	No	No
Yes	No	No
Yes	No	No
Yes	Yes	No

86	58.Khalitya&Palitya	3		Yes	No	No	
87	59.Shleepada	3		Yes	No	No	
88	60.Tuberculosis	3					
Total Marks			100				

Paper No:1		
Question No	Type of Question	Question Paper Format
Q1	Multiple choice Questions 20 Questions 1 mark each All compulsory Must know part- 15 MCQ Desirable to know- 3 MCQ Nice to know part- 2 MCQ	1. 2. Pareeksha 2. 5. Upashaya/Anupashaya 3. 7. Doshagati and Rogamarga 4. 6. Dosha Vikriti 5. 8. Srotodushti 6. 9. Concept of Ama 7. 12. Dushyadushti 8. 15. Vyadhinamakara 9. 16. Vyadhi 10. 17. Ashtanindita (Endocrine disorders) 11. 18. Janapadodhwamsavikara (Pandemic disorders) 12. 19. Nidanarthakara Vyadhi, Vyadhisankara 13. 20. Vyadhikshamatva 14. 21. Rogibala Pareeksha 15. 22. Dhatu Paka 16. 23. Infection and Nutritional disorders 17. 27. Sadhyasadyatva – Prognosis/24. Upadrava 18. 25. Arishta 19. 26. Vyadhibalapareeksha 20. 28. Digital health and Artificial intelligence in the context of Roganidana
Q2	Short answer Questions Eight Questions 5 Marks Each All compulsory Must know- 7 SAQ Desirable to know- 1 SAQ No question on Nice to know	1. 1. Roganidana – Pathophysiology and clinical diagnosis/2. Pareeksha 2. 11. Sthanasamshraya – Poorvaroopa/8. Srotodushti/12. Dushyadushti/7. Doshagati and Rogamarga/6. Dosha Vikriti 3. 13. Samprapti/16. Vyadhi/19. Nidanarthakara Vyadhi, Vyadhisankara/17. Ashtanindita (Endocrine disorders)/14. Rupa 4. 20. Vyadhikshamatva/21. Rogibala Pareeksha/18. Janapadodhwamsavikara (Pandemic disorders)/19. Nidanarthakara Vyadhi, Vyadhisankara/22. Dhatu Paka 5. 26. Vyadhibalapareeksha/27. Sadhyasadyatva – Prognosis/24. Upadrava 6. 23. Infection and Nutritional disorders 7. 10. Assessment of Ama/9. Concept of Ama 8. 5. Upashaya/Anupashaya

Q3	Long answer Questions For Questions 10 marks each All compulsory All questions on must know .No Questions on Nicetoknow and Desirable to know	1. 4. Sapekshanidana-Vyavacchedakanidana/3. Methods of Rogi pareeksha/12. Dushyadush ti/6. Dosha Vikriti/2. Pareeksha 2. 11. Sthanasamshraya–Poorvaroop/14. Rupa 3. 9. Concept of Ama/22. Dhatu Paka/8. Srotodushti/7. Doshagati and Rogamarga 4. 20. Vyadhikshamatva/22. Dhatu Paka
Paper No:2		
Question No	Type of Question	Question Paper Format
Q1	Multiple choice Questions 20 Questions 1 mark each All compulsory Must know part- 15 MCQ Desirable to know- 3 MCQ Nicetoknow part- 2 MCQ	1. 1. Agnimandya–Ajeerna, Anaha, Adhmana, Atopa/2. Chhardi 2. 3. Amlapitta/4. Shoola/7. Visuchika, Alasaka, Vilambika 3. 5. Atisara, and Pravahika/8. Common GIT diseases 4. 13. Shwasa/15. Rajayakshma & Shosha/12. Hikka/14. Kasa 5. 16. Common lung disorders 6. 11. Common Urinary diseases 7. 17. Jwara/19. Fever/18. Masurika–Romantika 8. 25. Cardiovascular disorders/22. Hematopoietic diseases 9. 28. Hepatobiliary diseases 10. 33. Skin diseases 11. 35. Thyroid disorders/34. Galaganda 12. 37. Obesity 13. 39. Diabetes Mellitus and Pancreatitis 14. 42. Common neurological and spine disorders 15. 44. Diseases of bone, joints, and muscles/47. Immunological & Metabolic disorders 16. 48. Klaibya & Vandhyatva/49. Sexual dysfunction and Infertility 17. 51. Vishada/50. Unmada & Apsmara 18. 57. Clinical presentation of common parasitic disorders/52. Murchha, and Sanyasa 19. 54. Phiranga and Upadamsha/55. Syphilis & Gonorrhoea 20. 57. Clinical presentation of common parasitic disorders/59. Shleepada/56. Krimiroga/60. Tuberculosis

Q2	Short answer Questions Eight Questions 5 Marks Each All compulsory Must know - 7 SAQ Desirable to know - 1 SAQ No question on Nicet oknow	5. Atisara, and Pravahika/1. Agnimandya – Ajeerna, Anaha, Adhmana, Atopa/2. Chhardi /8. Common GIT diseases/6. Grahani/3. Amlapitta/4. Shoola/7. Visuchika, Alasaka, Vilambika 11. Common Urinary diseases/9. Mutrakrichhra/10. Mutraghata 25. Cardiovascular disorders/23. Hridroga/20. Pandu/17. Jwara/26. Kamala/28. Hepatobiliary diseases/19. Fever/21. Raktapitta/22. Hematopoietic diseases/24. Shotha 32. Visarpa/31. Shwitra/27. Udara Roga/29. Kushtha - Maha Kushtha & Kshudra Kushtha (According to Charaka)/33. Skin diseases/26. Kamala/28. Hepatobiliary diseases/30. Sheetapitta 40. Vatavyadhi/44. Diseases of bone, joints, and muscles/43. Sandhigatavata and Asthimajjagatavata/46. Vatarakta/42. Common neurological and spine disorders/45. Amavata/41. Snayugatavata/47. Immunological & Metabolic disorders 57. Clinical presentation of common parasitic disorders/60. Tuberculosis 13. Shwasa/15. Rajayakshma & Shosha/12. Hikka/16. Common lung disorders/14. Kasa 39. Diabetes Mellitus and Pancreatitis/37. Obesity/38. Prameha
Q3	Long answer Questions Four Questions 10 marks each All compulsory All questions on must know. No questions on Nicet oknow and Desirable to know	13. Shwasa/5. Atisara, and Pravahika/1. Agnimandya – Ajeerna, Anaha, Adhmana, Atopa/6. Grahani/4. Shoola/14. Kasa 20. Pandu / 17. Jwara / 38. Prameha / 21. Raktapitta / 36. Sthoulya – Karshya / 24. Shotha 32. Visarpa/31. Shwitra/27. Udara Roga/29. Kushtha - Maha Kushtha & Kshudra Kushtha (According to Charaka)/26. Kamala/30. Sheetapitta 40. Vatavyadhi / 43. Sandhigatavata and Asthimajjagatavata/46. Vatarakta/41. Snayugatavata

6 H Distribution of Practical Exam

S.No	Heads	Marks
1	Spotting/Identification:(10QuestionsX3Marks=30Marks):(Note:Minimum of one spotting should be kept mandatory from all the different the ads mentioned below) X-Ray/ECG/Clinical sign picture/Slide/Diagnostic report/Causative factors X-Ray(Assessment format): On a given X-Ray film (Any of the below): • Comment on inspiration and rotation (chest), position, penetration or exposure, and artifacts in a given X-Ray film • Find out the abnormal findings or sign that indicates a specific condition (By assessing size, shape, density, and location of structures)– Airway/Bones and soft tissue/Cardiac/Diaphragm/Effusion/Gastric bubble/Hila and mediastinum) ECG(Assessment format): On a given ElectroCardioGram (Any of the below): • Determine and comment on rhythm and rate (Paper and pencil method/Caliper method/10-times method/1500 method) • P wave interpretation (Location/Amplitude/Duration/Configuration/Deflection) • PR interval interpretation (Location and duration) • QRS complex interpretation (Location/Amplitude/Duration/Configuration/Deflection) • ST segment interpretation (Location and deflection) • T wave interpretation (Location/Amplitude/Configuration/Deflection) Clinical sign/image or picture(Assessment format): On a given image of a patient with sign (Any of the below): • Identify the sign • Possible aetiologies behind the case • Possible investigations for further confirmation of a case • Differential diagnosis • Diagnose the condition or disease associated with the sign Slide(Assessment format): Identify and mention the provisional diagnosis of (Any of the below): • Haematology (Peripheral blood smear) • Histopathology (Lung and trachea/Blood, Spleen and lymph/Heart and vessels/Glands/Liver) • Stool microscopy (Ova, Cyst, Pus cells)	30

	• Urinemicroscopy(Epithelialcells,RBCs,Leukocytes,Casts,Crystals) • Microbiology(Bacterialidentification–Shape,Gram+ve/Gram–ve) • Parasitology(Slide/Specimen) Diagnosticreport(Assessmentformat): Interpretthereportandmentiontheprovisionaldiagnosis(Anyofthebelow) : • Hemogram • LiverFunctionTest(LFT) • RenalFunctionTest(RFT) • Diabeticprofile • Thyroidprofile • Lipidprofile Causativefactors/Hetu(Assessmentformat): Mentionthediseaseordiseaseshatatareassociatedwiththecauseorhetu(Show nasanobject/model/specimen/picture)withbriefjustification(Anyofthebel ow): • Anyspecificdiet • Anyspecificregimen • Anyspecificfactormentionedforcausingadisease	
2	LongCase:Historytaking,Examination,Investigation(Ordern dinterpretation),DifferentialDiagnosis,ProvisionalDiagnosis(1 Case X40Marks=40Marks) a. Historytaking(Includingcommunicationskills)-10Marks Historytakingshouldcoverthefollowingpoints: • AturaVivara(Basicpatientdetails) • PradhanaVedanawithKalaprakarsha(Chiefcomplaintswithduration) • Vartamanavyadhivrutant(Historyofpresentillness) • PoorvavyadhiVrittanta(Pastillness) • Kulavrutanta(Familyhistory) • ChikitsaVrutanta(Treatmenthistory) • VayaktikaVrutanta(Personalhistory)– Ahara,Vihara,Vyasana,Vyayamashakti,Malapravritti,Mutrapravritt i,Rajapravritti,Koshtha,Natureofworkanddurationofwork,Emotiona lmakeup,andSocialRelation. b. Examination&Orderandinterpretationofinvestigations– 20Marks Theexaminationshouldincludethefollowingpoints: • GeneralexaminationincludingAshtasthanapareeksha • Systemicexamination– PratyakshaandAnumanaPariksha/PanchajnanendriyatahaPareek sha(Affectedsystem/systems),SrotopareekshaandManapareeksh a	40

	Investigation should include the following points:• Ordered investigation ntopatient - Any further comment on the previously ordered investigations and any further suggestions - Interpretation of ordered investigation to the relevant case c. Differential Diagnosis, Provisional Diagnosis, and Final diagnosis. – 10 Marks Differential diagnosis and diagnosis (Vyavachedakanidana and vyadhivinishaya) should include the following: - Group of suspicious diseases based on your knowledge on Ayurveda and contemporary science against your observation on patient - Justification for inclusion and exclusion of diseases based on pratyatmalakshana - Arriving at a final diagnosis based on the clinical acumen - Drafting the sampraptighataka (Involvement of dosha, dushya, indriya, manas, agni, koshta, srotas, srotodushti prakara, udbhavasthana, sancharas thanavyaktasthana, rogamarga, upadrava, arishta, sadhyasadyata)	
3	Demonstration: Clinical examination on the simulator or a patient or Simulated patient (SP) (1 Demonstration X 30 Marks = 30 Marks): The student will be given a specific case or a scenario (other than the case given for long case taking) and asked to perform the examination of a particular system as a whole or a part of the examinations such as inspection or palpation or percussion or auscultation or any specific tests or group of tests or elicit any particular sign for any of the following system (Only steps of examination to be written with observation and interpretation after demonstration): - Respiratory system examination - Cardiovascular System examination - Oral cavity and per abdominal examination - Nervous system examination - Locomotor system examination - Integumentary system examination	30
4	Viva mark distribution and basic instructions Conceptual and theoretical questions: MK:	70

Pareeksha, Dosha Vkruti, Dhatu and Srotovaigunya, Ama, Nidana Panchaka, Kriyakala, Vyadhi, Vyadhikshamatwa, Dhatu Paka etc. Annava, Pureesha vaha, Pranava, Mutravaha, Rasava, Raktava, Medova, Vata vyadhi, Snayugata, Sandhigata vikara etc. **(20 Marks)**

DK:

Rogi and Roga, Balapareeksha, Doshagata and Rogamarga, Nidanarthakararoga, Vyadhinamakara, Sadyasadyata, Upadrava etc. Common GIT diseases, Common Urinary diseases, Common lung disorders, Fever, Hematopoietic diseases, Cardiovascular disorders, Hepatobiliary disorders, Skin diseases, Thyroid disorders, Obesity, Metabolic diseases, Common neurological and spine disorders, Diseases of bone, joints, and muscles, Immunological & Metabolic disorders, Common parasitic disorders, Tuberculosis etc. **(10 Marks)**

Link to existing literature and critical thinking:

MK:



Pareeksha, Dosha Vkruti, Dhatu and Srotovaigunya, Ama, Nidana Panchaka, Kriyakala, Vyadhi, Vyadhikshamatwa, Dhatu Paka etc. Annava, Pureesha vaha, Pranava, Mutravaha, Rasava, Raktava, Medova, Vata vyadhi, Snayugata, Sandhigata vikara etc. **(20 Marks)**

DK:

Rogi and Roga, Balapareeksha, Doshagata and Rogamarga, Nidanarthakararoga, Vyadhinamakara, Sadyasadyata, Upadrava etc. **(10 Marks)**

Viva on activity book:

Questions to be asked as per the heads provided in the activity book **(10 Marks)**

Basic instructions:

Number of questions: There must be a total minimum of 10 questions and a maximum of 15 questions from both examiners.

1. The questions asked during a viva should be relevant, thought-provoking, and designed to assess the candidate's understanding, knowledge, and critical thinking skills.
2. Breadth and depth: The questions should cover a wider range of topics related to both the papers as well as activity and practical with equal importance, ensuring that they have a comprehensive understanding, critical thinking, and analysis.
3. Open-ended: Questions should be open-ended rather than requiring simple yes/no answers. This allows the candidate to demonstrate their understanding and ability to provide detailed explanations and justifications.

	4. Conceptual and theoretical: Some questions should focus on the candidate's understanding of key concepts, theories, and methodologies within their syllabus. This helps evaluate their grasp of foundational knowledge and their ability to apply it. 5. Critical thinking: The questions should encourage the candidate to think critically, analyze the subject, and findings, and identify limitations or alternative perspectives. 6. Link to existing literature: Some questions can explore the candidate's knowledge and understanding of relevant literature in contemporary science. 7. Follow-up questions: It can be effective to ask follow-up questions to probe deeper into the candidate's responses. This helps assess their ability to defend, respond to challenges, and think on their feet. 8. Avoid leading questions: It is important to avoid leading questions that provide the candidate with clues or guide them towards a specific answer. The goal is to assess their independent thinking and understanding. 9. Balance: The questions should strike a balance between being challenging and fair. It should push the candidate's limits without being excessively difficult or intimidating. 10. No questions will be asked from Nicetoknow category. However, 70% of the questions are to be asked from Must Know category and 30% from the Desirable to Know category by the examiner.	
5	Internal assessments	30
Total Marks		200

References Books/ Resources

S.No	Book	Resources
1	1.MadhavaNidana	SrikantaMurthyKR.MadhavaNidanam(Rogaviniscaya)of Madhavakara.Varanasi:ChaukhambhaOrientalia;2013
2	2.CharakaSamhita	Agnivesh,Charaka,Dridhbala.Reprint.Varanasi:ChowkhambhaSanskritSeriesOffice;2009.CharakaSamhita
3	3.SusrutaSamhita	AcharyaYT,editor.SushrutaSamhitaofSushruta.Reprinted .Varanasi:ChaukhambhaOrientalia;2017
4	4.AshtangaHrudaya	SadashivaHS,editor.1sted.Varanasi:ChaukhambhaSanskritSansthan;2011.AstangaHrudayaofVagbhata
5	5.AshtangaSangraha	Vagbhata.AshtangaSangraha.EditedbyShivprasadSharma.ChowkhambhaSanskritseriesoffice,Varanasi
6	6.Rogavigyanevumvikrutivigyan	YashwantGovindJoshi
7	7.Roganidanevumvikrutivigyan	Prof.AjayKumarSharma;ChaukhambhaBharatiAcademy
8	8.TextbookofAyurvediyavikrti-vijnana&RogaVijnana	Dr.ParameswarappaS.Byadgi;Chaukhambhapublications, NewDelhi
9	9.TextbookofPathologywithPathologyQuickReviewandMCQs	2018;JaypeeBrothersMedicalPublishers;HarshMohan
10	10.Aguidetopathology	JaypeeBrothersMedicalPublishers;Eighthedition(2005);K Chaudhary
11	11.Robbins&CotranPathologicBasisofDisease	10thEdition-May11,2020;Kumar,Abbas,Aster;Elsevierpublishers
12	12.Davidson'sPrinciplesandPracticeofMedicine	24 th Edition2022byIanPenman(Editor),StuartH.Ralston(Editor),MarkStrachan(Editor),RichardHobson(Editor);Elsevierpublishers
13	13.Atextbookofpathology	N.CDey&T.KDey;NCBAPublisher2009
14	14.BoydsTextbookofPathology	10thEditionbyJRBhardwaj,PrabalDeb(Author),WoltersKluwerIndia(Publisher)
15	15.Kundu'sBedsideClinicsinMedicine	2020;KSPUdyogPublisher;ArupKumarKundu
16	16.P.J.Mehta'sPracticalMedicine	21stEdition–2021;TheNationalBookDepot;NiharPMehta,SPMehta,SR Joshi
17	17.Macleod'sClinicalExamination	13 th Edition,2013byJ.AlastairInnes,AnnaR.Dover,KarenFairhurst
18	18.ClinicalMethodsInMedicine:ClinicalSkillsandPractices	2015;JaypeeBrothersMedicalPublishers;S.N.Chugh,EshanGupta

19	19. Chamberlain's Symptoms and Signs in Clinical Medicine	2010; CRC Press; Andrew R. Houghton & David Gray
20	20. Hutchison's Clinical Methods: An Integrated Approach to Clinical Practice	2012; Elsevier publishers Michael Glynn, William M. Drake
21	21. Bates' Guide to Physical Examination and History Taking	Lippincott Williams & Wilkins; 2016 by M. D. Bickley, Lyn S. (Author), M. D. Szilagy, Peter G. (Author), M. D. Hoffman, Richard M. (Editor)
22	22. French's Index of Differential Diagnosis A-Z 1	2016; CRC Press; by Mark T. Kinirons (Editor)
23	23. Savills System of Clinical Medicine	14 th Edition 2005; CBS Publishers; by EC Warner (Author)
24	24. Todd-Sanford-Davidson's Clinical Diagnosis and Management by Laboratory Methods	2016; Saunders publishers; by Campbell James Todd (Author)
25	25. Clinical Methods in Ayurveda	2013; Chaukhamba Orientalia; by Prof. K. R. Srikantha Murthy (Author)
26	26. Clinical Diagnosis in Ayurveda (A Practical book of Ayurvedic Diagnosis in the Light of Modern Medical Science)	2015; Chaukhamba Sanskrit Pratishthan; by M. Srinivasulu (Author)
27	27. Medical Laboratory Technology	2009; Jaypee Brothers Medical Publishers; by Ramnik Sood (Author)
28	28. Textbook of Medical Laboratory Technology	Revised Reprint 2021; B. Godkar, Darshan P. Godkar; Bhalanipublishinghouse
29	29. Practical biochemistry for medical, dental and allied courses	3 rd Edition; by Bd Toora GRajagopal (Author)
30	30. Essential of clinical pathology	2010; First edition; Jaypee Brothers Medical Publishers; by Shrish MKawthalkar (Author)
31	31. Textbook of human parasitology protozoology and helminthology	2020; CBS Publishers by Sood R. (Author)
32	32. Clinical Pathology & Clinical Bacteriology (For Medical Students and Practitioners)	Jaypee Brothers Medical Publishers; 9 th Edition; 2000 by Sachdev (Author)
33	33. Practical Pathology	Arya Publications; by K. Uma Chaturvedi (Author), Tejinder Singh (Author)
34	34. Textbook on clinical biochemistry and hematology	Naveen Chandra, Anmol Publisher; First edition, 2015

35	35. Medical Laboratory Technology	Third Edition, 2019; NCBA publishers by CRMaiti
36	36. Diagnosis and Treatment of Common Skin Diseases	2016; Jaypee Brothers Medical Publishers; by Virendra N Sehgal (Author)
37	37. Ananthanarayan and Paniker's Textbook of Microbiology	Eleventh Edition; 2020; Universities Press (India) Pvt. Ltd; by R Ananthanarayan and CK Jayaram Paniker (Author), Reba Kanungo (Editor)
38	38. Learning Radiology: Recognizing the Basics	2015; Saunders publishers; by William Herring MD FACR (Author)
39	39. Radiology in Medical Practice	2015; Elsevier India; by ABMA Abdullah (Author)
40	40. Clark's Positioning in Radiography	13 th Edition; 2015; CRC Press; by A. Stewart Whitley (Author), Gail Jefferson (Author), Ken Holmes (Author), Charles Sloane (Author), Craig Anderson (Author), Graham Hoadley (Author)
41	41. Textbook of Radiology for Residents and Technicians	2018; CBS Publishers; by Bhargava S.K (Author)
42	42. Essentials of ECG	2017; Avichal Publishing Company; by Vipin Gupta (Author)
43	43. Nidanachikitsa hastamalaka	2016; Baidyanath Ayurved publication; by Vaidya Ranjit Rai Desai
44	44. Rasavaisheshikam	Kottakal Ayurveda Series: 120; 3 rd Edition; 2014; by K. Raghavan Tirumulpad
45	45. Taber's Cyclopedic Medical Dictionary	23 rd Edition; 2017; F.A. Davis Company; by Venes (Author)
46	46. Doshakaranatwa Mimamsa	Chowkhamba Bharati Academy; 2013; by Acharya P. V. Sharma
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71	71.PubMedCentral	https://www.ncbi.nlm.nih.gov/pmc/
72	72.Radiopaedia	https://radiopaedia.org/

Abbreviations

Assessment

S.No	Short form	Discription
1	T-EMI	Theoryextendedmatchingitem
2	T-EW	TheoryEssaywriting
3	T-MEQs	TheoryMEQs
4	T-CRQs	TheoryCRQs
5	T-CS	Theorycasestudy
6	T-OBT	Theoryopenbooktest
7	P-VIVA	PracticalViva
8	P-REC	PracticalRecitation
9	P-EXAM	Practicalexam
10	PRN	Presentation
11	P-PRF	PracticalPerformance
12	P-SUR	PracticalSurvey
13	P-EN	Practicalenact
14	P-RP	PracticalRoleplay
15	P-MOD	PracticalModel
16	P-POS	PracticalPoster
17	P-CASE	PracticalCasetaking
18	P-ID	Practicalidentification
19	P-PS	PracticalProblemsolving
20	QZ	Quiz
21	PUZ	Puzzles
22	CL-PR	ClassPresentation,
23	DEB	Debate
24	WP	Wordpuzzle
25	O-QZ	Onlinequiz

26	O-GAME	Onlinegame-basedassessment
27	M-MOD	MakingofModel
28	M-CHT	MakingofCharts
29	M-POS	MakingofPosters
30	C-INT	Conductinginterview
31	INT	Interactions
32	CR-RED	Criticalreadingpapers
33	CR-W	CreativityWriting
34	C-VC	Clinicalvideocases,
35	SP	Simulatedpatients
36	PM	Patientmanagementproblems
37	CHK	Checklists
38	OSCE	OSCE
39	OSPE	OSPE,
40	Mini-CEX	Mini-CEX
41	DOPS	DOPS
42	CWS	CWS
43	RS	Ratingscales
44	RK	Recordkeeping
45	COM	Compilations
46	Portfolios	Portfolios
47	Logbook	Logbook
48	TR	Trainersreport
49	SA	Self-assessment
50	PA	Peerassessment
51	360D	360-degreevaluation
52	TT-Theory	Theory
53	PP-Practical	Practical
54	VV-Viva	Viva

Domain

S.No	Short form	Discription
1	CK	Cognitive/Knowledge
2	CC	Cognitive/Comprehension
3	CAP	Cognitive/Application
4	CAN	Cognitive/Analysis
5	CS	Cognitive/Synthesis
6	CE	Cognitive/Evaluation
7	PSY-SET	Psychomotor/Set
8	PSY-GUD	Psychomotor/Guided response
9	PSY-MEC	Psychomotor/Mechanism
10	PSY-ADT	Psychomotor Adaptation
11	PSY-ORG	Psychomotor/Origination
12	AFT-REC	Affective/ Receiving
13	AFT-RES	Affective/Responding
14	AFT-VAL	Affective/Valuing
15	AFT-SET	Affective/Organization
16	AFT-CHR	Affective/ characterization

T L method

S.No	Short form	Discription
1	L	Lecture
2	L&PPT	Lecture with Power point presentation
3	L&GD	Lecture & Group Discussion
4	L_VC	Lecture with Video clips
5	DIS	Discussions
6	BS	Brainstorming
7	IBL	Inquiry-Based Learning
8	PBL	PBL
9	CBL	CBL
10	PrBL	Project-Based Learning
11	TBL	TBL
12	TPW	Team project work
13	FC	Flipped classroom
14	BL	Blended Learning
15	EDU	Edutainment
16	ML	Mobile learning
17	ECE	ECE
18	SIM	Simulation
19	RP	Role plays
20	SDL	Self-directed learning
21	PSM	Problem solving method
22	KL	Kinesthetic Learning
23	W	Workshops
24	GBL	Game-Based Learning
25	D-M	Demo on Model

26	LS	Library Session
27	PL	Peer learning
28	RLE	Real life experience
29	REC	Recitation
30	SY	Symposium
31	TUT	Tutorial
32	PER	Presentations
33	PT	Practical
34	XRy	X ray identification
35	CD	Case diagnosis
36	LRI	Lab report interpretation
37	DA	Drug analysis
38	D	Demonstration
39	D_BED	Demonstration bedside
40	D_L	Demonstration Lab
41	DG	Demonstration Garden
42	FV	Field visit
43	PRA	Practical

Agad Tantra evam Vidhi Vaidyaka

Table 2 : Contents of Course

Paper1					
Sr. No	A2 List of Topics	B2 Term	C2 Marks	D2 Lecture hours	E2 Non-Lecture hours

1	ConceptsofAgadaTantra(ClinicalToxicology) 1.1 AgadaTantraandClinicalToxicology. 1.2 ScopeofAgadaTantra. 1.3 Definitionofvishaandpoison,synonyms,vishaguna, differencebetweenvisha,madyaandojaguna,vishagati,c lassificationofvishaandpoison,sthavaraandjangamavis haadhishtana. 1.4 Differencebetweenpoison,venomandtoxin. 1.5 Routesofadministrationofpoison. 1.6 Modeofactionofvisha(vishagunanusarakarma)andp oison(Introductiontotoxicokinetics) 1.7 Factorsmodifyingtheactionofpoison. 1.8 Vishavardhakabhavaandvishasankata 1.9 Vishavega,vegantaraandsthavaravishaveganusar alakshanaandchikitsa. 1.10 Vishapeetaandvishamuktalakshana.	1	13	8	1
2	VishaChikitsa(ManagementofPoisoning) 2.1. Diagnosisofpoisoninginliving&dead 2.2. Chaturvimshatiupakrama. 2.3. Generalprinciplesofmanagementofpoisoning. 2.4. Dutiesofmedicalofficerincaseofsuspectedp oisoning.	1		5	4
3	VishaktaaaharaparikshaandViruddhaahara 3.1. Sourcesofexposureofvishawithcontemporary relevance. 3.2. Vishaktaaaharapariksha. 3.3. Adulterationandtestsforitsdetection. 3.4. Techniquesusedinthedetectionofpoisons. 3.5. Viruddha-aharawithcontemporaryrelevance. 3.6. Foodpoisoningandamavisha.	1		3	2
4	GaravishaandDooshivisha 4.1. Garavisha 4.2. Dooshivisha 4.3. Contemporaryaspectsofgaravishaanddooshivisha. 4.4. Roleofgaravishaanddooshivishainthemanifestation ofdiseases 4.5. Researchupdatesingaravishaanddooshivisha	1	12	7	2
5	VishaUpadravaanddiseasescausedduetoexposuretoVi sha/poisons	1		4	2

	♦ 5.1 Vishaupadrava ♦ 5.2 Drug-induced toxicity ♦ 5.3 Occupational hazards. ♦ 5.4 Allergic manifestations ♦ 5.5 Endocrine disrupters				
6	Environmental Toxicology ♦ 6.1 Vishaktavayu, jala and bhumi (air, water and land pollution) ♦ 6.2 Effect of biological, chemical and nuclear warfare. ♦ 6.3 Ecotoxicology & biomagnification. ♦ 6.4 Toxic vigilance.	2	11	2	5
7	Dermatological manifestations of visha/poisons. 7.1. Contact dermatitis and its management. 7.2. Signs and symptoms and management of abhyangavisha, lepavisha, vastravisha, padukavisha, abharanavisha etc. with contemporary relevance. 7.3. Signs and symptoms and management of dermatological manifestations due to cosmetics, chemicals, occupational and other allergens. 7.4. Dermatological manifestation due to dooshivisha and dgaravisha. 7.5. Dermatological manifestation due to bites and stings.	2		6	2
8	Therapeutic utility of Agadayoga ♦ 8.1 Dooshivishariagada ♦ 8.2 Bilwadiagada ♦ 8.3 Dashangaagada ♦ 8.4 Murvadiagada ♦ 8.5 Panchashirishaagada ♦ 8.6 Vishaghnamahakashaya (Charaka Samhita) ♦ 8.7 Ekasaragana (Sushruta Samhita)	2		1	0
9	Sthavaravisha – Poisons of Plant origin 9.1. Cardiac Poisons - Vatsanabha, Karaveera, Digitalis, Tobacco and Cerbera odolam.	2	17	4	2

	9.2. Neurotoxic Poisons- Kupeelu, Ahiphena, Dhatura, Bhanga. 9.3. Irritant Poisons- Jayapala, Gunja, Bhallataka, Arka, Snuhi, Langali.				
10	Sthavara Visha – Poisons of Metallic origin 10.1. Arsenic. 10.2. Mercury. 10.3. Lead. 10.4. Copper	2		4	2
11	Jangama Visha 11.1. Sarpavisha 11.2. Lootavisha 11.3. Vrischikavisha 11.4. Mushikavisha and its contemporary relevance. 11.5. Alarkavisha and its contemporary relevance. 11.6. Keetavisha 11.7. Vector borne diseases.	2		10	6
12	Kritrimavisha 12.1. Inorganic Acids – Sulphuric acid, Hydrochloric acid, Nitric acid. 12.2. Organic Acids – Oxalic acid, Carbolic acid, Formic acid. 12.3. Alkalies – Potassium hydroxide and Sodium hydroxide. 12.4. Asphyxiants – Carbon monoxide, Carbon dioxide. 12.5. Non-metallic poisons – Phosphorous, cyanide 12.6. Hydrocarbons – Kerosene. 12.7. Agrochemical Poisoning – Organo- phosphorus compounds, Carbamates, Organo- chlorine compounds, Aluminium phosphide. 12.8. Household poisons.	3	12	2	0
13	Substances of abuse 13.1. Madya and madatyaya, Alcoholism. 13.2. Addiction – Alcohol, Bhang, Opioids, Tobacco and Digital addiction 13.3. Drugs of abuse – Lysergic acid diethylamide (LSD) and 3,4- Methylenedioxymethamphetamine (MDMA).	3		4	3

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	13.4. Narcotic Drugs and Psychotropic Substances (NDPS) Act.				
14	Agada Tantra perspectives on cancer 14.1. Toxic carcinogens. 14.2. Toxicities due to chemo and radiotherapy and its Ayurvedic approach. 14.3. Agada and vishad ravya prayoga in the prevention and management of cancer along with its research updates.	3		2	4
15	Forensic medicine (Vyavahara Ayurveda) and Medical jurisprudence (Vidhivaidyaka): 15.1 Forensic Medicine and Medical Jurisprudence. 15.2 Introduction to Indian Penal Code, Indian Evidence Act and Criminal Procedure Code.	1	10	1	0
16	Vaidyasadvritta: Duties and Responsibilities of medical practitioner 16.1 Vaidyasadvritta, medical ethics and code of conduct, Charaka oath and Hippocratic oath. 16.2 NCISM- constitution, objectives and functions. 16.3 Duties, rights and privileges of a registered medical practitioner. 16.4 Consent, professional secrecy and privilege of communication. 16.5 Professional negligence, profession of malpractice and unethical practices. 16.6 Defenses in medical negligence suits. 16.7 Medical records. 16.8 Consumer Protection Act.	1		6	4
17	Legal Procedures 17.1. Courts and their powers 17.2. Inquest, evidence and witnesses 17.3. Court procedures: summons, oath, recording of evidence and conduct money. 17.4. Conduct of a medical professional in the court of law.	1		4	4
18	Personal identity	1		2	2

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	18.1. Identification data 18.2. Age 18.3. Race, religion, sex. 18.4. Moles, tattoos, scars, occupational marks & hairs. 18.5. Handwriting, dactylography, DNA typing and superimposition				
19	Thanatology 19.1. Death 19.2. Signs of death. 19.3. Medicolegal autopsy and exhumation. 19.4. The Transplantation of Human Organs and Tissues Act (THOTA).	2	12	6	2
20	Asphyxial deaths 20.1. Hanging. 20.2. Strangulation and suffocation 20.3. Drowning.	2		4	2
21	Injury 21.1. Basics of injury 21.2. Mechanical injury 21.3. Firearm injury 21.4. Thermal injury 21.5. Dowry death	2		5	3
22	Pregnancy, delivery and abortion ♦ 22.1 Medico-legal aspects of pregnancy, delivery, infanticide and battered baby syndrome. 22.2 Abortion, Medical Termination of Pregnancy (MTP) Act and Pre-Conception and Pre-Natal Diagnostic Techniques (PCPNDT) Act. ♦ 22.3 Medico-legal aspects of artificial insemination and surrogacy.	3	6	2	3
23	Sexual offences 23.1. Rape 23.2. Medico-legal aspects of sexual offences 23.3. Protection of Children from Sexual Offences (POCSO) Act	3		2	1
24	Forensic psychiatry. 24.1. Common symptoms associated with psychiatric disorders 24.2. Lucid interval	3	7	2	2

	24.3. Civil and criminal responsibilities of a mentally ill person 24.4. Mental Health Act (MHA)			
25	Forensic science laboratory 25.1. Hierarchy and major divisions of forensic lab services. 25.2. Newer techniques and recent advances - polygraphy, narcoanalysis, DNA profiling.	3	1	0
26	Laws, Acts, Rules and Regulations 26.1 Clinical Establishments Act 26.2 State AYUSH Registration board rules and regulations. 26.3 Medicare Service Persons and Medicare Service Institutions (Prevention of violence and damage or loss to property) Act, 2008. 26.4 Drugs and Cosmetics Act and Rules - Schedules related to poison. 26.5 The Occupational Safety, Health and Working Conditions Code, 2020 26.6 Employees State Insurance Act, 1948. 26.7 Rights of Person with Disability Act, 2016.	3	3	2
Total Marks			100	100 hr 60 hr

Table 3: Learning objectives (Theory) of Course

Paper1									
A3 Course outcome	B3 Learning Objective (At the end of the session, the student should be able to)	C3 Domain/sub	D3 Must to know / desirable to know / Niceto know	E3 Level Does/ Show show/ Know show/ Know	F3 T-L method	G3 Assessment (Refer ----- 'abbreviations')	H3 Formative/summative	I3 Term	J3 Integration
Topic 1 Concepts of Agada Tantra (Clinical Toxicology) (Lecture :8 hours, Non lecture: 1 hours)									
CO1	Define Agada Tantra and Toxicology. Describe the scope of Agada Tantra in the present era.	CK	MK	K	L&P PT	T-EMI, T-EW	F&S	I	
CO1	Define visha and poison. Enlist its synonyms.	CK	MK	K	L&P PT	T-EMI	F&S	I	
CO1	Differentiate between poison, venom and toxin.	CK	MK	K	L, L & P T	P-VIVA	F&S	I	
CO1	Describe classification of visha & poison	CK	MK	K	L&P PT	T-EMI, P-VIVA	F&S	I	
CO1	Describe thavara and jangama visha adhithana.	CK	MK	K	L&P PT	T-EW	F&S	I	
CO1	Describe the routes of administration of poison.	CC	MK	K	L&P PT	T-EW, P-VIVA	F&S	I	

CO1	Enlistvishagunaanddifferentiatebetweenvisha,madyaandoja	CK	MK	K	L&PP	T-EMI	F&S	I	

	guna.				T				
CO1	Describe the mode of action of visha (vishagunanusarkarma) & poison (Introduction to toxicokinetics).	CC	MK	KH	L, L & PPT, L & GD	T-EMI, T-EW	F&S	I	
CO1	Describe the factors modifying the action of poison.	CC	MK	KH	L & PPT	T-EW	F&S	I	
CO1	Describe vishavardhakabhava and vishasankata.	CC	MK	KH	L & PPT	T-EMI, T-EW, P-VIVA	F&S	I	
CO1	Describe vishavega & vegantara	CK	DK	K	L & PPT	T-EMI, P-VIVA	F&S	I	
CO1	Describe the varavishaveganusaralakshana and chikitsa	CK	MK	K	L, L & PPT	T-EMI	F&S	I	
CO1	Describe vishapeeta and vishamuktalakshana.	CK	MK	K	L & GD	T-EMI, P-VIVA	F&S	I	
Topic 2 Visha Chikitsa (Management of Poisoning) (Lecture :5 hours, Non lecture: 4 hours)									
CO2	Describe the diagnosis of poisoning in living and dead.	CAP	MK	KH	L & PPT	T-EMI, T-EW, P-VIVA	F&S	I	
CO2	Enumerate and discuss chaturvimshati upakrama	CC	MK	KH	L & PPT	T-EW, P-VIVA	F&S	I	
CO2	Describe the general principles of management of poisoning.	CAP	MK	KH	L & PPT	T-EMI, P-VIVA	F&S	I	V-KC

CO2	Describe the duties of medical officer in case of suspected poisoning.	CK	MK	K	L&P PT	T- EMI, P- VIVA	F&S	I	
Topic 3 Vishakta aahara pariksha and Viruddha ahara (Lecture :3 hours, Non lecture: 2 hours)									

CO1,CO2,C O3	Explainthevariousourcesofexposureofvishalikeanna,paana, vastra,abhyanga,lepa,paduka,abharana,etc.	CK	DK	K	L&P PT,L &GD	T-EW,CL- PR,M- CHT	F&S	I	
CO1,CO2,C O3	DescribetheAyurvedicmethodsofdetectionoffoodandbeverag escontaminatedwithvisha.	CC	MK	KH	L&P PT,L _VC, SDL, D	T-EW,P- VIVA,P- EXAM	F&S	I	
CO1,CO2,C O3	Defineadulteration,describethemethodsofdetectionofadulter antsanditsrelevanceinAgadaTantra.	CAP	DK	KH	L_VC ,SDL ,PT	T-EW,P- VIVA,P- EXAM,OSP E ,RK	F&S	I	
CO1,CO2,C O3	Describethemodernanalyticaltechniquesforthedetectionofpoi son(incontaminatedarticles)likechromatography,spectroscop y,etc.	CC	NK	KH	L&P PT,L &GD ,L _VC	T-EW,P- VIVA,CL- PR	F&S	I	
CO1,CO2,C O3	Defineviruddhaaharaandexplainitstypes.	CC	MK	KH	L&P PT,L &GD ,BS	T-EW,P- VIVA,INT	F&S	I	
CO1,CO2,C O3	Discussandillustratethecontemporaryimportanceofviruddhaa harawithexamples	CAN	MK	KH	L&G D,BS ,SDL	T-EW,QZ ,CL-PR	F&S	I	
CO1,CO2,C O3	Discusstheapplicationofconceptsofviruddhaaharainthepreve ntionandmanagementofdiseases.	CAP	MK	KH	L&G D,BS ,SDL	T-EW,P- VIVA,CR- RED	F&S	I	
CO1,CO2,C O3	Describefoodpoisoning,istypesandmanagement.	CC	MK	KH	L&P PT,L	T-EW,P- VIVA,CR-	F&S	I	

					&	RED			

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					GD,L _VC ,CD				
CO1,CO2,C O3	Discuss the clinical application of principles of Agada Tantra in the management of food poisoning.	CAP	MK	KH	L&G D,BS ,CBL ,SDL	T-EW,P- VIVA,CL- PR	F&S	I	
CO1,CO2,C O3	Describe the concept of amavisha.	CC	MK	KH	L&P PT,L &GD ,L _VC	T- EW,P- VIVA	F&S	I	
Topic 4 Garavisha and Dooshivisha (Lecture : 7 hours, Non lecture: 2 hours)									
CO1,CO3	Describe the various definitions of garavisha.	CK	MK	K	L&P PT	T-EW	F&S	I	
CO1,CO3	Describe the clinical presentation of garavisha.	CC	MK	KH	L&P PT	T-EW	F&S	I	
CO1,CO3	Understand and explain the management principles of garavisha.	CC	MK	KH	L&P PT	T-EW	F&S	I	
CO1,CO3	Describe the various definitions of dooshivisha.	CC	MK	KH	L&P PT	T-EW	F&S	I	
CO3	Describe the clinical presentation of dooshivisha.	CC	MK	KH	L&P PT	T-EW	F&S	I	
CO3,CO4	Describe the principles of management of dooshivisha.	CC	MK	KH	L&P PT,D IS	T-EW,P-REC	F&S	I	
CO3,CO4	Discuss the application of the concept of dooshivisha and	CAP	MK	KH	L&G	P-VIVA	F&S	I	

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	garavishaanditsmanagementindaytodayclinicalpractice.				D				
CO3,CO5	Discuss therecent research updates in the concept of garavishaan ddooshivisha.	CAN	MK	KH	L&GD, PER	P-VIVA,CL-PR	F&S	I	
CO1,CO3,C O4	Describe garavishaan ddooshivisha as an etiology for the disease of present era.	CAP	MK	KH	DIS, BS, F C	P-VIVA,CL-PR	F&S	I	
Topic 5 Visha Upadrava and diseases caused due to exposure to Visha/poisons (Lecture :4 hours, Non lecture: 2 hours)									
CO1,CO3	Describe visha upadrava.	CK	MK	K	L&P PT	T-EW,P-VIVA	F&S	I	
CO2,CO3,C O4	Define drug induced toxicity and discuss its Agada Tantra perspective.	CC	MK	KH	L&G D,L_ VC, BS	T-EW,T-OBT,P-VIVA	F&S	I	
CO2,CO3,C O4	Discuss the application of principles of Agada Tantra in drug induced hepatotoxicity, nephrotoxicity and neurotoxicity.	CAP	MK	KH	L&P PT,C BL	T-EW,P-VIVA,CL-PR	F&S	I	
CO2,CO3,C O4	Discuss various occupational poisons and their health hazards.	CC	MK	KH	L&P PT,P BL,S DL	T-OBT,P-VIVA,M-CHT,M-POS	F&S	I	H-SW
CO2,CO3,C O4	Discuss the application of principles of Agada Tantra in occupational diseases caused due to pollution, paints, pesticides, fertilizer and other chemicals.	CC	DK	KH	L&P PT,M L	QZ,CL-PR,M-CHT,M-POS	F&S	I	
CO2,CO3,C O4	Define and discuss allergy, types of allergens and its understanding as per Ayurveda.	CC	MK	KH	L&P PT,DIS ,BS,C	INT,CR-RED	F&S	I	

					BL				
CO2,CO3,C O4	Discuss the application of the treatment principles of Agada Tantra in various allergic manifestations.	CAP	MK	KH	L&G D,BS ,CBL	T-EMI,P- VIVA,PRN,C L-PR	F&S	I	
CO2,CO3,C O4	Define and enlist endocrine disruptors and discuss its Agada Tantra perspectives.	CAP	DK	KH	L&P PT,D IS ,BS, CBL	CL-PR,M- CHT,COM	F&S	I	
Topic 6 Environmental Toxicology (Lecture :2 hours, Non lecture: 5 hours)									
CO4,CO5	Define environmental toxicology.	CK	DK	K	L&P PT,D IS	PRN,M-POS	F&S	II	
CO3,CO4,C O5	Describe the lakshanas and chikitsa of vishaktabhoomi, vishaktajala, and vishaktavayu.	CK	DK	K	L&P PT	P-VIVA,P- MOD	F&S	II	
CO4,CO5	Define pollution. Describe various pollutants and explain water pollution, soil pollution, air pollution, along with their health hazards.	CK	DK	KH	L&P PT,B S	T-EW,T- CS,PRN,P- MOD	F&S	II	
CO4,CO5	Describe the health effects of biological, chemical and nuclear warfare.	CK	NK	K	L&G D,S DL	PRN,QZ	F&S	II	
CO4,CO5	Define ecotoxicology & biomagnification.	CK	NK	KH	L&G D,S DL	PRN,CL-PR	F&S	II	
CO4,CO5	Explain the concept of toxicovigilance	CC	DK	K	FC, SDL	P-POS,CL- PR,CR- RED	F	II	

Topic 7Dermatological manifestations of visha/poisons.(Lecture :6 hours, Non lecture: 2 hours)

CO3,CO4	Describe the clinical presentations and diagnosis of padukavisha, abharanavisha, vastravisha, lepavisha, abhyangavisha, etc.	CAP	MK	KH	L&P PT,D IS ,CBL ,CD	T-EW,P- CASE,CL- PR	F&S	II	
CO3,CO4	Discuss the management of padukavisha, abharanavisha, vastravisha, lepavisha, abhyangavisha, etc.	CAN	MK	KH	L&P PT,D IS ,CBL ,PER	T-EW,P- EXAM,P- CASE,CL- PR	F&S	II	
CO3,CO4	Describe contact dermatitis and its types.	CK	MK	K	L&P PT	T- EW,P- VIVA	F&S	II	
CO3,CO4	Discuss the application of treatment principles of Agada Tantra in the contact dermatitis.	CAP	MK	KH	L&P PT,C BL	P-VIVA,P- CASE,CL- PR	F&S	II	
CO3,CO4	Discuss the dermatological conditions caused due to garavisha and dooshivisha.	CAP	MK	KH	L&P PT,D IS ,CBL ,CD	T-EW,P- VIVA,P- CASE	F&S	II	
CO3,CO4	Discuss the application of principles of treatment of garavisha and dooshivisha in the management of dermatological manifestations.	CAP	MK	KH	L&P PT,D IS ,CBL	P-VIVA,P- CASE,CL- PR	F&S	II	

CO3,CO4	Discuss the diagnosis and application of the treatment principles of Keetavisha in dermatological manifestations due to bites & stings.	CAP	MK	KH	L&P PT,D IS ,CBL ,SDL	T-EW,P- VIVA,P- CASE,CL-PR	F&S	II	

Topic 8 Therapeutic utility of Agada yoga (Lecture :1 hours, Non lecture: 0 hours)

CO1,CO2,CO3,CO4	Enlist ingredients and discuss the therapeutic utility of	CAP	MK	KH	L&P	T-EW,P-	F&S	II	

3,CO4	Doohivishari Agada, Bilwadi Agada, Dashanga Agada, Murvadi Agada and Panchashrisha Agada.				T,DIS ,CBL	CASE			
CO1,CO2,CO3,CO4	Enlist and discuss the ingredients of vishaghnamahakashaya (Charaka Samhita) and ekasaragana (Sushruta Samhita).	CAP	MK	KH	L&P PT,B S,CB L,FC	T- EW,P- VIVA	F&S	II	

Topic 9 Sthavara visha – Poisons of Plant origin (Lecture :4 hours, Non lecture: 2 hours)

CO2,CO4,CO6	Describe the active principles, mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and medico-legal aspects of vatsanabha.	CAP	MK	KH	L&P PT	T-EW,P- VIVA,P- ID	F&S	II	
CO2,CO4	Mention therapeutic dose and enlist two important formulations of vatsanabha.	CK	NK	K	L	T-EMI,P- VIVA,P- EXAM	F&S	II	
CO2,CO4,CO6	Describe the active principles, mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and medico-legal aspects of karaveera.	CAP	MK	K	L&P PT	T-EW,P- VIVA,P- ID	F&S	II	
CO2,CO4	Mention therapeutic dose and enlist two important formulations of karaveera.	CK	NK	K	L	T-EW,T-ME Qs,P-VIVA,P- EXAM	F&S	II	

CO2,CO6	Describe mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and medicolegal aspects of digitalis.	CAP	NK	K	L&P PT	T-EW, P-VIVA	F&S	II	
CO2,CO6	Describe mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and medicolegal aspects of tobacco.	CK	MK	K	L&P PT	T-EW, P-ID	F&S	II	
CO2,CO6	Describe mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and	CK	DK	K	L&P PT	T-EW	F&S	II	

	medicolegalaspectsof Cerberaodollam.								
CO2,CO4,C O6	Describetheactiveprinciples,modeofaction,fataldose,fatalper iod,signsandsymptoms,management,post- mortemappearanceandmedicolegalaspectsofKupeelu.	CK	MK	KH	L&P PT	T-EW,P- VIVA,P- ID	F&S	II	
CO2,CO6	Mentiontherapeuticdoseandenlisttwoimportantformulations ofkupeelu.	CK	NK	K	L	T-EMI	F&S	II	
CO2,CO4,C O6	Describetheactiveprinciples,modeofaction,fataldose,fatalper iod,signsandsymptoms,management,post- mortemappearanceandmedicolegalaspectsofahiphen.	CK	MK	KH	L&P PT	T-EW,P- VIVA,P- ID	F&S	II	
CO2,CO6	Mentiontherapeuticdoseandenlisttwoimportantformulations ofahiphen.	CK	NK	K	L	T-EMI	F&S	II	
CO2,CO4,C O6	Describetheactiveprinciples,modeofaction,fataldose,fatalper iod,signsandsymptoms,management,post- mortemappearanceandmedicolegalaspectsofdhatura.	CK	MK	KH	L&P PT	T-EW,P- VIVA,P- ID	F&S	II	
CO2,CO6	Mentiontherapeuticdoseandenlisttwoimportantformulations ofdhatura.	CK	NK	K	L	T-EMI	F&S	II	
CO2,CO4,C O6	Describetheactiveprinciples,modeofaction,fataldose,fatalper iod,signsandsymptoms,management,post- mortemappearanceandmedicolegalaspectsofBhanga.	CK	MK	K	L&P PT	T- EW,P- VIVA,P- EXAM,P-ID	F&S	II	
CO2,CO6	Mentiontherapeuticdoseandenlisttwoimportantformulations ofbhanga.	CK	NK	K	L	T-EMI	F&S	II	
CO2,CO4,C O6	Describetheactiveprinciples,modeofaction,fataldose,fatalper iod,signsandsymptoms,management,post- mortemappearanceandmedicolegalaspectsofjayapala.	CK	MK	K	L&P PT	T-EW,P- VIVA,P- ID	F&S	II	
CO4	Mentiontherapeuticdoseandenlisttwoimportantformulations	CK	NK	K	L	T-EMI,P-	F&S	II	

	ofjayapala.					EXAM			
CO2,CO4,C O6	Describe the active principles, mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and medico legal aspects of gunja.	CAP	DK	KH	L&P PT	T-EW,P- VIVA,P- ID	F&S	II	
CO4	Mention therapeutic dose and enlist two important formulations of gunja.	CK	NK	KH	L	T-EW,P- VIVA,P- EXAM	F&S	II	
CO2,CO4,C O6	Describe the active principles, mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and medico legal aspects of bhallataka.	CAP	MK	KH	L&P PT	T-EW,P- VIVA,P- ID	F&S	II	
CO4	Mention therapeutic dose and enlist two important formulations of bhallataka.	CK	NK	K	L	T-EMI,P- VIVA,P- EXAM	F&S	II	
CO2	Describe the active principles, mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and medico legal aspects of farka and snuhi.	CK	DK	K	L&P PT	T- EW,P- VIVA	F&S	II	
CO2,CO4,C O6	Describe the active principles, mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and medico legal aspects of langali.	CK	NK	K	L&P PT	T-EW,P- VIVA,P- ID	F&S	II	
Topic 10 Sthavara Visha – Poisons of Metallic origin (Lecture :4 hours, Non lecture: 2 hours)									
CO2	Describe the mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance, medico legal aspects of acute poisoning of 1. Arsenic 2. Mercury 3. Lead 4. Copper	CK	MK	K	L&P PT,P BL	T- EMI,T- MEQs,P- VIVA	F&S	II	

	Write its therapeutic dose and list any four important formulations.								
CO1, CO2	Discuss the Ayurvedic concepts for the diagnosis and management of chronic heavy metal toxicity.	CC	DK	K	L&P PT, L & GD	T-EMI, T-MEQs, P-VIVA	F&S	II	
CO2, CO3, CO4	Discuss the toxicological implications of improperly prepared medicines with special reference to those containing metals, minerals and poisonous substances.	CAP	NK	KH	L&P PT, C BL, F C	P-VIVA	F&S	II	
Topic 11 Jangama Visha (Lecture : 10 hours, Non lecture: 6 hours)									
CO2, CO5	Describe sarpabhedha and enumerate the identification features of darvikara, mandali and rajimantha sarpa.	CAP	MK	KH	L&P PT, B S, CBL	T-EW, P-VIVA, P-EXAM	F&S	II	
CO2, CO5	Classify snakes and describe the features of venomous and non-venomous snakes and identify their bites.	CAN	MK	K	L&P PT	T-EW, P-VIVA, P-EXAM	F&S	II	
CO2, CO5	Describe the fatal dose, fatal period, signs and symptoms of common cobra, king cobra, Russell's viper, saw scaled viper, pit viper and common krait.	CAN	MK	KH	L&P PT, DIS , BS, CBL	T-EW, T-CS, P-VIVA, P-EXAM	F&S	II	
	Describe the samanyalakshana and samanyachikitsa of darvikara, mandali and rajimantha sarpadamsha.	CK	MK	K	L	T-EMI	F&S	II	

CO2,CO5	Describe the management of snake bites according to recent WHO snake bite management guidelines.	CAN	MK	KH	L&P PT,C BL,P ER,C D	T-EW,P- VIVA,P- EXAM	F&S	II	
CO2,CO5	Describe the classification, diagnosis, samanya lakshana and chikitsa of lootavisha with its contemporary aspects.	CAN	MK	KH	L&P PT,C B	T- EW,P- VIVA	F&S	II	

					L				
CO2,CO5	Describe the classification, diagnosis, samanya lakshana and chikitsa of vrischika damsha (Scorpion Sting) along with its contemporary aspects.	CK	MK	K	L&P PT,C BL,C D	T-EW,P- VIVA,P- EXAM	F&S	II	
CO2,CO4	Describe leptospirosis and rat bite fever with special reference to moushikavisha.	CK	NK	K	L,C BL	T-EW	F&S	II	
CO2,CO5	Describe rabies and its management with special reference to oalarkavisha.	CK	DK	KH	L&G D,C BL	T- EW,P- VIVA	F&S	II	
CO2,CO5	Describe the classification of keeta, samanya lakshana and chikitsa of keeta damsha with special importance to regional prevalence.	CAN	DK	KH	L&P PT,C BL	T-EW	F&S	II	
CO2,CO5	Discuss the application of vishachikitsa in vector borne diseases like chikungunya, dengue and malaria.	CAP	DK	KH	L&P PT,D IS	P-VIVA	F&S	II	
Topic 12 Kritima visha (Lecture :2 hours, Non lecture: 0 hours)									

CO2	Describe the action of poison, fatal dose, fatal period, signs and symptoms, management, postmortem appearance and medico legal aspects of Inorganic acids- Sulphuric acid, Hydrochloric acid and Nitric Acid Organic acids- Oxalic acids, Carbolic acids and Formic acid Alkalies	CK	MK	KH	L&P PT, P ER	T-EW, P- VIVA, P- EXAM	F&S	III	
CO2	Describe the action of poison, fatal dose, fatal period, signs and	CK	DK	KH	L&P PT, P E	T- EW, P- VIVA	F&S	III	
	symptoms, management, postmortem appearance and medico legal aspects of Asphyxiants- CO and CO2 Non Metal- Phosphorous Hydrocarbon-Kerosene				R				

CO2	Describe the action of poison, fatal dose, fatal period, signs and symptoms, management, postmortem appearance and medicolegal aspects of agrochemical poisons - organophosphorous compounds, carbamates, organochlorine compounds and aluminium phosphide and enlist the household poisons.	CAP	MK	SH	L&P PT, P BL	T-EW, P- VIVA, P- EXAM	F&S	III	
Topic 13 Substances of abuse (Lecture : 4 hours, Non lecture: 3 hours)									
CO1, CO2	Define Mada and describe its stages.	CK	MK	K	L&P PT	T-EMI, T- MEQs, P- VIVA	F&S	III	
CO1, CO2	Describe the types of madatyaya along with its management.	CK	MK	K	L&P PT	T-EMI, T- MEQs, P- VIVA	F&S	III	
CO1, CO2, CO6	Describe mode of action, fatal dose, fatal period, signs and symptoms, management, postmortem appearance and medicolegal importance of acute ethanol poisoning.	CC	MK	KH	L&P PT	T-EMI, T-CS, T- OBT, P- VIVA	F&S	III	
CO1, CO2, CO6	Describe mode of action, fatal dose, fatal period, signs and symptoms, management, postmortem appearance and medicolegal importance of acute methanol poisoning.	CC	MK	K	L&P PT	T-EMI, T- MEQs, P- VIVA	F&S	III	
CO2, CO4	Discuss the application of principles of Ayurveda in the	CC	MK	KH	L&G	T-EW, P-	F&S	III	
	management of chronic alcoholism.				D, BS	VIVA			

CO2,CO4	Discuss the signs & symptoms of alcohol withdrawal with its Ayurvedic approach.	CC	MK	KH	L&G D,BS ,IBL	T- EW,P- VIVA	F&S	III	
CO2,CO4	Discuss the signs & symptoms of withdrawal of bhang (cannabis), ahiphena/opium and its derivatives, tobacco, LSD and MDM A with its Ayurvedic approach.	CC	MK	KH	L&G D,BS ,TUT	T- EW,P- VIVA	F&S	III	
CO2,CO4	Discuss the research updates in Ayurveda in the management of conditions due to substances of abuse.	CC	MK	KH	L& GD	T-EMI,T- MEQs,T- CRQs,P- VIVA	F&S	III	
CO7	Describe the NDPS Act.	CK	DK	K	L&P PT	T-EW	F&S	III	
Topic 14 Agada Tantra perspectives on cancer (Lecture :2 hours, Non lecture: 4 hours)									
CO2,CO4	Discuss the concepts of Agada Tantra in oncology.	CC	MK	KH	L&G D,BS ,PBL	T- EMI,T- MEQs,P- VIVA	F&S	III	
CO1,CO2	Enlist the cancer causing toxic chemicals/substances (toxic carcinogens) and describe the process of mutation in genes and carcinogenesis.	CC	MK	K	L& GD	T-EMI,T- MEQs,T- CRQs,P- VIVA,SA	F&S	III	
CO2,CO4	Describe the chemotherapy induced common toxicities and Ayurvedic approach for its management.	CC	MK	KH	L&P PT,P BL	T-EMI,T- MEQs,T- CRQs,P- VIVA,SA	F&S	III	
CO2,CO4	Describe the radiotherapy induced common toxicity and Ayurvedic approach for its management.	CC	MK	KH	L& GD, PBL ,SD	T-EMI,T- MEQs,T- CRQs,P- VIVA	F&S	III	

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CO2,CO4	Discuss the role of visha and vishaghnadra vya in the management of cancer along with its research updates.	CC	DK	KH	L&GD,BS	T-EMI,T-MEQs,T-CRQs,P-VIVA	F&S	III	
Topic 15 Forensic medicine (Vyavahara Ayurveda) and Medical jurisprudence (Vidhi vaidyaka): (Lecture :1 hours, Non lecture: 0 hours)									
CO1,CO6,C07	Define Forensic Medicine & Medical Jurisprudence. Give an introduction to Indian Penal Code (IPC), Criminal Procedure Code (CrPC) and Indian Evidence Act (IEA).	CC	MK	KH	L&GD	T-EW,P-VIVA,QZ	F&S	I	
Topic 16 Vaidya sadvritta : Duties and Responsibilities of medical practitioner (Lecture :6 hours, Non lecture: 4 hours)									
CO1,CO6,C07	Describe vaidya sadvritta, medical ethics, code of conduct, Charaka oath and Hippocratic oath.	CK	MK	K	L&PPT,L&GD,BS,PER	T-EW,P-VIVA	F&S	I	
CO1,CO6,C07	Describe the constitution, objectives and functions of NCISM.	CK	MK	K	L&PPT,DIS	T-EW,P-VIVA	F&S	I	
CO6,CO7	Describe the duties and rights and privileges of a registered medical practitioner.	CK	MK	K	L&PPT,DIS	T-EW,P-VIVA	F&S	I	
CO1,CO6,C07	Describe consent, professional secrecy and privileged communication.	CC	MK	K	L&PPT,BS	T-EW	F&S	I	
CO1,CO6,C07	Describe professional negligence, professional misconduct and unethical practices.	CC	MK	K	L&GD,CBL,PER	T-EW,P-VIVA	F&S	I	

CO6,CO7	Explain the defenses in medical negligence suits with appropriate case laws.	CAP	MK	K	L&P PT,L &GD ,B	T- EW,P- VIVA	F&S	I	
					S,C BL				
CO6,CO7	Describe the maintenance of medical records and explain its significance.	CC	MK	K	L,FV	T- EW,P- VIVA	F&S	I	
CO7	Describe the Consumer Protection Act.	CK	MK	K	L&P PT	T- EW,P- VIVA	F&S	I	
Topic 17 Legal Procedures (Lecture :4 hours, Non lecture: 4 hours)									
CO1,CO6,C O7	Describe the types of courts along with their powers. Describe Inquest, Evidence, Witness, Summons, Conduct money and procedure of recording of evidence in a court of law. Describe the conduct of a medical professional in the court of law.	CC	MK	KH	L&P PT,D IS ,SDL	T-EW,P- VIVA,CL- PR	F&S	I	
Topic 18 Personal identity (Lecture :2 hours, Non lecture: 2 hours)									
CO1,CO6	Define identification and enlist the identification data. Describe the method of estimation of age based on Teeth, ossification of bones, secondary sexual characteristics and general development.	CC	DK	KH	L&P PT,L _VC, DIS	T- EW,P- VIVA	F&S	I	
CO1,CO6	Describe the medico-legal importance of age, tattoo marks and occupational marks.	CK	DK	K	L&P PT	T-EW	F&S	I	
CO1,CO6	Describe the medico-legal importance of face, religion, sex, moles and hair.	CC	DK	KH	L_VC ,DIS ,ED	P-VIVA	F	I	

					U				
CO1,CO6	Describe the medico-legal importance of handwriting,dactylography, DNA typing and superimposition as an identification data.	CK	NK	K	L,E DU	T-EW	F	I	
Topic 19Thanatology (Lecture :6 hours, Non lecture: 2 hours)									

CO6	Define death and describe the stages and modes of death. Explain the immediate changes following death.	CC	MK	KH	L&P PT,L &GD ,L _VC	T- EW,P- VIVA	F&S	II	
CO6	Enlist and explain the early changes following death. Describe Algor mortis, rigor mortis and livor mortis with regard to their definition, mechanism, modifying factors and medicolegal importance. Enable Ginger <i>Cannot connect to Ginger</i> Check your internet connection or reload the browser Disable in this text field Rephrase Rephrase current sentence Edit in Ginger ×	CC	MK	KH	L&P PT,L _VC, DIS, SIM	T- EW,P- VIVA	F&S	II	
CO6	Enlist the late changes following death and describe the definition, modifying factors and medicolegal importance of putrefaction, mummification and adipocere formation. Enable Ginger <i>Cannot connect to Ginger</i> Check your internet connection or reload the browser Disable in this text field Rephrase Rephrase current sentence Edit in Ginger ×	CC	MK	KH	L&P PT,L _VC, DIS	T- EW,P- VIVA	F&S	II	
CO6	Define Autopsy and describe its types, its objectives, rules and procedure along with exhumation.	CC	MK	KH	L&P PT,L _VC	T- EW,P- VIVA	F&S	II	
CO6	Describe the Transplantation of Human Organs and Tissues Act.	CC	NK	KH	BS, SDL ,PE R	T- EW,P- VIVA	F	II	
Topic 20 Asphyxial deaths (Lecture :4 hours, Non lecture: 2 hours)									
CO6	Define hanging. Describe its classification, causes of death, post-mortem appearances and medico-legal aspects.	CK	MK	KH	L&P PT,D	T-EW,T-ME Qs,T-CS,P-	F&S	II	

					IS				

						VIVA,P-MOD			
CO6	Definestrangulationandsuffocation.Enlisttheirclassification ,post-mortemappearancesandmedico-legalaspects.	CK	MK	K	L&P PT,D -M	T-EW,T-ME Qs,PRN,M-MOD	F&S	II	
CO6	DefineDrowning,explainitsclassification,post-mortemappearancesandmedico-legalaspects.	CK	MK	K	L&P PT,L _VC	T-EW,P-VIVA,PRN, P-CASE	F&S	II	
Topic 21Injury (Lecture :5 hours, Non lecture: 3 hours)									
CO6	DefineandclassifyInjuries.Describethemedico-legalaspectsofinjuries.	CK	MK	K	L&GD	T-EW	F&S	II	
CO6	Describethethecharacteristics,ageandmedico-legalaspectsofmechanicalinjuries.	CK	MK	K	L&P PT	T-EW	F&S	II	
CO6	Describefirearminjuries,itscharacteristicsandmedico-legalaspects.Differentiatebetweenentryandexitwound	CK	DK	K	L&P PT	T-EW	F&S	II	
CO6	Defineandclassifythermalinjury.Describecharecterstics anddegreesofburns,ruleofnine,post-mortemappearances,andmedico-legalaspects.	CK	DK	K	L&GD	T-EW	F&S	II	
CO6	Explainmedico-legalaspectsofdowrydeath.	CK	NK	K	L&GD	T-EW	F&S	II	
Topic 22Pregnancy, delivery and abortion (Lecture :2 hours, Non lecture: 3 hours)									
CO6,CO7	Definepregnancy,delivery,infanticideandbatteredbabysyndr omealongwiththeirmedicolegalaspects.	CK	MK	K	L,L&PPT, L &GD	T-EW,T-CS,P - VIVA,P-EXAM	F&S	III	
CO6,CO7	Defineandclassifyabortion,MTPActandPCPNDTAct.	CK	MK	K	L&P PT,D	T-EW,T-ME Qs,T-CS,P-	F&S	III	

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					M,D	VIVA,PRN			
CO6,CO7	Describe Surrogacy (Regulation) Act 2021 and the Assisted Reproductive Technology (Regulation) Act 2021.	CK	NK	KH	L,L &PP T	P-VIVA,O- QZ	F&S	III	

Topic 23 Sexual offences (Lecture :2 hours, Non lecture: 1 hours)

CO6	Describe classification of sexual offences.	CK	NK	KH	L&P PT	P- VIVA,PRN,Q Z	F&S	III	
CO6	Define rape. Describe the examination of a rape victim and accused and its medico-legal aspects.	CK	MK	KH	L&P PT,C BL	T-EW,P- VIVA,P- EXAM,PRN	F&S	III	
CO6	Define the unnatural sexual offences and sexual perversion with their medico-legal aspects and give introduction to POCSO Act.	CK	NK	K	L&P PT,C BL	P-VIVA,QZ	F&S	III	

Topic 24 Forensic psychiatry. (Lecture :2 hours, Non lecture: 2 hours)

CO6	Describe the symptoms commonly associated with psychiatric disorders & the significance of lucid interval.	CK	DK	K	L&P PT,T UT	T-EMI,T- EW,P- VIVA	F&S	III	
CO6,CO7	Describe the civil and criminal responsibilities of a mentally ill person.	CK	DK	K	L&P PT	T- EW,P- VIVA	F&S	III	
CO6	Describe Mental Health Act	CK	NK	K	SDL ,PE R	T- EW,P- VIVA	F&S	III	

Topic 25 Forensic science laboratory (Lecture :1 hours, Non lecture: 0 hours)									
CO6	25.1. Hierarchy and major divisions of forensic lab services. 25.2. Newer techniques and recent advances - polygraphy, narcoanalysis, DNA profiling.	CK	DK	K	L&P PT,M L	T- OBT,P- VIVA	F&S	III	
Topic 26 Laws, Acts, Rules and Regulations (Lecture :3 hours, Non lecture: 2 hours)									
CO6,CO7	Describe the 1. NCISM Rules and Regulations in force. 2. Clinical Establishments Act. 3. Medicare Service Persons and Medicare Service Institutions (Prevention of violence and damage or loss to property) Act, 2008. 4. The Drug and Cosmetic Act - schedules related to poison. 5. Rules and Regulations related to AYUSH State Registration Boards of concern state.	CK	DK	K	L&P PT,D IS ,SDL	T-EW,P- VIVA,CL- PR	F&S	III	

List of Practicals [Term and Hours]

PRACTICALS(Marks-100)			
S.No	List of Topics	Term	Hours
1	VishaChikitsa	1	6
2	VishaktaAharaPariksha	1	6
3	Dooshivisha,Garavisha,VishaUpadrava	1	20
4	Dermatologicalmanifestationofvisha	2	20
5	Environmentaltoxicology	2	2
6	JangamaVisha	2	10
7	Sthavaravisha	2	6
8	Substanceabuse	3	8
9	LegalProcedures	1	2
10	VaidyaSadvritta	1	2
11	PersonalIdentity	1	4
12	Thanatology	2	6
13	Injury	2	6
14	Sexualoffences	3	2
15	FieldVisits(FieldvisitsshouldbeintegratedalongwiththeeducationaltourconductedbyDravyagunavijnan,RasasatraandSwasthavruthaDepartments)	2	30
16	Topicsrelatedtoregionalpreference	3	10

Table 4: Learning objectives (Practical)

A4 Course outcome	B4 Learning Objective (At the end of the session, the student should be able to)	C4 Domain/sub	D4 Must to know / desirable to know / Nice to know	E4 Level Does/ Show show/ Know show/ Know	F4 T-L method	G4 Assessment (Refer abbreviations)	H4 Formative/ summative	I4 Term	K4 Integration
Topic 1 Visha Chikitsa									
CO2	Demonstrate the procedure of gastric lavage on mannequin.	CAP	MK	SH	D-M, D	P-EXAM, P-PRF, OSPE	F&S	I	
CO2	Demonstrate the procedure of CPR on mannequin.	PSY - ME C	MK	D	D-M, D	P-EXAM, P-PRF, OSPE	F&S	I	
CO2	Observe the different procedures for removal of absorbed poison.	CC	MK	KH	L_VC, D	P-VIVA	F&S	I	
Topic 2 Vishakta Ahara Pariksha									
CO2	Demonstrate adulteration detection test for urea in milk, borax in milk, artificial colour in turmeric, pulses and vegetables as per recent Food Safety and Standards Authority of India (FSSAI) guidelines.	PSY - SET	MK	D	D_L	P-PRF, RK	F&S	I	
CO2	Demonstrate adulteration detection test for argemone oil in mustard oil and adulterants in Honey as per recent FSSAI guidelines.	PSY - SET	MK	D	D_L	P-PRF, RK	F&S	I	
Topic 3 Dooshivisha, Garavisha, Visha Upadrava									

CO3,CO4	Diagnosisandmanagementofdiseasesduetogaravisha,dooshiv ishaandvishaupadrava-druginducedtoxicities.	CAP	MK	SH	L_VC ,CBL ,SIM, CD	SP,OSCE,RK	F&S	I	
CO3,CO4	Diagnosisandmanagementofdiseasesduetogaravisha,dooshiv ishaandvishaupadrava-occupationalhazards.	CAP	MK	KH	L_VC ,PBL ,CBL ,SIM ,CD	OSCE,RK	F&S	II	
CO3,CO4	Diagnosisandmanagementofdiseasesduetogaravisha,dooshiv ishaandvishaupadrava-allergicmanifestations.	CAP	MK	KH	L_VC ,PBL ,CBL ,SIM ,CD	OSCE,RK	F&S	I	
CO3,CO4	Diagnosisandmanagementofdiseasesduetogaravisha,dooshiv ishaandvishaupadrava-autoimmunediseases	CAP	MK	KH	L_VC ,CBL ,CD	OSCE,RK	F&S	I	
CO3,CO4	Diagnosisandmanagementofdiseasesduetogaravisha,dooshiv ishaandvishaupadrava-endocrinedisruptorsinduceddiseases.	CAP	MK	KH	L_VC ,CBL ,CD	OSCE,RK	F&S	I	
Topic 4Dermatological manifestation of visha									
CO3,CO4	DiagnosisandManagementofDermatologicalmanifestationsd uetovishaex:contactpoisoning(padukavisha,abharanavishaet c.)	CAN	MK	SH	L_VC ,CBL ,CD	OSCE,RK	F&S	II	
CO3,CO4	Diagnosisandmanagementofdermatologicalmanifestationsdue tovisha-bitesandstings.	CAP	MK	KH	L_VC ,CBL ,CD	OSCE,RK	F&S	II	

CO3,CO4	DiagnosisandManagementofcontactdermatitisbasedontheprinciplesofAgadaTantra.	CAP	MK	KH	L_VC ,CBL ,CD	OSCE,RK	F&S	II	
Topic 5Environmental toxicology									
CO5	SocialAwarenessprogramrelatedtoenvironmentaltoxicology– Rally,streetplay,skitetc	AFT - VAL	DK	SH	RP	P-VIVA,M- CHT	F	II	
Topic 6Jangama Visha									
CO2,CO4	Demonstrateidentificationofpoisonousandnonpoisonoussnakes.	CAN	MK	KH	L&G D,L_ VC,D - M,FV	P-VIVA,P- EXAM,OSCE	F&S	II	
CO2,CO4	Demonstrationofthediagnosisofpoisonoussnakebitecasesbasedonlocalandsystemicclinicalpresentations.	CAP	MK	KH	L&G D,L_ VC, CBL ,CD	P-VIVA,P- EXAM,RK	F&S	II	
CO2,CO4	Demonstrationofidentificationofvrishchika,lootaandkeetabasedonregionalprevalenceandtheir diagnosisbasedonclinical presentations.	CAP	MK	KH	L&G D,L_ VC, CBL ,CD	P-VIVA,P- EXAM,RK	F&S	II	
Topic 7Sthavara visha									
CO2	DemonstrationofIdentificationofvatsanabha,karaveeraandto baccowiththeirrespective toxicparts.	CAN	MK	KH	D- M,D	P-VIVA,P- EXAM,OSPE ,RK	F&S	II	
CO2	DemonstrationofIdentificationofkupeelu,dhatturaandbhanga	CAN	MK	KH	D	P-VIVA,P-	F&S	II	

	andtheirrespectivetoxicpart.					EXAM,OSPE ,RK			
CO2	DemonstrationofIdentificationofjayapala,gunja,bhallataka,la ngaliwiththeirrespectivetoxicparts.	CAN	MK	KH	D	P-VIVA,P- EXAM,OSPE ,RK	F&S	II	
CO2	Demonstrationofidentificationofarsenic,copper,mercuryandl ead.	CAN	MK	K	D-M	P-VIVA,P- EXAM	F&S	III	
CO2	DemonstrationofIdentificationofnonmetalandmineralcompo unds,acids,alkalis,agrochemicals,hydrocarbonsandhousehol dpoisons.	CK	MK	K	D	P-VIVA,P- EXAM,RK	F&S	III	
Topic 8Substance abuse									
CO2,CO4	Createpublicawarenessonsubstanceabuseanditsilleffects.	AFT - VAL	MK	SH	RP,D	P-POS,QZ,M- CHT	F	III	
Topic 9Legal Procedures									
CO6,CO7	Demonstartiononissuingoffitnesscertificate,sicknesscertifica te,birthanddeathcertificate,andotherrelevantmedicalandmedi colegalcertificates.	CAN	MK	D	PBL, W,P T	P- EXAM,OSP E ,RK	F&S	I	
CO6,CO7	DemonstartionofreportingofLeaveagainstmedicaladvice(LA MA),dischargeagainstmedicaladvice(DAMA)anddoscharge onpatientrequest(DOPR)	CAP	MK	D	SDL	P-VIVA,RK	F	I	
Topic 10Vaidya Sadvritta									
CO6,CO7	Exposuretomedicalrecordsdepartmentforunderstandingstora ge,maintananceanddisposalofMedicalrecords.	CK	DK	K	D,FV	P-VIVA	F&S	I	

CO6	Demonstrate the method of sex determination based on pelvis.	CAP	MK	SH	EDU, SIM, D	P-PRF, OSPE	F&S	I	
Topic 12 Thanatology									
CO6	Observe the procedure of medico-legal autopsy and preparation of autopsy report.	CAP	MK	SH	L_VC, D, FV	RK	S	II	
Topic 13 Injury									
CO6, CO7	Demonstrate the difference between homicidal, suicidal and accidental injuries.	CAP	MK	SH	L&P PT, L_VC, SIM, D-M	P-VIVA, P-EXAM	F&S	II	
CO6, CO7	Demonstration of drafting of an injury report.	CAP	MK	D	D-M, D	P-EXAM, P-PRF	F&S	II	
Topic 14 Sexual offences									
CO5, CO6, CO7	Discuss the essential of Protection of Women from Domestic Violence Act (PWDV Act) 2005 and The Sexual Harassment of Women at Workplace (Prevention, Prohibition & Redressal) Act and Rules (PoSH Act) 2013.	AFT - VAL	DK	D	L&G D, BS, RP	C-INT, INT	F&S	III	
Topic 15 Field Visits (Field visits should be integrated along with the educational tour conducted by Dravyagunavijnan, Rasasatra and Swasthavrutha Departments)									
CO6, CO7	(Visit to Forensic Science Laboratory)- (Mandatory) Appraise the functioning of a forensic science laboratory	CC	MK	KH	FV	P-VIVA, RK	F	III	
CO4, CO5	(Visit to Food testing laboratory) Observe the instrumentation and procedure of food testing	CC	DK	KH	FV	RK, COM	F	I	

CO4,CO5	(VisittoPollutionControlBoard)- (Mandatory)PerceivethefunctioningofPollutionControlBoar d	CC	DK	KH	FV	P-VIVA,RK	F	II	
CO4,CO5	(VisittoDe-addictioncentre)Observethemanagementofde- addictioncases	PSY - GU D	DK	KH	FV	RK	F	III	
CO7	(VisittotheCourt)- (Mandatory)Observetheprocedureofcourtprocedureandconduc tofamedicalpractitionerasanexpertwitness	PSY - GU D	MK	KH	FV	RK	F	I	
CO6	(Visittomortuaryforobservationofautopsy)Observetheproced ureofmedico-legalautopsy	PSY - GU D	MK	KH	FV	P-VIVA,RK	F	II	
CO2	(Visittosnakepark)- (Mandatory)Observelivespecimensofsnake	CC	DK	KH	FV	P-VIVA,RK	F	II	
CO2,CO7	(Visittocasuality)- (Mandatory)Watchtheprocedureofresuscitationandemergenc ymanagement	CK	MK	KH	FV	RK	F	I	
CO4,CO5	(Visittooccupationalhazardscentre)Observethetypesandman agementofcasesofoccupationalhazard	CK	DK	KH	FV	RK	F	II	
CO2	(VisittoASVmanufacturingcentre)Observethestepsandproce duresinvolvedinASVmanufacturing	CK	DK	K	FV	RK	F	II	
CO4,CO5	VisitCancertreatmentcentre.	CK	NK	K	FV	RK	F	III	
CO2,CO4	Visittodepartmentofentomology.	CC	NK	K	FV	RK	F	II	

CO2,CO5	Visittofolklore vaidya using Agadatantra concepts in vishachiki tsa.	CAP	DK	SH	FV	RK	F&S	II	
Topic 16 Topics related to regional preference									
CO2,CO3	Discuss the topics related to regional preference like bites and stings, substance abuse, texts of regional importance, regional	CAP	NK	K	L&GD	P-VIVA, M-POS	F	III	

	vishachikitsapractices, regional medico-legal issues etc.								

Table 4a: List of Practical

S.No	Name of practical	Term	Activity	Practical hrs
1	VishaChikitsa	1	1.1 Gastriclavage 1.2 Cardiopulmonary resuscitation (CPR) 1.3 Videodemonstration or visit to the emergency care unit for procedures used for removal of absorbed poison.	6
2	Vishakta Ahara Pariksha	1	2.1 Adulteration detection Tests 2.1.1 Urea in milk 2.1.2 Boric acid in milk 2.1.3 Artificial color in turmeric. 2.1.4 Artificial color in pulses and Vegetables. 2.1.5 Argemone Oil in Mustard oil 2.1.6 Adulteration in Honey	6
3	Dooshivisha, Garavisha, Visha Upadrava	1	3.1 Case based teaching on diseases due to dooshivisha and garavisha- drug induced toxicity, occupational hazards, allergic manifestations, autoimmune diseases and endocrine disruptors. 3.2 Recording 10 cases based on case based teaching or OPD and IPD exposure.	20
4	Dermatological manifestation of visha	2	4.1 Dermatological manifestations due to visha ex: contact poisoning (padukavisha, abharanavisha etc.) and bites and stings. 4.2 Contact Dermatitis 4.3 Recording 10 cases based on case based teaching or OPD and IPD exposure.	20
5	Environmental toxicology	2	5.1 Social Awareness program – Rally, street play, skit etc.	2
6	Jangama Visha	2	6.1 Identification of Poisonous and non poisonous snakes 6.2 Diagnosis based on bite marks of snakes 6.3 Diagnosis and Management of snake bite cases through audio/video case presentations or OPD/IPD exposure 6.4 Diagnosis and management of vishchika, loota and keetadamshakas through audio/video case presentations or	10

			OPD/IPD exposure.	
7	Sthavaravisha	2	7.1 Identification of various plant poisons, metal and mineral compounds, acids, alkaloids, agrochemicals, hydrocarbons and household poisons.	6
8	Substance abuse	3	8.1 Community Awareness programmes by students like rallies, street play etc. 8.1.1. Observation of international day against drug abuse and illicit trafficking. 8.1.2. World No Tobacco Day.	8
9	Legal Procedures	1	9.1 Hands on training on Preparation of Medical & Medicolegal reports. 9.1.1 Fitness & Sickness certificate. 9.1.2 Birth & Death Certificate and other relevant medical and medicolegal certificates. 9.1.3 Leaving against medical advice (LAMA), Discharge against medical advice (DAMA), Discharge on patient request (DOPR)	2
10	Vaidya Sadvritta	1	10.1 Exposure to the medical records department for understanding the storage, maintenance and disposal of medical records.	2
11	Personal Identity	1	11.1. Sex determination based on pelvis.	4
12	Thanatology	2	12.1 Procedure of autopsy: visit to mortuary for audio-visual demonstrations.	6
13	Injury	2	13.1. Hands on training on assessment of accidental, suicidal, and homicidal injuries. 13.2. Preparation of injury report.	6
14	Sexual offences	3	14.1 Introduction to Protection of Women from Domestic Violence Act (PWDV Act) 2005 and The Sexual Harassment of	2

			Women at Workplace (Prevention, Prohibition & Redressal) Act and Rules (PoSH Act) 2013.	
15	Field Visits (Field visits should be integrated along with the educational tour conducted by Dravya Gunavijna, Rasasatra and Swastha Departments)	2	(It is mandatory to have 5 field visits)	30
16	Topics related to regional preference	3	Exposure to topics related to regional preference like bites and stings, substance abuse, text of regional importance, regional vishachikitsa practices, regional medico-legal issues etc.	10
Total Hr				140

Activity

CO	Topic name	Activity Details	Hours
CO3, CO4	Survey of personal care products.	Students shall be divided into small groups and are asked to collect the information about common personal care products like soaps, shampoos, deodorants, cosmetic etc. Then they should be asked to list the chemicals used in them and discuss about the health hazards associated with their use. Then students can be asked to present their findings in the form of class seminar or Charts or Posters or small videos.	4
CO5	Community teaching by students - awareness among adolescents about Protection of Women from Domestic Violence Act (PWDV Act) 2005 and The Sexual Harassment of Women at Workplace (Prevention, Prohibition	After undergoing orientation/sensitization regarding Protection of Women from Domestic Violence Act (PWDV Act) 2005 and The Sexual Harassment of Women at Workplace (Prevention, Prohibition & Redressal) Act and Rules (PoSH Act) 2013, the students will have to visit nearby schools/colleges in small teams/groups and create awareness among them. This can be done as part of NSS activity or exclusive visits to schools/colleges.	2

	&Redressal)ActandR ules		

	(PoSH Act) 2013.		
CO2, CO4	Observation of international day against drug abuse and illicit trafficking	Community awareness programmes by students like rallies, street play etc.	3
CO2, CO4	No Tobacco Day	Community Awareness programmes by student like rallies, street play, skit, flash mob etc.	3
CO5	Environmental toxicology	Poster presentation competition related to environment, rallies, skit, flash mob on World Environment Day.	2
CO6, CO7	Vaidya Sadavritta	Exposure to Medical records department for maintenance, storage and disposal of medical record, finding out errors in medical case records.	2
CO6	Forensic psychiatry	Seminar/guest lecture on how to deal with adolescent psychiatric issue	2
CO2, CO4	Chronic toxicity of heavy metals.	Group discussion and case based learning by taking example of published case reports.	1
CO2, CO4	World Cancer Day to raise awareness of cancer risk and cancer prevention	Poster Competition/Quiz Competition/Group Discussion	4
CO6, CO7	Legal procedure- Recording of evidence and duties of a physician in the court of Law.	Mock court/role play	4
CO2	Sarpa Visha	1. Identification of poisonous and non poisonous snakes- Group Discussion/Brainstorming- Specimens (Photos) of poisonous and non poisonous snakes with their features shall be given to small group of students and asked to identify the snakes. 2. Clinical diagnosis of snake bites	2

		Group Discussion- Specimens (Photos) showcasing local and system ic signs and symptoms of poisonous (Hemotoxic and Neurotoxic) snake bites shall be given to small group of students and asked to diagnose the case. CBL- Presentation of recorded cases or the Case reports or studies published in reputed journals. Brainstorming/Quiz- The same pictures may be shown with MCQ's and Quiz session can be conducted among the groups of students	
CO2	Vrischikavisha, lutavisha and keetavisha.	Group Discussion- Specimens (Photos) showcasing local and system ic signs and symptoms of Vrischika Visha (Scorpi on Sting), Loota Visha (Spider Bite) and Keetavis ha (Insect bite) and differentiating with snake bites shall be given to small group of students and asked to diagnose the case. CBL- Presentation of recorded cases or the Case reports or studies published in reputed journals. Brainstorming/Quiz- The same pictures may be shown with MCQ's and Quiz session can be conducted among the groups of students.	2

CO3,CO4	Dooshivisha,garavish aandvishaupadrava	GroupDiscussion- Photographs/casereports/simulatedcasesshow casingvariousdruginducedtoxicities,occupati onalhazards,allergicmanifestations,autoimmu nediseasesanddiseasesduetoendocrinedisrupt orsshallbegiventosmallgroupofstudentsandas kedtoassessthe dosha,diagnoseanddiscussthep lanoftreatment.	4

		CBL- Presentation of recorded cases or the Case reports or studies published in reputed journals. Brainstorming/Quiz- The same pictures may be shown with MCQ's and Quiz session can be conducted among the groups of students.	
CO3, CO4	Dermatological manifestation of visha.	Group Discussion- Photographs/case reports/simulated cases show casing various dermatological presentation of poisoning, bites and stings and contact dermatitis shall be given to small group of students and asked to assess the dosha, diagnose and discuss the plan of treatment. CBL- Presentation of recorded cases or the Case reports or studies published in reputed journals. Brainstorming/Quiz- The same pictures may be shown with MCQ's and Quiz session can be conducted among the groups of students.	4
# Hours indicated are included in calculations of Table 3 and 4.			

Table 5- Teaching learning method

Sr No	Teaching learning methods in the course	No of Activities
1	Lecture	18
2	Lecture with Powerpoint presentation	106
3	Lecture & Group Discussion	32
4	Lecture with Video clips	13
5	Discussions	22
6	Brainstorming	22

7	Inquiry-Based Learning	1

8	PBL	6
9	CBL	26
10	Flippedclassroom	4
11	Edutainment	2
12	Mobilelearning	2
13	Simulation	1
14	Self-directedlearning	15
15	DemoonModel	2
16	Tutorial	2
17	Presentations	9
18	Practical	1
19	Casediagnosis	5
20	Demonstration	2
21	Fieldvisit	1

These are overall teaching learning methods listed in Table 3 and 4. Teachers can select the best possible method among the given methods as per objective, available time etc.

Table 6: Assessment Summary: Assessment is subdivided in A to H points

6 A-Number of Papers and Marks Distribution

Subject Code	Papers	Theory	Practical/Clinical Assessment					Grand Total
			Practical	Viva	Portfolio (Set SA)	IA	Sub Total	
AyUG-AT	1	100	100	60	10	30	200	300

6 B - Scheme of Assessment (formative and Summative)

PROFESSIONAL COURSE	DURATION OF PROFESSIONAL COURSE		
	First Term (1-6Months)	Second Term (7-12Months)	Third Term (13-18Months)
Second	3PA&FirstTT	3PA&SecondTT	3PA&UE

PA:Periodical Assessment;**TT:**Term Test;**UE:**University Examinations.

6 C - Calculation Method for Internal assessment Marks

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERMASS ESSMENT	
	A 4	B	C	D	E	F	G	H
	1(15 Marks)	2(15 Marks)	3(15 Marks)	Average(A+B+C/3)	Converted to 30 Marks(D/15*30)	Term Test(Marks converted to 30)	SubTotal_/60 Marks	Term Assessment(.../30)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. **Conduct Theory (100 Marks) (MCQ (20*1 Marks), SAQ (8*5), LAQ (4*10)) and Practical (100 Marks) Then convert to 30 marks.							

6 D - Evaluation Methods for Periodical Assessment

S. No	Evaluation Methods
1	Activities Indicated in Table 3-Column G 3 as per Indicated I, II or III term in column I 3

Evaluation Methods in MSE

1. Practical / Clinical Performance
2. Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3. Open Book Test (Problem Based)
4. Summary Writing (Research Papers/ Samhitas)
5. Class Presentations; Work Book Maintenance
6. Problem Based Assignment
7. Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8. Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9. Small Project etc.

6 E Question Paper Pattern

II PROFESSIONAL BAMS EXAMINATIONS AyUG-AT PAPER-1

Time: 3 Hours Maximum Marks: 100 INSTRUCTIONS:

All questions compulsory

		Number of Questions	Marks per question	Total Marks
Q1	MULTIPLE CHOICE QUESTIONS (MCQ)	20	1	20
Q2	SHORT ANSWER QUESTIONS (SAQ)	8	5	40
Q3	LONG ANSWER QUESTIONS (LAQ)	4	10	40
				100

6 F Distribution of theory examination

Paper1						
Sr. No	A List of Topics	B Term	C Marks	MCQ (1 Mark)	SAQ (5 Marks)	LAQ (10 Marks)
1	ConceptsofAgadaTantra(ClinicalToxicology)	1	13	Yes	Yes	Yes
2	VishaChikitsa(ManagementofPoisoning)	1		Yes	Yes	Yes
3	VishaktaaaharaparikshaandViruddhaahara	1		Yes	Yes	No
4	GaravishaandDooshivisha	1	12	Yes	Yes	Yes
5	VishaUpadravaanddiseasescausedduetoexposuretoVisha/poisons	1		Yes	Yes	No
6	EnvironmentalToxicology	2	11	Yes	Yes	No
7	Dermatologicalmanifestationsofvisha/poisons.	2		Yes	Yes	No
8	TherapeuticutilityofAgadayoga	2		Yes	Yes	No
9	Sthavaravisha–PoisonsofPlantorigin	2	17	Yes	Yes	Yes
10	SthavaraVisha–PoisonsofMetallicorigin	2		Yes	Yes	Yes
11	JangamaVisha	2		Yes	Yes	Yes
12	Kritrimavisha	3	12	Yes	Yes	Yes
13	Substancesofabuse	3		Yes	Yes	Yes
14	AgadaTantraperspectivesoncancer	3		Yes	Yes	No
15	Forensicmedicine(VyavaharaAyurveda)andMedicaljurisprudence(Vidhivaidyaka):	1	10	Yes	No	No

16	Vaidyasadvritta:DutiesandResponsibilities ofmedicalpractitioner	1		Yes	Yes	No
17	LegalProcedures	1		Yes	Yes	No
18	Personalidentity	1		Yes	Yes	Yes
19	Thanatology	2	12	Yes	Yes	Yes
20	Asphyxialdeaths	2		Yes	Yes	Yes
21	Injury	2		Yes	Yes	Yes
22	Pregnancy,deliveryandabortion	3	6	Yes	Yes	No
23	Sexualoffences	3		Yes	Yes	No
24	Forensicpsychiatry.	3	7	Yes	Yes	No
25	Forensicsciencelaboratory	3		Yes	Yes	No
26	Laws,Acts,RulesandRegulations	3		Yes	Yes	No
Total Marks			100			

Paper No:1		
Question No	Type of Question	Question Paper Format
Q1	Multiple choice Questions 20 Questions 1 mark each All compulsory Must know part- 15 MCQ Desirable to know- 3 MCQ Nice to know part- 2 MCQ	1. Concept of Agada Tantra (Clinical Toxicology) 2. Visha Chikitsa (Management of Poisoning) 3. Vishaktaaaharapariksha and Viruddhaahara 4. Garavisha and Dooshivisha 5. Visha Upadrava and diseases caused due to exposure to Visha/poisons 6. Asphyxial deaths 7. Dermatological manifestations of visha/poisons. 8. Therapeutic utility of Agadayoga 9. Kritrimavisha/Sthavara Visha–Poisons of Metallic origin 10. Jangama Visha 11. Substances of abuse 12. Agada Tantra perspectives on cancer 13. Vaidyasadvritta: Duties and Responsibilities of medical practitioner/Forensic medicine (Vyavahara Ayurveda) and Medical jurisprudence (Vidhivaidyaka): 14. Legal Procedures/Injury 15. Pregnancy, delivery and abortion/Thanatology 16. Environmental Toxicology/Personal identity 17. Forensic psychiatry./Forensic science laboratory 18. Laws, Acts, Rules and Regulations 19. Sthavaravisha–Poisons of Plant origin 20. Sexual offences
Q2	Short answer Questions Eight Questions 5 Marks Each All compulsory Must know- 7 SAQ Desirable to know- 1 SAQ No question on Nice to know	1. Vishaktaaaharapariksha and Viruddhaahara /Visha Upadrava and diseases caused due to exposure to Visha/poisons/Garavisha and Dooshivisha 2. Visha Chikitsa (Management of Poisoning)/Therapeutic utility of Agadayoga/Dermatological manifestations of visha/poisons. 3. Kritrimavisha/Sthavaravisha–Poisons of Plant origin/Environmental Toxicology/Sthavara Visha–Poisons of Metallic origin 4. Jangama Visha/Concept of Agada Tantra (Clinical Toxicology)/Vaidyasadvritta: Duties and Responsibilities of medical

		practitioner 5. Environmental Toxicology/Agada Tantra perspectives on cancer/Substances of abuse 6. Asphyxial deaths/Personal identity/Injury 7. Pregnancy, delivery and abortion/Sexual offences/Personal identity 8. Forensic psychiatry./Forensic science laboratory/Laws, Acts, Rules and Regulations
Q3	Long answer Questions For Questions 10 marks each All compulsory All questions on must know No questions on Nicetoknow and Desirable to know	1. Visha Chikitsa (Management of Poisoning)/Concepts of Agada Tantra (Clinical Toxicology) 2. Jangama Visha/Garavisha and Dooshivisha 3. Kritrimavisha/Sthavaravisha – Poisons of Plant origin/Sthavara Visha – Poisons of Metallic origin/Substances of abuse 4. Thanatology/Asphyxial deaths/Personal identity/Injury

6 H Distribution of Practical Exam

S.No	Heads	Marks
1	Spotting(15specimensof4markseach) 1.1.Snake–2specimens 1.1.1 Identification - 1mark 1.1.2 Differentiatingfeaturesofpoisonous/non-poisonoussnake–1mark 1.1.3 Importantclinicalsigns- 1mark 1.1.4 Ayurvedicmanagement- 1mark 1.2.Mineralpoisons/Kritrimavisha(1specimeneach)- 2specimens 1.2.1.Identification - 1mark 1.2.2 Identificationofsymptomclustersmimickingotherdiseasesandtheir differentialdiagnosis- 2marks 1.2.3 MethodofdetoxificationandAntidotes - 1mark 1.3.Toxicplants–2specimens 1.3.1 Identificationwithscientific,familyandsanskritnames 1mark 1.3.2 ModeofuseinVishacases–1mark 1.3.3 detoxificationmethod,ClassofpoisonandActiveprinciplespresentint heplant -1mark 1.3.4 Antidotesusedagainstthespecimen -1mark 1.4.Antitoxicplants– 3specimens 1.4.1 Identificationwithscientific,familyandsankritnames -1mark 1.4.2 Modeofuseinvisha -1mark 1.4.3 Activeprinciples -1mark 1.4.4 Importantformulations-1mark 1.5.Injuries–2specimens 1.5.1. Identifytheinjury -1mark 1.5.2. Identifytheweapon/criminalactcausingsuchinjury-2mark 1.5.3. Medico-legalimportance -1marks 1.6.Newsitem– papercuttingsorothermedico-legalcasescenarios–2specimens 1.6.1 Identifythecrime–1mark	60

	1.6.2. Relevant IPC/CrPC sections associated with the crime – 1 mark 1.6.3. Relevant Act related to the crime – with sub-questions related to its sub-sections, punishment etc. – 2 marks 7. Jangamavisha – other poisonous creatures – 2 specimens 1.7.1. Identification – 1 mark 1.7.2. Adhishtana/samanyalakshana/chikitsa – 2 marks 1.7.3. specific formulations/doses – 1 mark (Sub-questions mentioned against each item is for a purpose of example only. Different questions may be framed on the various aspects of the guidelines provided)	
2	Practical Records	10
3	Medical and Medico-legal Certificate Writing Students will be provided with a case-scenario based on which they are asked to write a medical certificate for a specific purpose. Evaluation guidelines should be based on the essential criteria in the format of a valid medical certificate.	10
4	Short Case Case scenarios with pictures to diagnose a specific case of poisoning and specific questions asked regarding its clinical examination, investigations, treatment, prognosis etc.	10
5	Clinical Application of Agada - Identification of Agada for a case scenario detailed – 2 marks - Select the ingredients of the formulation from a group of drugs and identify using scientific names and answer sub-questions based on its preparation, anupana, dose etc. – 8 marks	10
6	Viva Questions will be asked on the following topics - Agada Tantra (2 questions 5 marks each) – 10 marks - Forensic Science (Vyavaharayurveda) (2 questions 5 marks each) – 10 marks - Jurisprudence (Vidhivaidyaka) (2 questions 5 marks each) – 10 marks - Toxicology (2 questions 5 marks each) – 10 marks - Concepts of Agada Tantra in cancer and substance abuse (one question from each) (2 questions 5 marks each) – 10 marks - Viva on Compilation and Communications skills (2 questions 5 marks each) – 10 marks	60

7	Electives (Set SA)	10
8	IA	30
Total Marks		200

References Books/ Resources

S.No	Book	Author(s)/Resources
1	ConciseForensicMedicine&Toxicology	KS Narayana Reddy, Jaypee Medical Publisher
2	Essentials of Forensic Medicine & Toxicology	KS Narayana Reddy, Jaypee Medical Publisher
3	Principles of Forensic Medicine & Toxicology	Rajesh Bardale, Jaypee Medical Publisher
4	Modern Medical Toxicology	VVPillay, Jaypee Medical Publisher
5	Recent Advances in Forensic Medicine and Toxicology (Volume 1&2)	Gautam Biswas, Jaypee Medical Publisher
6	Textbook on Medicolegal Issues: Related to Various Medical Specialties by Satish Tiwari Mahesh Baldwa Mukul Tiwari Alka Kuthe	Jaypee Medical Publisher
7	Manual on Doctor and Law	RN Goel Narendra, Malhotra Shashi Goel, Jaypee Medical Publisher
8	Jaypee's Video Atlas of Medicolegal Autopsy	Sujith Sreenivas C Prasanna K Thomas Mathew, Jaypee Medical Publisher
9	Jaypee Gold Standard Mini Atlas Series Forensic Medicine by Ashesh Gunwantrao Wankhede	Jaypee Medical Publisher
10	MODI's Textbook of Medical Jurisprudence and Toxicology	KKannan, Jaypee Medical Publisher
11	A Textbook of Agada Tantra	Dr Shobha Bhat, Chaukamba Orientalia
12	Agada Tantra	Dr Ramesh Chandra Tiwari, Chaukamba Orientalia
13	Text Book of Agad Tantra Evam Vyavahar Ayurveda	Dr Sandeep Charak Dr. Piyush Gupta Dr Divya Tiwari, Ayurveda Sanskrit Hindi Pustak Bhandar.
14	Ayodhya Prasad Achal's Agada Tantra	Dr Jina Patnaik, Chaukamba Surbharati Prakashan
15	Illustrated Agada Tantra	Dr PVNR Prasad, Chaukamba Sanskrit Series Varanasi
16	Textbook on Agada Tantra	<u>DR VP JOGLEKAR, RASHTRIYASHIKSHAN MANDAL, PUNE</u>
17	Review of Forensic Medicine and Toxicology by Dr Gautam Biswas	Jaypee Medical Publisher
18	Toxicology- An Ayurvedic Perspective	Department of Agad Tantra, Vaidyaratnam PS Varier Ayurveda College, Kottakkal

Abbreviations

Assessment

S.No	Short form	Discription
1	T-EMI	Theoryextendedmatchingitem
2	T-EW	TheoryEssaywriting
3	T-MEQs	TheoryMEQs
4	T-CRQs	TheoryCRQs
5	T-CS	Theorycasestudy
6	T-OBT	Theoryopenbooktest
7	P-VIVA	PracticalViva
8	P-REC	PracticalRecitation
9	P-EXAM	Practicalexam
10	PRN	Presentation
11	P-PRF	PracticalPerformance
12	P-SUR	PracticalSurvey
13	P-EN	Practicalenact
14	P-RP	PracticalRoleplay
15	P-MOD	PracticalModel
16	P-POS	PracticalPoster
17	P-CASE	PracticalCasetaking
18	P-ID	Practicalidentification
19	P-PS	PracticalProblemsolving
20	QZ	Quiz
21	PUZ	Puzzles
22	CL-PR	ClassPresentation,
23	DEB	Debate
24	WP	Wordpuzzle
25	O-QZ	Onlinequiz

26	O-GAME	Onlinegame-basedassessment
27	M-MOD	MakingofModel
28	M-CHT	MakingofCharts
29	M-POS	MakingofPosters
30	C-INT	Conductinginterview
31	INT	Interactions
32	CR-RED	Criticalreadingpapers
33	CR-W	CreativityWriting
34	C-VC	Clinicalvideocases,
35	SP	Simulatedpatients
36	PM	Patientmanagementproblems
37	CHK	Checklists
38	OSCE	OSCE
39	OSPE	OSPE,
40	Mini-CEX	Mini-CEX
41	DOPS	DOPS
42	CWS	CWS
43	RS	Ratingscales
44	RK	Recordkeeping
45	COM	Compilations
46	Portfolios	Portfolios
47	Logbook	Logbook
48	TR	Trainersreport
49	SA	Self-assessment
50	PA	Peerassessment
51	360D	360-degreeevaluation
52	TT-Theory	Theory
53	PP-Practical	Practical
54	VV-Viva	Viva

Domain

S.No	Short form	Discription
1	CK	Cognitive/Knowledge
2	CC	Cognitive/Comprehension
3	CAP	Cognitive/Application
4	CAN	Cognitive/Analysis
5	CS	Cognitive/Synthesis
6	CE	Cognitive/Evaluation
7	PSY-SET	Psychomotor/Set
8	PSY-GUD	Psychomotor/Guided response
9	PSY-MEC	Psychomotor/Mechanism
10	PSY-ADT	Psychomotor Adaptation
11	PSY-ORG	Psychomotor/Origination
12	AFT-REC	Affective/ Receiving
13	AFT-RES	Affective/Responding
14	AFT-VAL	Affective/Valuing
15	AFT-SET	Affective/Organization
16	AFT-CHR	Affective/ characterization

T L method

S.No	Short form	Discription
1	L	Lecture
2	L&PPT	Lecture with Power point presentation
3	L&GD	Lecture & Group Discussion
4	L_VC	Lecture with Video clips
5	DIS	Discussions
6	BS	Brainstorming
7	IBL	Inquiry-Based Learning
8	PBL	PBL
9	CBL	CBL
10	PrBL	Project-Based Learning
11	TBL	TBL
12	TPW	Team project work
13	FC	Flipped classroom
14	BL	Blended Learning
15	EDU	Edutainment
16	ML	Mobile learning
17	ECE	ECE
18	SIM	Simulation
19	RP	Role plays
20	SDL	Self-directed learning
21	PSM	Problem solving method
22	KL	Kinesthetic Learning
23	W	Workshops
24	GBL	Game-Based Learning
25	D-M	Demo on Model

26	LS	Library Session
27	PL	Peer learning
28	RLE	Real life experience
29	REC	Recitation
30	SY	Symposium
31	TUT	Tutorial
32	PER	Presentations
33	PT	Practical
34	XRy	X ray identification
35	CD	Case diagnosis
36	LRI	Lab report interpretation
37	DA	Drug analysis
38	D	Demonstration
39	D_BED	Demonstration bedside
40	D_L	Demonstration Lab
41	DG	Demonstration Garden
42	FV	Field visit
43	PRA	Practical

Samhita Adhyayan-2

Table 2 : Contents of Course

Paper1					
Sr. No	A2 List of Topics	B2 Term	C2 Marks	D2 Lecture hours	E2 Non-Lecture hours

1	Cha.Su.13-SnehaAdhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Snehayoni 2. Chaturvidhasnehaanditsqualities 3. Snehakaalaanditsanupana 4. Pravicharanasneha 5. Acchapeya 6. Snehamatraanditsindications 7. Introductiontosnehayogyaandayogyapurusha 8. Introductiontoayoga,samyakyogaandatiyogaofsnehapana 9. Koshtapariksha 10. Introductiontosnehapanavidhi 11. Introductiontosadyasneha 12. Snehavyapatkaarana,lakshanaandchikitsa III.Adhyayasangraha	1	37	3	1
2	Cha.Su.14-SvedaAdhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Benefitsofswedana 2. Swedanabheda 3. Swedanavidhi 4. Samyakswinnalakshana 5. Atiswinnalakshanaandchikitsa 6. Swedanayogyaandayogya 7. Trayodashaagniswedavivarana 8. Dashavidhaniragnisweda III.Adhyayasangraha	1		2	1
3	Cha.Su.15-UpakalpaneeyaAdhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Samshodhanaupayogidravyasangraha 2. Aturalayanirmana 3. Introductiontovamanavidhi 4. Samsarjanakrama 5. Introductiontovirechanavidhi 6. Benefitsofsamshodhana III.Adhyayasangraha	1		2	3
4	Cha.Su.16-ChikitsaprabhritiyaAdhyaya I.Adhyayaparichaya	1		2	2

	II. Siddhantavivarana 1. Samyakvirikta–avirikta-ativiriktalakshana 2. Bahudoshalakshana 3. Benefitsofsamshodhan 4. Importanceofsamshodhan 5. Samshodhanaatiyogaandayogachikitsa 6. Swabhavoparamavada 7. Chikitsaparibhasha 8. Qualitiesofchikitsa-prabhritavaidya III.Adhyayasangraha			
5	Cha.Su.17-KiyantashiraseeyaAdhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Importanceofshiras 2. Introductiontohiroroga,hridroga,vidradhi,madhumehaand madhumehapidaka 3. 62typesofpermutationandcombinationofdoshas 4. Trayodasasannipata(13typesofcombinationofdoshas) 5. 12typesofvishamasannipata(Doshavikalpa) 6. Typesofkshaya 7. Ojus 8. Doshagati III.Adhyayasangraha	1	3	0
6	Cha.Su.18-TrisotheeyaAdhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Typesofshotha 2. Trividhabodhya(threetypesofassessmentofdiseases) 3. Ekadeshajashotha 4. Aparisankhyeyatwaofroga 5. Anuktaroga(unnameddiseases)anditsmanagement 6. Karmasofprakritadoshas III.Adhyayasangraha	1	1	3
7	Cha.Su.19-AshtodareeyaAdhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Sankhyasampraptiofsamanyajavyadhi 2. Tridoshapradhanyata 3. Nija-agantusambandha III.Adhyayasangraha	1	1	3
8	Cha.Su.20-Maharogaadhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Vyadhibheda(classificationofdisease) 2. Agantu-mukha(causesofagantudiseases) 3. Trividha-prerana(threetiologicalfactors) 4. Samanyaja-nanatmaja-vikara–classification	1	2	2

	5. Vataja-nanatmajavikaras,atmarupaandprakupitakarma 6. Pittaja-nanatmajavikaras,atmarupaandprakupitakarma 7. Kaphaja-nanatmajavikaras,atmarupaandprakupitakarm a III.Adhyayasangraha			
9	Cha.Su.21-Ashtauninditeeyaadhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Ashtaninditapurusha 2. Atisthulaandatikarshya 3. Ashtadoshaofsthaulya 4. Dosha-lakshana-hetuofkarsyaandsthaulya 5. Prasastapurushalakshana 6. Chikitsasutraofsthaulyaandkarsya 7. Nidraparibhasha 8. Arhaandvarjyafordivaswapna 9. Effectsofratrijagaranaanddivaswapna 10. TypesofNidra III.Adhyayasangraha	1	3	3
10	Cha.Su.22-LanghanabrimhaneeyaAdhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Shadupakrama 2. Swaroopaandlakshanaofshadupakrama 3. Dasavidhalanghana 4. Dasavidhalanghana-prayoga-niyama 5. Propertiesofdravyasusedinshadupakrama 6. Samyaklakshanaoflanghana,brimhanaandsthambhana 7. Atiyogaandayogaofshadupakrama III.Adhyayasangraha	1	3	2
11	Cha.Su.23-SantarpaneeyaAdhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Santarpanadravya 2. Santarpanajanyavyadhi 3. Chikitsasutraofsantarpanajanyavyadhi 4. Apatarpanajanyavyadhi 5. Chikitsasutraofapatarpanajanyavyadhi III.Adhyayasangraha	1	2	0
12	Cha.Su.24-VidhishoniteeyaAdhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Shonita-pradhanyata 2. Shonita-dushti-karana 3. Shonitajanyaroga 4. Shonita-dushti-chikitsa 5. Raktadushtilakshanainrelationtodosha	1	3	2

	6. Vishuddharaktalakshana 7. Vishuddharakta-purusha-lakshana 8. Pathyainraktamoksha 9. Introductiontomada-murchaya-sanyasa III.Adhyayasangraha			
13	Cha.Su.25-YajjapurushheeyaAdhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Factorsresponsibleforgenerationofpurushaanddiseases 2. Conceptofhitaaharaanditsimportance 3. Differentfactorsrelatedwithaharalikeaharayoni,prabhava,udarka,upayoga,rasa,gurvadigunaetc 4. Agryasangraha-(Aushadha-Anna-Vihara) 5. Terminologyofpathyaandapathya 6. Enumerationofaasavayoni III.Adhyayasangraha	1	2	4
14	Cha.Su.26-AtreyabhadraakaapeeyaAdhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Sambhashaparishatonnumberofrasa 2. Gunasofparthivadidravys 3. Dravyaprabhavaandgunaprabhava 4. Dravyakarmukatasiddhanta(pharmacodynamics)withrespecttoadhikarana,kala,karma,veerya,upayaandphala 5. Paradiguna 6. Rasadi-panchaka–Additionalknowledge 7. Examplesofsamanapratyarakshaandvichitrapratyaksha 8. Propertiesofvipaka 9. Perceptionofrasa,vipakaandveerya 10. Examplesofprabhava 11. Typesofviruddhaandmanagementofcomplications 12. Principlesoftreatmentofdiseasescausedbyviruddhaahara III.Adhyayasangraha	1	3	3
15	Cha.Su.27-AnnapaanavidhiAdhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Benefitsofhitaahara 2. Examplesofhitaaharaandahitaahara 3. Aharavargas 4. Importanceofanna III.Adhyayasangraha	1	4	2
16	Cha.Su.28-VividhashitapeeteeyaAdhyaya I. Adhyayaparichaya II. Siddhantavivarana	1	4	14

	1. Caturvidha-ahara 2. Differencebetweenhitaaharaandahitaahara 3. Susceptibilitytodiseases(withrespecttopathyaand apathya) 4. Vyadhi-sahashareera 5. Dhatupradoshaj,upadhatupradoshaj,indriyapradosh aja,malapradoshajavikarasandtreatmentprinciples 6. Shakhagatiandkoshtagatiofdoshas 7. Causesofhealthanddiseases 8. Importanceofprajnaaparadha III.Adhyayasangraha				
17	Cha.Su.29-DashapraanaayataneeyaAdhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Enumerationofdashapraanaayatana 2. Terminologyofpraanaabhisaravaidyaandrogaabhisar avaidya,chadmachara,yogyabhisakandkarmakovida III.Adhyayasangraha	2		2	2
18	Cha.Su.30-ArthedashamahamooleeyaAdhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Importanceofhridaya 2. Bestfactorsforlife(shreshtatamabhava) 3. FourtypesofAyu 4. ShashwatatwaofAyurveda 5. QualityofLearnerofAyurveda 6. Ashtaprashna 7. Dashaprakaran 8. Synonymsoftantra III.Adhyayasangraha	2		2	0
19	Cha.Ni.01-JwaranidanaAdhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Descriptionofnidanapanchaka 2. Nidanaparyaya 3. Vyadhiparyaya 4. Ashtavidhajwaranidana,sampraptiandlakshana. 5. Jwarapurvarupa 6. Jwaramahaprabhavavivarana 7. Jwarasamkshiptachikitsasutra. 8. Importanceofghrutapaaninjeernajwara. III.Adhyayasangraha	2	19	2	2
20	Cha.Ni.02-RaktapittanidanaAdhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Raktapittaparyayaandnirukti. 2. Raktapittanidan,purvarupa,upadrava	2		2	2

	3. Raktapittamarga,doshaanubhandhaandsa dhyaasadyata. 4. Raktapittachikitsasutra III.Adhyayasangraha			
21	Cha.Ni.03-GulmanidanaAdhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Sankhyasamprapti 2. Gulmasthanas 3. Nidana,lakshanaandsampraptiofvata-pitta- kahpajagulma 4. Shonitagulma 5. Gulmapurvarupa 6. Sadhyaasadyata 7. Chikitsasutra III.Adhyayasangraha	2	2	2
22	Cha.Ni.04-Pramehanidanaadhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Sankhyasamprapti(vimsatiprameha) 2. Sampraptighataka(doshaviseshaanddushyavisesha) 3. Nidanapanchakaofdoshajaprameha(vata,pittaandkap ha) 4. Sadhyasadyata 5. Poorvarupa 6. Upadrava 7. Chikitsasutra III.Adhyayasangraha	2	2	3
23	Cha.Ni.05-KushtanidanaAdhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Saptadravyaofkushta 2. Anekarupaofkushta 3. Samanyanidanaandsamanyapurvarupa 4. Sadhyasadyata 5. Saptakushtalakshana 6. Upadrava III.Adhyayasangraha	2	2	4
24	Cha.Ni.06-ShoshanidanaAdhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Viseshanidana,sampraptiandlakshanaofshosha 2. Purvarupa 3. Ekadasarupa 4. Sadhyasadyata III.Adhyayasangraha	2	2	2

25	Cha.Ni.07-UnmadanidanaAdhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Sankhyasamprapti 2. Unmadaabhimukhakarana(predisposingfactors ofunmada) 3. Unmadanirvacana(ashtavibhrama) 4. Purvarupa 5. Vata-pitta-kapha-sannipatajunmadalakshna 6. Roleofprajnaparadha 7. Chikitsasutraofunmada 8. Agantujaunmada-nidana,purvarupa,lakshana,chikitsasutra III.Adhyayasangraha	2		2	4
26	Cha.Ni.08-Apasmaranidanaadhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Definitionofapasmara 2. Apasmaraabhimukakarana(predisposingfactors ofunmada) 3. Visheshalakshanaofapasmara 4. Cikitsasutra 5. Nidanarthakararoga 6. Vyadhisankara 7. Suddha-asuddhacikitsa 8. Sadhyasadhyata–nirvacana 9. Tiryaggatadosha-cikitsasutra III.Adhyayasangraha	2		2	4
27	Cha.Vi.01-RasavimanaAdhyayam I. Adhyayaparichaya II. Siddhantavivarana 1. Importanceandobjectiveofvimanasthana 2. Prakrutisamasamavetaandvikrutivishamasamav etasiddhanta 3. ChaturvidhaPrabhava(rasa-dravya-dosh-vikaraprabhava) 4. Examplesofdravyaprabhava-taila,ghrutaandmadhu. 5. Dravyaswhichareavoidedforregularconsumption 6. Satmyaparibhashaandtypes 7. Aharavidhivisheshayatana 8. Aharavidhividhanaandbhojyasaadgunyam III.Adhyayasangraha	3	24	2	3
28	Cha.Vi.02-TrividhakuksheeyaAdhyayam I. Adhyayaparichaya II. Siddhantavivarana 1. Threedivisionsofamashayafordecidingaharamatraa 2. Matraavatahaarakshan	3		2	0

	3. Amatravatvaofahara 4. Effectsofheenamaatraandatimatraofahara 5. Mentalfactorswhichaffectthedigestionoffood 6. Twotypesofamadosha 7. Hetu-lingaandaushasdhaoofamadosha 8. Demarcationofamasaya III.Adhyayasangraha			
29	Cha.Vi.03-JanapadodhwansaneeyaVimanamAdhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Importanceoftimelycollectionofmedicines. 2. Janapadodhwamsakaragamanabhasas(fourcausesofepi demicdiseases) 3. Lakshanasofvikrutvayu,jala,deshaandkala. 4. Chikitsasiddhantaofjanapadodhwamsakaravikaras 5. Roleofadharmainjanapadodhwamsa 6. Niyataandaniyataayu 7. Daivaandpurushakara 8. Examplesofhetuviparitchikitsainjwara 9. Apatarpanaanditstypes 10. Descriptionofdesha III.Adhyayasangraha	3	2	2
30	Cha.Vi.04-Trividharogavisheshavijnanyaneeyaadhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Threemethodsofdiagnosingdiseases 2. Characteristics of aptopadesha, pratyaksha and anumana 3. Application of aptopadesha, pratyaksha and anumana in clinical examination III.Adhyayasangraha	3	2	3
31	Cha.Vi.05-SrotovimanaAdhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Srotasparibhasa 2. Types of srotas 3. Types of srotodushti 4. Hetu, lakshan and chikitsa of srotodushti III.Adhyayasangraha	3	2	2
32	Cha.Vi.06-Roganikavimanaadhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Dvividhavyadhibhedhabasedonprabhava,bala,adhisht hana,nimitta,ashayabheda. 2. Vyadhiaparisanmkheyatva 3. Relationbetweenshareerikaandmanasikadosha. 4. Anubhandhy-anubandharoga 5. Agnibhedha, prakrutibhedha.	3	2	2

	6. Vatalaprakrutigataroga,theirhetuandchikitsa,pittaprakrutigataroga,theirhetuandchikitsa-kapha-prakrutigataroga,theirhetuandchikitsa 7. Rajavaidyagunas III.Adhyayasangraha				
33	Cha.Vi.07-VyadhitarupeeyavimanaAdhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Dvividhavydhitapurushabasedonseverityofdiseaseandclinicalpresentation 2. Krimibheda 3. Trividhachikitsa III.Adhyayasangraha	3		2	2
34	Cha.Vi.08-RogabhishagjiteeyamAdhyaayam. I. Adhyayaparichaya II. Siddhantavivarana 1. Shastrapareeksha 2. Meansoflearningshastra 3. Adhyayanaandadhyapanavidhi 4. Sambhasahavidhi-Types 5. Threetypesofparishat 6. Vadamargapadani 7. MethodologyofVadaanditsbenefits 8. Dashavidhapareeksyabhava 9. Dashavidhaaturapareeksha III.Adhyayasangraha	3		5	11
35	Cha.Sha.01-KatithapurushheeyaAdhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Sareeraandsareerasthana 2. Purushaanditstypes 3. Manonirupanam 4. Atmalinga 5. Ashtaprakritiandshodasavikara 6. Srishtyutpattiandpralaya 7. Trividhadukhahetu 8. Prajnaparadha 9. Daiva 10. Naishtikichikitsa 11. Vedanaandvedanaadhishtana 12. Vedananasahetu 13. Moksha 14. Smritihetus III.Adhyayasangraha	2	13	2	3
36	Cha.Sha.02-AtulyagothreeyamAdhyaaya I. Adhyayaparichaya II. Siddhantavivarana	2		1	0

	1. Prerequisites of conception 2. Shodashadhatu in shareera 3. Sexual abnormalities 4. Sadyogriheetagarbhineelakshana 5. Ativahikapurusha 6. Daiva & paurusha 7. Roganutpatti III. Adhyayasangraha			
37	Cha.Sha.03-Khuddikagarbhavakranti Adhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Matrujadibhava singarbh 2. Beeja & beejabhaga III. Adhyayasangraha	2	1	0
38	Cha.Sha.04-Mahateegarbhavakranti Adhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Garbha & garbhaposhana 2. Garbhopaghatakarabhava 3. Congenital abnormalities 4. Trividhasatvabheda (manasaprakriti) III. Adhyayasangraha	2	1	2
39	Cha.Sha.05-Purushavichaya Shareera Adhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Lokapurushasamya 2. Hetwadipanchaka 3. Satyabuddhi III. Adhyayasangraha	2	1	4
40	Cha.Sha.06-Sareeravichaya adhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Definition of sareera 2. Samanyavisheshasidhanta – applied aspect 3. Shareeradhatuguna 4. Shareeravridhikarabhava 5. Balavridhikarabhava 6. Aharaparinamakarabhava 7. Sareeragunabheda 8. Kala-akalamrityu 9. Paramayukaranam III. Adhyayasangraha	2	1	2
41	Cha.Sha.07-Sareerasankhyasareera Adhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Paramanubheda of shareera	2	1	2

	III.Adhyayasangraha				
42	Cha.Sha.08-JathisutreeyaAdhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Sutikagara 2. Garbhopaghatakarabhava III.Adhyayasangraha	2		1	12
43	Cha.In.1-VarnasvariyaIndriyaAdhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Factorsforassessingrishta 2. Sixtypesofprakrutibhedha 3. Rishtaadhikarakrutavikrutibhedha 4. Prakrutaandvaikarikavarna 5. Varnavishayakarishtha 6. Prakrutaandvaikarikaswara 7. Swaravishayakarishtha III.Adhyayasangraha	3	7	1	1
44	Cha.In.2-PushpitakamIndriyaAdhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Gandhavishayakasamgrah 2. Rasavishayakaarishta III.Adhyayasangraha	3		1	0
45	Cha.In.3-ParimarshaneeyamIndriyamAdhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Sparshagamyabhava(palpablesigns) 2. Sparshavishayakarishtalakshana III.Adhyayasangraha	3		1	0
46	Cha.In.4-IndriyaneekamIndriyaadhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Indriyavishayakaarishtasamanyaniyama(generalrule regardinginvolvementofindriya) III.Adhyayasangraha	3		1	0
47	Cha.In.5-PurvarupeeyamIndriyamAdhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Jvararupavishayakapoorvaroopiyarishta(rishtabased onpurvarupaofjvara) 2. Swapnabheda(typesofswapna) III.Adhyayasangraha	3		1	2
48	Cha.In.6-KatamanisharireeyamIndriyamAdhyaya I.Adhyayaparichaya	3		1	0

	II. Sidhantavivarana 1. Rishtarelatedtopureesha,mutraandswayathu III.Adhyayasangraha			
49	Cha.In.7-PannarupiyamIndriyamAdhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Pratichayavishayakaarishta 2. Chayavikrutiariishtas 3. Fivetypeschayabheda 4. Seventypesprabhabheda III.Adhyayasangraha	3	1	0
50	Cha.In.8-AvakshiraseeyamIndriyamAdhyaya I. Adhyayaparichaya II. Adhyayasangraha	3	1	0
51	Cha.In.9-YasyashyavanimittiyaIndriyaAdhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Ashtamaharogas III.Adhyayasangraha	3	1	0
52	Cha.In.10-SadyomaraneeyamIndriyaAdhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Sadyomaraneeyaaarishtas III.Adhyayasangraha	3	1	0
53	Cha.In.11-AnujyotiyamIndriyaAdhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. DefinitionofArishta III.Shlokasangraha	3	1	0
54	Cha.In.12-GomayachurniyamIndriyaAdhyaya I. Adhyayaparichaya II. Siddhantavivarana 1. Mumurshulakshana, 2. Prashastadootalakshanaandmangalikadravya. 3. Arogyajanakabhava III.Adhyayasangraha	3	1	17
Total Marks			100	100 hr
				140 hr

Table 3: Learning objectives (Theory) of Course

Paper1									
A3 Course outcome	B3 Learning Objective (At the end of the session, the student should be able to)	C3 Domain/sub	D3 Must to know / desirable to know / Nice to know	E3 Level Does/ Show show/ Know show/ Know	F3 T-L method	G3 Assessment (Refer abbreviations)	H3 Formative/ summative	I3 Term	J3 Integration
Topic 1 Cha.Su.13- Sneha Adhyaya (Lecture :3 hours, Non lecture: 1 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT, TT-Theory, VV-Viva	F&S	I	
CO2	Explain basic meaning and importance of key terms in the chapter such as sneha, snehayoni, caturvidhasneha, acchasnehapana, sadyasneha and pravicharana.	CK	MK	K	L&GD, BS	QZ, COM, TT-Theory, VV-Viva	F&S	I	
CO4,CO5	Enlist sthava and jangamsnehayoni ChSu13/9-11	CK	MK	K	L&GD, ML	M-POS, TT-Theory	F&S	I	
CO4,CO5	Justify why tila taila is the best among taila varga. ChSu13/12	CK	MK	KH	L, L & PP T, D A	T-EMI	F&S	I	
CO4,CO5	Explain qualities and mode of action of erand taila Ch.Su13/12	CK	DK	KH	L, L_ VC, DA	T-EMI	F&S	I	

CO4,CO5	Enlistfourtypesofsnehaandjustifysarpiasthebest(shreshta).	CC	MK	KH	L,DIS	PRN,TT-Theo	F&S	I	

	Ch.Su13/13				,DA	ry,VV-Viva			
CO4,CO5	ExplainsnehapaankaalaandanupaanCh.Su18-22	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Defineandenlist24typesofpravicharanasnehaandothertypesofsnehapravicharana.ChSu13/23,24,25,27,28	CC	MK	KH	L&GD	CL-PR,TT-Theory,VV-Viva	F&S	I	
CO4,CO5	ExplainacchasnehapaanaanditsimportanceChSu13/26	CK	DK	KH	L&GD,RP,PL	TT-Theory,VV-Viva	F&S	I	
CO4,CO5	EnlisttypesofsnehamatraCh.Su13/29-30	CC	MK	KH	L&GD,R,EC	QZ,TT-Theory,VV-Viva	F&S	I	
CO4,CO5	MentionrulefordurationofsnehapaanaCh.Su13/51	CC	MK	KH	L&GD,BS	PUZ,TT-Theory,VV-Viva	F&S	I	
CO4,CO5	MentionyogyaandayogyaaforsnehanaCaSu13/52-56.	CC	DK	KH	L,L&PPT,L&GD,CB,L	TT-Theory,VV-Viva	F&S	I	V-PC
CO4,CO5	Summarizesamyaksnigdhalakshana,asnigdhalakshanaandatisnigdhalakshana.ChSu13/57-59	CC	DK	KH	L&GD,D	P-ID,TT-Theory,VV-Viva	F&S	I	
CO2,CO4,CO5	Summarisesnehavyapatkarana,lakshanaandchikitsaChSu75-79	CAP	NK	KH	L&GD,PL	TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Figureoutimportanceofpathyaandapathyainsnehapaan.ChSu13/60-61-64	CK	DK	KH	L&GD,S,DL	M-CHT,TT-Theory,VV-Viva	F&S	I	

CO4,CO5	Explainpathyaapathyatobefollowedduringandafter	CC	MK	KH	L&G	CHK,TT- Theo	F&S	I	

	snehapaana.ChSu62-64				D,E DU	ry,VV-Viva			
CO4,CO5	Explaincriteria'sforassessingkoshta.ChSu13/65-69.	CC	MK	KH	L&G D,C BL	TT- Theory,VV- Viva	F&S	I	
CO4,CO5,C O6	Illustratetypesofkoshthainpatientsundergoingsnehapana	PSY - SET	NK	SH	CBL, CD, D _BED	P-ID,VV- Viva	F&S	I	
CO4,CO5	Mentionsomeexamplesforrecipesofvicharanasneha.ChSu 13/82-94	CK	DK	K	L,L &PP T	TT- Theory,VV- Viva	F&S	I	
CO4,CO5	InterprettheroleofagniinsadyasnehaCaSu13/96-97	CK	DK	K	L,L &G D,IB L	TT- Theory,VV- Viva	F&S	I	
CO1,CO2	Recitesutrano.ChSu13/13-17,22,57-59.	CK	MK	K	SDL ,RE C	P-REC	F&S	I	
CO1,CO2	SummarizethechapterasperChSu13/100.	CK	NK	K	SDL	P-VIVA	F&S	I	
CO4,CO5	RelatedravyaclassificationmentionedinchSu1(trividha)withsn ehayoni	CAP	MK	KH	DIS	PRN	F	I	
Topic 2Cha.Su.14- Sveda Adhyaya (Lecture :2 hours, Non lecture: 1 hours)									
CO1,CO2	Justifythepositionofthechapterinthesamhitaanditsimportance	CC	MK	K	L& GD	INT,TT- Theory,VV- Viva	F&S	I	

CO2	Explainbasicmeaningandimportanceofkeytermsinthechapter suchasagnisweda,niragnisweda,snigdhapurva,ruskhapurvaa ndtrayodasasweda	CK	MK	K	L& GD, BS	QZ,COM,TT- Theory,VV- Viva	F&S	I	
CO4,CO5	Explainthebenefitsofswedana.ChSu14/3-5	CC	MK	KH	L&G	TT-Theory,V	F&S	I	

					D,R LE	V-Viva			
CO4,CO5	ExplainsamyakswedanaandatiswedanalakshanaChSu14/13-15	CC	MK	KH	L& GD	TT- Theory,VV- Viva	F&S	I	
CO4,CO5	SummarizetheindicationsandcontraindicationsforswedanaCh Su14/16-24.	CC	DK	KH	L&G D,C BL	TT- Theory,VV- Viva	F&S	I	
CO4,CO5	Differentiatepindasweda,nadisweda,avagahswedaandupana haswedawithrespecttothedrugsusedandprocedure.ChSu14/25-37.	CC	DK	KH	L&G D,L_ VC, CBL	TT- Theory,VV- Viva	F&S	I	
CO4,CO5	Enlist13typesofagnisweda.ChSu14/39-63	CC	MK	KH	L&P PT,L _VC	QZ,TT- Theory,VV- Viva	F&S	I	
CO4,CO5	Enlist10typesofniragniswedaCh.Su14/64.	CC	MK	KH	L,L &G D	O-QZ,TT-The ory,VV-Viva	F&S	I	
CO4,CO5	Enlistthreeclassificationsofdvividhasweda.ChSu14/66	CK	MK	KH	L& GD	M-CHT,TT-T heory,VV- Viva	F&S	I	
CO1,CO2	RecitesutrasChSu14/4,5,39,40,64.	CK	MK	K	SDL ,RE	P-REC	F&S	I	

					C				
CO1,CO2	SummarizethechapteraspersutraChSu14/68-71	CK	NK	K	SDL	P-VIVA	F&S	I	
Topic 3Cha.Su.15- Upakalpaneeya Adhyaya (Lecture :2 hours, Non lecture: 3 hours)									
CO1,CO2	JustifythepositionofthechapterintheSamhitaanditsimportanc e	CK	MK	K	L& GD	INT,TT- Theory,VV- Viva	F&S	I	

CO1,CO2	Explainbasicmeaningandimportanceofkeytermsinthechapter suchassambharan,aturaalaya,samsarjankrama.	CK	MK	K	L& GD, BS	QZ,COM,TT- Theory,VV- Viva	F&S	I	
CO4,CO5	SummarizetheguidelinesforVaidyasbeforecommencingchiki tsaChSu15/3-5.	CK	DK	KH	L& GD	M-CHT,TT-T heory,VV- Viva	F&S	I	
CO4,CO5	EnlistsamshodhanaupayogidravyasangrahaChSu15/6	CK	MK	KH	L& GD	QZ,TT- Theory,VV- Viva	F&S	I	
CO4,CO5	Figureouttheprocedureofvamanakarma.ChSu15/9-15	CC	DK	KH	L& GD, RP	CHK,TT- Theo ry,VV-Viva	F&S	I	
CO4,CO5	ExplainsamsarjanakramaChSu15/16	CC	MK	KH	L,L &G D	CL-PR,TT-Th eory,VV-Viva	F&S	I	
CO4,CO5	Identifymeritsofsamsarjanakramainpatients	PSY - SET	NK	SH	BS,I BL,D _BE D	P-CASE,SP	F&S	I	

CO4,CO5	OutlineprocedureforvirechanakarmaChSu15/17-18	CC	DK	KH	L&GD, RP	CHK,TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Explainbenefitsofsamshodhana.ChSu15/22.	CC	MK	KH	L,L&GD	TT-Theory,VV-Viva	F&S	I	
CO5,CO7	Relatethestructureofaturalaya(hospital)withthepresentscenario	CAP	DK	KH	DIS,BS,PrBL	DEB,M-MOD,INT	F	I	
CO1	RecitesutraChSu15/22	CK	MK	K	SDL,REC	P-REC	F&S	I	
CO1	SummarizethechapteraspersutraChSu15/2-25	CK	NK	K	SDL	P-VIVA	F&S	I	

Topic 4Cha.Su.16- Chikitsaprabhritiya Adhyaya (Lecture :2 hours, Non lecture: 2 hours)									
CO1,CO2	JustifythepositionofthechapterintheSamhitaanditsimportance.	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	I	
CO2	Explainbasicmeaningandimportanceofkeytermssuchasbahu doshalakshana,swabhaavoparamvaada,chikitsaprabhirta.	CK	MK	K	L&GD,BS	QZ,COM,TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Summarizesamyakvirikta–avirikta–ativiriktalakshana.ChSu16/6-10	CC	DK	KH	L&GD,D	RS,TT-Theory,VV-Viva	F&S	I	
CO4,CO5	ExplainbahudoshalakshanaChSu16/13-16	CC	MK	KH	L&GD	PUZ,TT-Theory,VV-Viva	F&S	I	

CO3,CO6	Identifybahudoshalakahanainpatients	PSY - SET	DK	SH	CBL, D_B ED	P-VIVA	F&S	I	
CO4,CO5	Explainbenefitsandimportanceofsamshodhana.Ch.Su 16/16-21	CC	MK	KH	L& GD	TT- Theory,VV- Viva	F&S	I	
CO4,CO5	ExplainswabhavoparamavadaChSu16/27-32	CC	MK	KH	L& GD, BS	DEB,TT-Theo ry,VV-Viva	F&S	I	
CO2,CO5	Outlinechikitsaofayoga,atiyogaofsamsodhana	CAP	DK	KH	L_VC ,CBL ,D	SP,TT-Theory ,VV-Viva	F&S	I	
CO4,CO5	DefinechikitsaChSu16/34-36	CC	MK	KH	L& GD	TT- Theory,VV- Viva	F&S	I	
CO4,CO8	Appreciatebenefitsofchikitsaprabhrutabhishak.ChSu. 16/37-38	CK	DK	KH	L& GD, D	TT- Theory,VV- Viva	F&S	I	
CO1	RecitesutrasChSu16/13-21,27,28,34-36	CK	MK	K	SDL,	P-REC	F&S	I	

					REC				
CO4,CO6,C O7	Relateswabhavoparamawithconceptofnidanaparivarjana	CAP	MK	KH	DIS	PRN	F	I	
CO1	SummarizethechapteraspersutraChSu16/39-41	CK	NK	K	SDL	P-VIVA	F&S	I	
Topic 5Cha.Su.17- Kiyantashiraseeya Adhyaya (Lecture :3 hours, Non lecture: 0 hours)									
CO1,CO2	JustifythepositionofthechapterintheSamhitaanditsimportanc e	CC	MK	K	L& GD	INT,TT- Theory,VV-	F&S	I	

						Viva			
CO2	Explainbasicmeaningandimportanceofkeytermsinthechapter suchasdoshagati,doshavikalpa,trayodasasannipata	CK	MK	K	L& GD, BS	QZ,COM,TT-Theory,VV-Viva	F&S	I	
CO2,CO3	Explainimportanceofshiras.ChSu17/12	CK	MK	K	L& GD	TT-Theory,VV-Viva	F&S	I	
CO3,CO4	Enlisttypesofsirogora,hridrogaandvidradhi	CC	MK	KH	L& GD	SP,TT-Theory	F&S	I	
CO3,CO4	Figureout62typesofpermutationandcombinationofdoshasCh Su17/41-44	CK	DK	K	L&G D,G BL	PUZ,TT-Theo ry,VV-Viva	F&S	I	
CO3,CO4	Figureout12typesofvishamasannipataChSu17/45-61	CK	DK	K	L& GD	M-POS	F&S	I	
CO3,CO4,C O6	Complementknowledgeaboutkshayalaskhanaofdoshadhatu- malatotheexistingunderstanding(additionalimportantfeatures mentionedinCS)	CK	DK	KH	DIS, FC	TT-Theory,VV-Viva	F&S	I	
CO3,CO4	Interpretdosha- vikalpa(combinationsofdoshas)indifferentconditions.Ch.Su. 17/45-61	CAP	MK	KH	IBL, CBL	P-PS,TT-Theo ry,VV-Viva	F&S	I	

CO3,CO7	ComplementknowledgeofOjustotheexistingunderstanding(a dditionalimportantfeaturesmentionedinCS)ChSu17/73-77	CC	MK	K	DIS, FC	TT-Theory	F&S	I	H-RN
CO3,CO4,C O6	Outlinethesampraptiofmadhumehaandimportanceofojus.ChSu 17/78-81	CAP	MK	KH	L& GD	TT-Theory	F&S	I	

CO2,CO3,CO4,CO7	Definetheterm“gati”andClassifyandexplainvariouskindsofgati.Ch.Su17/112-118Cakrapani	CK	MK	K	L&GD,RP	TT-Theory,VV-Viva	F&S	I	
CO2,CO4,CO6	Interpretasayaapakarsha-gatiinrelationshipwithdosha-gati.Ch.Su.17/45-46	CC	DK	KH	L&GD	TT-Theory	F&S	I	
CO3,CO4,CO7	ExplainskshayahetuCh.Su.17/76-77	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	I	
CO3,CO4,CO6	Illustratedosha-gatiinclinicalconditions	CAP	MK	KH	CBL,D	P-RP,P-CASE	F&S	I	
CO3,CO4	Explainidentificationofdoshavridhi,kshaya,samyaCh.Su.17/62	CC	MK	KH	L	CL-PR,TT-Theory,VV-Viva	F&S	I	
CO1	RecitesutrasChSu17/12,41-44,62,112-118	CK	MK	K	SDL,REC	P-REC	F&S	I	
CO1	SummarizethechapteraspersutraChSu17/120-121	CK	NK	K	SDL	P-VIVA	F&S	I	
Topic 6Cha.Su.18-Trisotheeya Adhyaya (Lecture :1 hours, Non lecture: 3 hours)									
CO1,CO2	JustifythepositionofthechapterintheSamhitaanditsimportance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	I	
CO2	Explainbasicmeaningandimportanceofkeytermsinthechapter suchastrisotha,trividhabodhyasangrahaandanuktaroga	CC	MK	K	L&PPT	TT-Theory,VV-Viva	F&S	I	
CO5	Nameandexplaintrividha-bodhya-sangraha(three-foldmethod	CC	MK	K	L&G	TT-Theory,V	F&S	I	

	for understanding disease – vikaraprakriti, samuthana and adhithana) Ca.Su.18/55,46-47				D	V-Viva			
CO3,CO6	Illustrate use of trividha-bodhya- sangrahainanuktavyadhi ChSu18/44-45	CAP	DK	KH	L&G D,C BL	TT- Theory, VV- Viva	F&S	I	
CO3,CO5	Outline pradesika sotha (localedema) ChSu18/19-36	CC	DK	K	L& GD, L_V C	P-ID, TT-Theo- ry, VV-Viva	F&S	I	
CO3,CO6	Explain aparisanakhyeyatwa of diseases (innumerability) ChSu 18/42	CK	MK	K	L& GD	TT- Theory, VV- Viva	F&S	I	
CO3	Complement tridosha- samanyakarma with additional details mentioned in CS	CC	MK	K	BS,I BL,F C	PRN, TT-Theo- ry, VV-Viva	F&S	I	
CO1	Recite sutras ChSu42,43,44-47	CK	MK	K	SDL ,RE C	P-REC	F&S	I	
CO1	Summarize the chapter as per sutra ChSu18/54-56	CK	NK	K	SDL	P-VIVA	F&S	I	
Topic 7 Cha.Su.19-Ashtodareeya Adhyaya (Lecture :1 hours, Non lecture: 3 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L& GD	INT, TT- Theory, VV- Viva	F&S	I	
CO2	Explain basic meaning and importance of key terms in the chapter such as nijavyadhi (intrinsic diseases), samanyaja- vyadhi (general diseases) and sankhyasamprapti (enumeration of types of diseases)	CK	MK	K	L& GD, BS	QZ, COM, TT- Theory, VV- Viva	F&S	I	

CO2,CO3	Outline the types of diseases (sankhya samprapti) mentioned in the chapter	CK	DK	K	L&G D,G BL	QZ,PUZ,TT- Theory,VV- Viva	F&S	I	

CO3,CO4	Illustrate the importance of tridosha in occurrence of diseases ChSu 19/5	CC	MK	KH	DIS, SDL	TT- Theory,VV- Viva	F&S	I	
CO3,CO4	Explain the relationship between Nija and Agaturogas (intrinsic and extrinsic diseases) ChSu 19/6,7	CK	MK	K	L& GD, PL	TT- Theory,VV- Viva	F&S	I	
CO6,CO8	Classify diseases in Ayurveda using available online resources (Activity, ref: activity table)	CAP	DK	KH	DIS, BL	SA,TT- Theory ,VV-Viva	F	I	
CO1,CO2	Recite sutras ChSu 19/5,6	CK	MK	K	SDL ,RE C	P-REC	F&S	I	
CO1,CO2	Summarize the chapter as per sutra ChSu 19/8,9	CK	NK	K	SDL	P-VIVA	F&S	I	
CO3,CO6,CO7	Summarize different classifications of diseases mentioned in Dehghanjeeviteeya, tisraishaneeya, ashtodareeya, maharoga androganeeka	CC	MK	KH	DIS ,W	P-POS	F	I	

Topic 8 Cha.Su.20- Maharoga adhyaya (Lecture :2 hours, Non lecture: 2 hours)

CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L& GD	INT,TT- Theory,VV- Viva	F&S	I	
CO2	Explain basic meaning and importance of key terms such as agantumukha, trividha prerana, samanyaja-vikara, nanatmaja-vikara and atmarupa	CK	MK	K	L& GD, BS	QZ,COM,TT- Theory,VV- Viva	F&S	I	

CO3,CO5	Explainthebasisfortheclassificationofdiseases.Ch.Su.20/3	CK	MK	K	L&G D,M L	M-CHT,TT-T heory,VV- Viva	F&S	I	
CO5	Definenijaandagantujavyadhi.Ch.Su.20/7	CK	MK	K	L& GD	TT- Theory,VV- Viva	F&S	I	
CO5	Describekaaranafornijaandagantujavyadhi.Ch.Su.20/4-5	CK	MK	K	L& GD	TT- Theory,VV- Viva	F&S	I	

CO3,CO5	Enlistnanatmajavyadhiofvataandrelateguna,atmarupa,vikrita karmaofvataanditsupakrama.Ch.Su.20/12,13	CAP	MK	K	L& GD	M-CHT,VV- Viva	F&S	I	
CO3,CO5	Enlistnanatmajavyadhiofpittaandrelateguna,atmarupa,vikrit akarmaofpitta,anditsupakramaCh.Su.20/14-16	CAP	MK	K	L& GD	M-CHT,VV- Viva	F&S	I	
CO3,CO5	EnlistnanatmajavyadhiofKaphaandRelateguna,atmarupa,vik ritakarmaofKaphaanditsUpakrama.Ch.Su.20/17-19	CAP	MK	K	L& GD	M-CHT,VV- Viva	F&S	I	
CO4,CO6,C O8	Makemonographsofnanatamaja- vikaras(Activity,seeactivitylist)	CAP	DK	KH	TPW ,BL	M-CHT,CR- W	F	I	
CO3,CO6,C O7	Relateparibhashaofdiffernttermsinnanatamajavyadhiwithd escriptionsavailableinAshatangasangrahaSu20/18	CC	DK	KH	DIS	T-OBT	F	I	
CO1,CO2	RecitesutrasCh.Su.20/3,4,5,11,14,17,20-22	CK	MK	K	SDL ,RE C	P-REC	F&S	I	
CO1,CO2	SummarizethechapteraspersutraChSu20/23-25	CC	NK	K	SDL	P-VIVA	F&S	I	
Topic 9Cha.Su.21- Ashtauninditeeya adhyaya (Lecture :3 hours, Non lecture: 3 hours)									
CO1,CO2	JustifythepositionofthechapterintheSamhitaanditsimportanc e	CC	MK	K	L& GD	INT,TT- Theory,VV-	F&S	I	

						Viva			
CO2	Explainbasicmeaningandimportanceofkeytermssuchasashtaninditapurusha,ashtadoshaofatisthaulya,prasastapuruhshalaks hana	CK	MK	K	L&GD,BS	QZ,COM,TT-Theory,VV-Viva	F&S	I	
CO2	EnlistashtaninditapurushaChSu21/3	CK	MK	K	L&GD,RP	TT-Theory,VV-Viva	F&S	I	
CO4,CO5	EnlistashtadoshaofatisthoolapurushaandjustifyitsashtadoshaCh.Su.21/4	CAP	MK	K	L&GD,RP	P-SUR,CL-PR,VV-Viva	F&S	I	
CO4,CO5,CO	Outlinethediagnosticfeaturesofatisthula.Ch.Su.21/9	CC	MK	K	L&G	TT-Theory,V	F&S	I	

7					D	V-Viva			
CO5,CO6,C O7	OutlinehetuandsampraptiofatisthaulyaCh.Su.21/4-8	CAP	DK	K	L&P PT	TT- Theory,VV- Viva	F&S	I	
CO4,CO5	Describechikistasutraforatisthulapurushaandmentiondifferentformulations.Ch.Su.21/20-28	CAP	MK	K	L& GD	TT- Theory,VV- Viva	F&S	I	
CO5,CO6	Describehetu,doshaandlakshanaforatikrushapurusha.Ch.Su.21/11-15	CC	MK	K	L&P PT	TT- Theory,VV- Viva	F&S	I	
CO4,CO5	DescribechikistasutraforatikrushapurushaandmentiondifferentformulationsCh.Su.21/20,29-34	CC	MK	KH	L& GD	TT- Theory,VV- Viva	F&S	I	
CO6	InterpretwhyatisthulapurushaisdifficulttotreatcomparedtokrushapurushaCh.Su.21/16-17	CAP	MK	K	L& GD	TT- Theory,VV- Viva	F&S	I	
CO5	Enlistthefeaturesofidealphysiqueinindividuals(prashastapurushalakshana)Ch.Su.21/18-19	CC	MK	KH	L& GD	TT- Theory,VV- Viva	F&S	I	
CO4,CO7	DefinenidraandenlistitstypesChSu21/35&58	CK	MK	K	L&P PT	TT- Theory,VV- Viva	F&S	I	
CO3,CO7	DeterminesignificanceofnidraasanetiologifactorofsthaulyaandkarsyaanditsroleinmanagementofthesameCa.Su.21/51	CAP	MK	KH	DIS, CBL, FC	CL-PR	F&S	I	
CO1,CO2	RecitesutrasChSu21/3,4,16,18,19,35,50,58	CK	MK	K	SDL ,RE C	P-REC	F&S	I	

CO1,CO2	SummarizethechapteraspersutraChSu21/60-62	CC	NK	K	SDL	P-VIVA	F&S	I	
Topic 10Cha.Su.22- Langhanabrimhaneeya Adhyaya (Lecture :3 hours, Non lecture: 2 hours)									
CO1,CO2	JustifythepositionofthechapterintheSamhitaanditsimportanc e	CC	MK	K	L& GD	INT,TT- Theory,VV- Viva	F&S	I	

CO2	Explainbasicmeaningandimportanceofkeytermssuchasshadu pakramaanddasavidhalanghana	CK	MK	K	L& GD, BS	QZ,COM,TT- Theory,VV- Viva	F&S	I	
CO2,CO4,C O5	Enlistanddefineshadupakrama.Ch.Su.22/4,9-12	CK	MK	K	L& GD	TT- Theory,VV- Viva	F&S	I	
CO2,CO5,C O7	Explainpropertiesofdravyasusedinshadupakramawit hexamp les.Ch.Su.22/12-17	CK	MK	K	L&P PT,P BL	TT- Theory,VV- Viva	F&S	I	
CO4,CO5	Enlistdasavidha-langhanaandtheirindicationsCh.Su.22/19-23	CK	MK	K	L& GD	TT- Theory,VV- Viva	F&S	I	
CO2,CO4,C O5	Relategurvadigunaandsamanyaviseshasidhantawithshadupa kramaChSu22/12-17	CK	DK	KH	DIS, FC	T-EMI,VV- Viva	F&S	I	
CO4,CO5	Identifydasavidhalanghanaintreatmentguidelinesmentionedf ordifferentdiseases	CAP	NK	KH	IBL, CBL	T-OBT,VV- Viva	F&S	I	
CO4,CO5	Explainsamyaklakshanaoflanghana,brimhanaandsthambhan aChSu22/34,35,38,40	CK	MK	K	L& GD	TT- Theory,VV- Viva	F&S	I	
CO4,CO5	Outlineatiyogaandayogalakshanaofbrimhana,langhanaandst hambhanaChSu22/36-38	CK	DK	K	L&G D,C BL	M-CHT,TT-T heory,VV- Viva	F&S	I	
CO1,CO2	RecitesutrasChSu21/9-24	CK	MK	K	SDL ,RE C	P-REC	F&S	I	
CO1,CO2	SummarizechapteraspersutraChSu22/44	CC	NK	K	SDL	P-VIVA	F&S	I	
Topic 11Cha.Su.23- Santarpaneeya Adhyaya (Lecture :2 hours, Non lecture: 0 hours)									

CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	KH	L&GD	INT, TT-Theory, VV-Viva	F&S	I	

CO2	Explain basic meaning and importance of key terms such as santarpana and apatarpana	CK	MK	K	L&GD, BS	QZ, COM, TT-Theory, VV-Viva	F&S	I	
CO3,CO5	Enlists santarpana dravya ChSu23/3-5	CK	MK	K	L&GD	TT-Theory, VV-Viva	F&S	I	
CO3	Enlists santarpana janyavyadhis ChSu23/5-7	CK	MK	K	L&GD	TT-Theory, VV-Viva	F&S	I	
CO3,CO6	Explain chikitsa-sutra for santarpana-janya-roga. Ch.Su.23/8	CAP	MK	K	L&GD	TT-Theory, VV-Viva	F&S	I	
CO3	Explain apatarpana janyavyadhis ChSu23/26-29	CK	MK	K	L&GD	TT-Theory, VV-Viva	F&S	I	
CO3,CO6	Outline the management approach to apatarpana janyavyadhi ChSu23/30-32	CC	MK	KH	L&GD, CBL	TT-Theory, VV-Viva	F&S	I	
CO1,CO2	Recites sutras ChSu23/5-7, 26-29	CK	MK	K	SDL, REC	P-REC	F&S	I	
CO2	Summarize chapter as per sutra ChSu23/40	CC	NK	K	SDL	P-VIVA	F&S	I	

Topic 12 Cha.Su.24- Vidhishoniteeya Adhyaya (Lecture :3 hours, Non lecture: 2 hours)

CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT, TT-Theory, VV-Viva	F&S	I	
CO2	Explain basic meaning and importance of key terms such as sönita dushti and visuddharakta	CK	MK	K	L&GD, BS	QZ, COM, TT-Theory, VV-Viva	F&S	I	
CO3, CO4, CO7	Explain causative factors for raktadushti Ch. Su. 24/5-10	CK	MK	K	L&GD	CHK	F&S	I	

CO4,CO6	Explain diagnostic criteria of fraktadushti. Ca.Su.24/17	CC	MK	K	L&GD	TT-Theory, VV-Viva	F&S	I	
CO4,CO6,C07	Enlist rakta-dushti janya-roga. Ch.Su.24/11-16,28/11-13	CC	MK	K	L&GD	TT-Theory, VV-Viva	F&S	I	
CO4,CO5	Explain treatment principles of rakta-dushti. Ch.Su.24/18.	CC	MK	K	L&GD	INT, VV-Viva	F&S	I	
CO3,CO4,C07	Explain visudha-raktalakshana ChSu23/22	CK	MK	K	L&GD	TT-Theory, VV-Viva	F&S	I	
CO3,CO4,C05	Explain visuddha-rakta-purushalakshana ChSu23/24	CK	MK	K	L&GD	TT-Theory, VV-Viva	F&S	I	
CO3,CO6,C07	Relate the concept of fraktadushti with similar references such as Ch.vi.5/26	CC	MK	KH	DIS	T-OBT	F	I	
CO4,CO5,C07	Explain pathyain raktamoksha ChSu24/23	CK	MK	K	L&GD	TT-Theory, VV-Viva	F&S	I	
CO4,CO5,C06	Summarize the samprapti of mada, murchaya and sanyasa ChSu24/25-29	CAP	DK	KH	L&GD, IB, RP	PUZ, TT-Theory, VV-Viva	F&S	I	
CO1,CO2	Recite sutras ChSu24/14,18,20,21,22,24	CK	MK	K	SDL, REC	P-REC	F&S	I	
CO2	Summarize the chapter as per sutra ChSu24/59-60	CC	NK	K	SDL	TT-Theory, VV-Viva	F&S	I	

Topic 13 Cha.Su.25- Yajjapurusheeya Adhyaya (Lecture :2 hours, Non lecture: 4 hours)									
CO1	Justify the position of the Yajjapurusheeya chapter in the Samhita and its importance	CC	MK	K	L&GD	INT, TT-Theory, VV-Viva	F&S	I	

CO2	Explain basic meaning and importance of key terms in the chapter such as Hita, Ahita, Pathya and Apathya	CK	MK	K	L&GD, BS	QZ, COM, TT-Theory, VV-Viva	F&S	I	
CO4, CO7	Justify the role of different factors responsible for formation of pūrṣa ChSu25/3-29	CC	DK	KH	L&GD, ML	TT-Theory, VV-Viva	F&S	I	
CO1, CO8	Appreciate importance of sambhashain bringing out scientific conclusions	AFT-REC	NK	KH	L&GD, RP, PL	SA, TT-Theory, VV-Viva	F&S	I	
CO2, CO3	Differentiate factors related with aharalike Aharayoni, Prabhava, udarka, Upayoga, Rasa, Gurvadi Guna etc ChSu25/36	CK	MK	KH	L&GD, LS	T-OBT, TT-Theory, VV-Viva	F&S	I	
CO3, CO4, CO5	Enlist important agnyas related with aushadha, anna and vihara ChSu25/38-40	CK	DK	K	L&GD, FC, GBL	T-OBT, TT-Theory, VV-Viva	F&S	I	H-DG, H-RN
CO4, CO5, CO7	Define pathya and explain its importance ChSu25/45-47	CC	MK	K	L&GD	TT-Theory, VV-Viva	F&S	I	
CO4, CO7, CO8	Justify importance of hita and ahita (See activity list)	CAP	DK	KH	DIS, FC	INT, TT-Theory, VV-Viva	F&S	I	

CO5	MentionasavayonisChSu25/49	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO1,CO2	RecitesutrasChSu25/29,31,33,45,46,47,50	CK	MK	K	SDL,REC	P-REC	F&S	I	
CO1	SummarizethechapterwithshlokanumberChSu25/51	CK	NK	K	SDL	TT-Theory,VV-Viva	F&S	I	

Topic 14Cha.Su.26- Atreyabhadraakaapyeeya Adhyaya(Lecture :3 hours, Non lecture: 3 hours)

CO1,CO2	JustifythepositionofthechapterintheSamhitaandits	CC	MK	K	L&G	INT,TT-Theor	F&S	I	

	importance				D	y,VV-Viva			
CO2	Explainbasicmeaningandimportanceofkeytermssuchasdravyaprabhava,gunaprabhava,rasapanchakaandviruddha	CK	MK	K	L&GD,BS	QZ,COM,TT-Theory,VV-Viva	F&S	I	
CO2,CO3,CO5	EnlistgunasofparthivadidravysChSu26/11	CK	DK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO4,CO5	DifferentiatedravyaprabhavaandgunaprabhavawithexamplesChSu26/13	CK	MK	KH	L&GD	PUZ,TT-Theory,VV-Viva	F&S	I	H-DG
CO4,CO5	ExplainedravyakarmukatasiddhantwithexamplesChSu26/13	CK	MK	KH	L&GD,DA	TT-Theory,VV-Viva	F&S	I	H-DG
CO4,CO5,CO6	Explaintheimportanceofparadigunasaschikitsopayogigunas(indiagnosistreatment).ChSu26/29-35(seeactivitylist,activityno.5)	CK	DK	KH	L&GD,FC,SDL	TT-Theory,VV-Viva	F&S	I	

CO2,CO5	Complement the existing knowledge of 'rasadipanchaka' with additions from Charakasamhita.	CK	DK	K	FC, SDL	T-OBT, TT-Theory, VV-Viva	F&S	I	
CO2,CO5	Differentiate the properties of three types of 'Vipakas' ChSu26/58-63	CK	MK	K	DIS, FC	TT-Theory, VV-Viva	F&S	I	
CO4,CO5	Explain method of perception of frasa, veerya and vipaka of dravyas ChSu26/66	CC	MK	KH	L&GD, D	DEB, TT-Theory, VV-Viva	F&S	I	H-DG
CO2,CO4,CO5	Enlist the examples of prabhava ChSu26/68-70	CK	MK	K	L&GD, E, DU, SDL	TT-Theory, VV-Viva	F&S	I	H-DG
CO4,CO5,CO7	Enlist the types of viruddhaahara and principles of management of diseases caused by viruddhaahara. ChSu26/86, 104-105	CK	MK	K	L&GD, BL, ,	P-PS, TT-Theory, VV-Viva	F&S	II	

					RLE				
CO4,CO5	Illustratevichitra-pratyayarabdhawithexamplesChSu26/48-52	CAP	MK	KH	DIS, IBL	P-ID,TT-Theory,VV-Viva	F&S	II	
CO1,CO2	RecitetheshlokasChSu26/13,36,37,61,62,66,81,85	CK	MK	K	SDL,REC	P-REC	F&S	II	
CO4,CO5	RelatedifferentsidhantasondravyamentionedinCh.Su1,ChSu4,ChSu27andChVi1	CC	MK	KH	DIS, FC	CL-PR	F	I	
CO1,CO2	SummarizethechapteraspersutraChSu26/107-113	CK	NK	K	SDL	TT-Theory,VV-Viva	F&S	II	
Topic 15Cha.Su.27- Annapaana vidhi Adhyaya (Lecture :4 hours, Non lecture: 2 hours)									
CO1,CO2	JustifythepositionofthechapterintheSamhitaanditsimportance	CK	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	I	
CO2,CO5,CO7	Enlistthecharacteristicsofhitaharaandexamplesofhitaaharaan dahitaahara.ChVi27/3	CK	MK	K	SDL	P-VIVA	F&S	I	
CO2,CO5,CO7	ClassifyaharaintodifferentvargasChSu27/26	CK	MK	K	FC, SDL	P-VIVA	F&S	I	
CO4,CO5,CO7	Illustrateahara-dravyathroughexhibition(Seeactivitylist,activityno.7)	CS	DK	SH	PrBL, RLE	Logbook,TR	F	I	
CO1,CO2	SummarisethechapterasperChSu27/351-352	CC	NK	K	SDL	TT-Theory,VV-Viva	F&S	I	
Topic 16Cha.Su.28- Vividhashitapeeteeya Adhyaya (Lecture :4 hours, Non lecture: 14 hours)									
CO1,CO2	JustifythepositionofthechapterintheSamhitaanditsimportance	CC	MK	K	L&GD	INT,TT-Theory,VV-	F&S	I	

						Viva			
CO2	Explainbasicmeaningofkeytermsinthechaptersuchas	CK	MK	K	L&G	QZ,COM,TT-	F&S	I	

	chaturvidhaahara, vyadhisahasareera, dhatu-upadhatu-mala-indriya-pradoshajavyadhi				D,BS	Theory, VV-Viva			
CO2,CO7	Enlist the four types of aahara ChSu28/3	CK	MK	K	L&G D,M L	M-CHT, VV-Viva	F&S	I	
CO2,CO7	Explain factors influencing susceptibility to diseases which modify the effects of pathya and apathya ChSu27/7	CK	MK	KH	L&G D,S DL	TT-Theory, VV-Viva	F&S	I	
CO3,CO7	Enlist the vyadhi-asahashareera ChSu27/7	CK	MK	KH	L&G D,IB L	TT-Theory, VV-Viva	F&S	I	
CO3,CO4,CO5,CO7	Outline dhatu-upadhatu-mala-indriya pradoshajavyadhi (diseases caused by dosha situated in different dhatus, upadhatu, mala sand indriyas) explain their treatment principles ChSu27/9-30	CC	MK	KH	L&G D,IB L,LS	T-OBT, M-CHT, TT-Theory, VV-Viva	F&S	I	
CO3,CO4,CO7	Explain mechanism koshtagati and sakhagati ChSu27/31-33	CC	MK	KH	L&G D,FC	TT-Theory, VV-Viva	F&S	I	
CO3,CO7	Emphasize the role of Prajnaparadh in causation of diseases ChSu27/39-40	CC	MK	KH	L&G D	TT-Theory, VV-Viva	F&S	I	
CO1,CO2	Recite sutras ChSu27/9-19,35-39,45	CK	MK	K	SDL ,RE C	P-REC	F&S	I	
CO1,CO2	Summarize the chapter as per ChSu28/45-48	CK	NK	K	SDL	T-OBT, TT-Theory, VV-Viva	F&S	I	

CO3,CO6	RelatedhatupradoshajavyadhiwithexplanationsinothertextssuchasCh.vi.5/10-22,Ch.Su.28/09-19,Ch.Vi.5/8anddhatugathaavasthadescribedinAshtangasangrahaSutasthana	CC	DK	KH	DIS, BS	CL-PR	F	I	

Topic 17 Cha.Su.29- Dashapraanaayataneeya Adhyaya(Lecture :2 hours, Non lecture: 2 hours)

CO1,CO2	JustifythepositionofthechapterintheSamhitaanditsimportance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	
CO2	Explainbasicmeaningandimportanceofkeytermssuchaspranaayatan,praanabhisara,rogaabhisara,chadmachara,yogyachikitsak,karmakovidah.	CK	MK	K	L&GD,BS	QZ,COM,TT-Theory,VV-Viva	F&S	II	
CO2,CO3,CO7	Enlistdashapraanayatanas.ChSu29/3,4	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO8	Enlisttwotypesofbhishak.ChSu29/5	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO8	Explainthequalitiesofpranaabhisar,rogabhisaraandbhishakchadmacaharaChSu29/7	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO8	Appreciatethesocialhazardscausedduetoquackery	AFT-REC	DK	KH	BS,SDL	CR-W,VV-Viva	F&S	II	
CO8	EnlistqualitiesofyogyachikitsakChSu29/13.	CK	MK	K	L&GD	TT-Theory,VV-	F&S	II	

						Viva			
CO8	Illustrate characteristics of different types of vaidya through skit (see activity no.8)	PSY - SET	DK	SH	RP, FV	PRN	F	II	
CO1,CO2	Recites sutras ChSu29/3,4,13.	CK	MK	K	SDL, REC	P-REC	F&S	II	
CO1,CO2	Summarize the chapter as per sutra Ch.Su29/14	CK	MK	K	SDL	T-OBT, TT-Theory, VV-Viva	F&S	II	
CO8	Related different references related to good qualities of Vaidya from different chapters ChSu11/50-53	CC	MK	KH	FC	CL-PR, DEB	F	II	

Topic 18Cha.Su.30- Arthedashamahamooleeya Adhyaya (Lecture :2 hours, Non lecture: 0 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CK	MK	K	L&GD	INT, TT-Theory, VV-Viva	F&S	II	
CO2	Explain basic meaning and importance of key terms such as artha, mahamula, mahaphala, shashwatatva	CK	MK	K	L&GD	TT-Theory, VV-Viva	F&S	II	
CO3,CO4,CO7	Explain the importance of hrudaya. ChSu30/3,4,5,6,7	CC	MK	KH	L&GD	TT-Theory, VV-Viva	F&S	II	
CO3,CO7	Relate concept of hrudaya with details given in trimarmeeya, sareerasthana etc.	CK	MK	KH	L&GD, FC	T-OBT	F	II	
CO3,CO4,CO7	Explain the importance of fojas and its sthana ChSu30/8-12.	CC	MK	KH	L&GD	TT-Theory, VV-Viva	F&S	II	
CO3,CO4,CO7	Define terms dhamani, srotas, sira. ChSu30/12	CK	MK	K	L&GD	TT-Theory, VV-Viva	F&S	II	
CO3,CO4,CO7	Explain shrestha tamabhava ChSu30/15	CK	NK	K	L&GD	TT-Theory, VV-Viva	F&S	II	
CO3,CO5,CO8	Explain Ayurveda vidlakshana and their method of understanding in the form of vakyashah, vakyarthashah, arthavayavashah ChSu30/16	CK	DK	KH	L&GD	TT-Theory, VV-Viva	F&S	II	
CO3,CO4,CO7	Outline lakshana of sukhayu, asukhayu, hitayu and ahitayu ChSu30/24,25	CK	DK	KH	L&GD, IB L	PUZ, TT-Theory, VV-Viva	F&S	II	

CO3,CO4	Defineobjective(prayojana)ofAyurvedaChSu30/26	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO5,C08	AppreciateeternityofAyurvedaChSu30/27	CC	MK	KH	L&GD,BS	TT-Theory,VV-Viva	F&S	II	

CO3,CO4,CO7,CO8	ExplainqualitiesoflearnerofAyurvedaandtheirobjectives.ChSu30/29	CC	DK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO4,C07	Enlistdashaprakaranoftantraartha.ChSu30/32.	CK	MK	KH	L,L&GD	P-VIVA,TT-Theory,VV-Viva	F&S	II	
CO3,CO4	OutlinetheashtasthanasofCharakaSamhitaChSu30/32	CK	MK	K	L&GD	TT-Theory,PP-Practical,VV-Viva	F&S	II	
CO3,CO4,C06	EnlistparyayasofAyurveda.ChSu30/31	CK	MK	K	L&GD	TT-Theory,PP-Practical,VV-Viva	F&S	II	
CO4,CO5	Explaincharacteristicsofpallavagrahibhishakorconsequences ofincompleteknowledge with the examplesChSu30/72-81.	CK	DK	K	L&GD	TT-Theory,PP-Practical,VV-Viva	F&S	II	
CO3,CO5,C08	AppreciateimportanceofShastrajnanaChSu30/84-85	AFT-VAL	DK	KH	L&GD,BS	VV-Viva	F&S	II	
CO1,CO2	Explainimportanceofsangrahaadhyayas	CC	DK	K	BL,SDL	VV-Viva	F&S	II	

CO1,CO2	RecitesutrasChSu30/3,410,11,12.	CK	MK	K	SDL ,RE C	P-REC	F&S	II	
CO1,CO2	SummarizethechapteraspersutrasChSu30/86-87	CK	NK	K	SDL	T-OBT,VV- Viva	F&S	II	
Topic 19Cha.Ni.01-Jwara nidana Adhyaya (Lecture :2 hours, Non lecture: 2 hours)									
CO1	Describethesthanaadhikarana(objectives)ofNidanasthanaCh. Ni.1/15	CK	MK	K	L	P-VIVA,TT- Theory	F	II	

CO1	Justifythepositionofthechapterinthesamhitaanditsimportance	CK	MK	K	L	T-EMI	F	II	
CO2	Explainbasicmeaningandimportanceofkeytermssuchasnidan apanchakaandjwara	CK	MK	K	L& GD, BS	QZ,COM,TT- Theory,VV- Viva	F&S	II	
CO4,CO6,C O7	Explainnidanapanchakawithsuitableexamples.Ch.Ni.1/6-13	CK	MK	KH	L& GD, FC	P-VIVA,TT- Theory	F&S	II	
CO4,CO6	DifferentiatevyadhibodhakanidanaandvyadhijanakanidanaCh Ni1/1Cakrapanicommentary	CAN	DK	KH	L&G D,T BL	VV-Viva	F	II	
CO2,CO4,C O6	Enlistsynonymsofnidana(causativefactors)androga(disease) ChNi1/3,5	CK	MK	KH	L	TT- Theory,VV- Viva	F&S	II	
CO4,CO6	ExplaintheimportanceofnidanapanchakaCh.Ni1/13	CK	MK	K	L& GD	TT- Theory,VV- Viva	F&S	II	

CO6	Explainnidanapanchakaandelaboratenidana(causativefactor) ,purvarupa(premonitorysymptoms)lakshana/rupa(symptoms)	CK	MK	KH	L& GD	T-EW	F	II	
CO4,CO6,C O7	DescribeupashayaalongwithitstypesindetailChNi1/10	CC	MK	SH	L& GD, BS	TT- Theory,VV- Viva	F&S	II	
CO4,CO6 2	Interprettheclassificationofsamprapti(pathogenesis)ChNi1/1	CK	MK	KH	L&P PT,C BL	TT- Theory,VV- Viva	F&S	II	
CO4,CO6	Diffrentiatethesamanyaandvisheshasampraptiofdisease	CAP	MK	SH	L_VC ,DIS	TT- Theory,VV- Viva	F&S	II	
CO3,CO4	Describethevisheshanidana(specificfactorsofdiseases)prakop akarana(causesofaggravation),samprapti(pathogenesis)	CAP	MK	KH	L& GD	TT- Theory,VV- Viva	F	II	

	andlakshana(symptoms)ofjwara(fever)								
CO3,CO6	Outlinevataja,pittaja,kaphaja,samsargaandsannipatajwaraChNi1/19-30	CC	MK	KH	L&G D,C BL	TT- Theory,VV- Viva	F&S	II	
CO3,CO4,C O6	Describeagantujjwaranidana(causesfactorofexogenousfever)ChNi1/30,31	CK	MK	KH	L	TT- Theory,VV- Viva	F&S	II	
CO2,CO4,C O5	Differentiatenavaandjeernajwarachikitsasutra(lineoftreatment)ChNi1/36	CK	MK	K	L,L &G D	TT- Theory,VV- Viva	F&S	II	
CO1,CO2	RecitesutrasChNi/3,5,7-11,38-40	CK	MK	K	SDL ,RE C	P-REC	F	II	
CO1,CO2	SummarizethechapteraspersutrasgivenattheendofthechapterChNi1/42-44	CK	NK	K	SDL	T-OBT	F&S	II	
Topic 20Cha.Ni.02-Raktapitta nidana Adhyaya (Lecture :2 hours, Non lecture: 2 hours)									
CO1,CO2	JustifythepositionofthechapterintheSamhita	CC	MK	K	L& GD	INT,TT- Theory,VV- Viva	F&S	II	
CO2	Explainbasicmeaningandimportanceofkeytermssuchaspratimargaharana,sadhyasadyata,raktapitta	CK	MK	KH	L& GD, BS	QZ,COM,TT- Theory,VV- Viva	F&S	II	
CO2,CO4,C O6	JustifyraktapittaparyayaandniruktiChNi2/5	CK	MK	K	L& GD	TT- Theory,VV- Viva	F&S	II	
CO2,CO4,C O6	Outlinerraktapittanidanaandsamprapti(etiologyandpathogenesisofraktapitta)	CC	DK	KH	L& GD	TT- Theory,VV- Viva	F&S	II	

CO3,CO4,C O6	Define raktapitta and outline raktapitta purvarupa (premonitory features of raktapitta) upadrava (complication of raktapitta) ChNi2/6,7	CC	MK	KH	L& GD	TT- Theory,VV- Viva	F&S	II	

CO4,CO6	Relateconceptoftrividhagati(adha,urdhwa,tiryag)withsampraptiofraktapittaChNi2/8	CAP	DK	KH	L&GD	T-EMI,TT-Theory,VV-Viva	F&S	II	
CO4,CO5,CO7	ExplainconceptofpratimargaharanainthecontextofraktapittaChNi2/9	CAP	MK	KH	L&GD,LS	TT-Theory,VV-Viva	F&S	II	
CO4,CO6	IllustratesadhyasadyataofraktapittaChNi2/9,12-20	CAP	MK	KH	L&GD,PL	TT-Theory,VV-Viva	F&S	II	
CO4,CO6	Outlineasadhyalakshanaofraktapitta(featuresofincurabledisease)ChNi2/23-26	CC	DK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO1,CO2	RecitesutrasChNi/19,27	CK	MK	K	SDL,REC	P-REC	F&S	II	
CO2	SummarizethechapteraspersutraChNi2/28,29	CK	NK	K	SDL	T-OBT	F&S	II	
Topic 21Cha.Ni.03-Gulma nidana Adhyaya (Lecture :2 hours, Non lecture: 2 hours)									
CO1,CO2	JustifythepositionofthechapterintheSamhita	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	
CO2	Explainbasicmeaningandimportanceofkeytermssuchasgulma,panchagulmaandraktagulma	CK	MK	K	L&GD,BS	QZ,COM,TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO6	DemonstratetheprakritisamasamvetaandvikrutivishamasamavetasiddhantainthecontextofgunmaCh.Ni3/6	CAP	DK	KH	L&GD,IBL	INT,TT-Theory,VV-Viva	F	II	
CO3,CO6	MentiontheimportanceofgulmasthanainsampraptiChNi3/7	CC	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	

CO3,CO6	Outline the features of vataja-pittaja-kaphaja and rakta jagulma along with samprapti lakshana (pathogenesis and clinical features) ChNi3/6-11	CC	DK	KH	L&GD	TT-Theory, VV-Viva	F&S	II	

CO3,CO6	Describe rakta jagulma samprapti, lakshana (pathogenesis and clinical features) ChNi3/13-14	CC	MK	K	L&GD	TT-Theory, VV-Viva	F&S	II	
CO4,CO6	Outline poorvarupa of gulma ChNi3/15	CC	DK	KH	L&GD	TT-Theory, VV-Viva	F&S	II	
CO4,CO5	Outline treatment principle of gulma ChNi2/16,17	CAP	MK	KH	L&GD	TT-Theory, VV-Viva	F&S	II	
CO1,CO2	Summarise the chapter as per sutra ChNi3/18	CK	NK	K	SDL	T-OBT	F&S	II	
Topic 22 Cha.Ni.04-Prameha nidana adhyaya (Lecture :2 hours, Non lecture: 3 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	KH	L&GD	INT, TT-Theory, VV-Viva	F&S	II	
CO2	Explain basic meaning and importance of key terms such as kleda, vikaravighatakarabhava	CK	MK	KH	L&GD, BS	TT-Theory, VV-Viva	F&S	II	
CO3,CO4,CO6	Describe the concept of kleda and its role in samprapti of prameha ChNi4/6-8	CC	DK	KH	L&GD, CBL	TT-Theory, VV-Viva	F&S	II	H-RN
CO4,CO6,CO7	Summarise the sankhya samprapti of prameha ChNi4/11,25,39	CK	MK	K	L	TT-Theory, VV-Viva	F&S	II	
CO2,CO3,CO6	Enlist causative factors and samprapighatakas in prameha ChNi4/7	CK	MK	K	L&GD, CBL	TT-Theory, VV-Viva	F&S	II	

CO2,CO3,C O6	Explores the sootra 'ehakhalunidan-dosha- dooshyavishesahebhyo.....' in the manifestation of diseases Ch Ni4/4	CAP	MK	KH	L&G D,BS ,CBL	TT- Theory,VV- Viva	F&S	II	
CO2,CO3,C O6	Relates nidana, dosha, dushya and samprapti of vataja, pittaja and ka phaja prameha ChNi4/5,8,24,36,37	CC	MK	KH	L&G D,C B	TT- Theory,VV- Viva	F&S	II	

					L				
CO2,CO3,C O6	Justify the role of samprapti ghatakas in diagnosed cases of prame ha	PSY - SET	NK	SH	L&G D,C BL, D_B ED	P-PS, TT-Theo ry,VV-Viva	F&S	II	H-RN
CO2,CO4,C O5	Outline the chikitsa sutra of prameha ChNi4/49	CC	DK	KH	L&G D,C BL	TT- Theory,VV- Viva	F&S	II	H-RN
CO4,CO6	Explains adhyasadyata of prameha ChNi4/11,27,38	CC	MK	K	L& GD	TT- Theory,VV- Viva	F&S	II	
CO4,CO6	Describe purvarupa and upadrava of prameha ChNi4/47,48	CC	MK	K	L_VC ,CBL	TT- Theory,VV- Viva	F&S	II	H-RN
CO3,CO7	Relate predisposing factors of prameha with present day lifestyle	CAP	DK	KH	DIS, FC	VV-Viva	F&S	II	
CO1,CO2	Recites sutras ChNi4/3,4,48,49	CK	MK	K	SDL ,RE C	P-REC	F&S	II	
CO1,CO2	Summarise the chapters as per sutra ChNi4/53-55	CK	NK	K	SDL	T-OBT	F&S	II	

Topic 23Cha.Ni.05-Kushta nidana Adhyaya (Lecture :2 hours, Non lecture: 4 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT, TT-Theory, VV-Viva	F&S	II	
CO2	Explain basic meaning and importance of key terms such as apta dravya, saptakushta	CK	MK	K	L&GD, BS	QZ, COM, TT-Theory, VV-Viva	F&S	II	
CO4, CO6, CO7	Enlist and explain apta dravya of kushta ChNi5/3	CC	MK	KH	L&GD, C, B	TT-Theory, VV-Viva	F&S	II	

					L				
CO2,CO3,C O6	Explaintheroleof'kleda'inthemanifestationofkushtaChNi5/3	CC	DK	KH	L&G D,C BL	TT- Theory,VV- Viva	F&S	II	H-RN
CO2,CO3,C O6	Outlineanekarupaofkushta(multiplicity)basedonvedana,varna,samsthanaandprabhavaChNi5/4	CC	DK	KH	L_VC ,CBL	TT- Theory,VV- Viva	F&S	II	H-RN
CO2,CO3,C O6	EnlistsaptakushtawiththeirdoshapredominanceChNi5/5	CK	MK	K	L&G D,B L	TT- Theory,VV- Viva	F&S	II	
CO2,CO4,C O6	OutlinesamanyanidanaofkushtaChNi5/6	CC	DK	KH	L&G D,C BL	TT- Theory,VV- Viva	F&S	II	
CO4,CO6	EnlistpurvarupaofkushtaChNi5/7	CC	MK	KH	L&G D,C BL	TT- Theory,VV- Viva	F&S	II	H-RN
CO4,CO6	OutlineupadravaofkushtaChNi5/11	CC	DK	KH	L&G D,C BL	TT- Theory,VV- Viva	F&S	II	
CO2,CO3,C O6	ExplainsadhyasadhyataofkushtaChNi5/9	CK	MK	K	L& GD	TT- Theory,VV- Viva	F&S	II	
CO1,CO2	RecitesutrasChNi5/3,5	CK	MK	K	SDL ,RE C	P-REC	F&S	II	
CO1,CO2	SummarisethechapteraspersutraChNi5/16	CK	NK	K	SDL	T-OBT	F&S	II	
Topic 24Cha.Ni.06-Shosha nidana Adhyaya (Lecture :2 hours, Non lecture: 2 hours)									

CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT, TT-Theory, VV-Viva	F&S	II	

CO2	Explain basic meaning and importance of key terms such as chaturvidhaayatana and ekadasarupa	CK	MK	K	L&GD, BS	QZ, COM, TT-Theory, VV-Viva	F&S	II	
CO2, CO3, CO6	Explain role of four aetiological factors (chaturvidhaayatana) in samprapti of shosha. ChNi6/4, 6, 7(1), 8, 10	CC	MK	KH	L&PPT, CBL	TT-Theory, VV-Viva	F&S	II	
CO2, CO3, CO6	Enlist ekadasarupa of shosha ChNi6/14	CK	MK	K	L&GD, ML	TT-Theory, VV-Viva	F&S	II	
CO2, CO3, CO6	Outline the purvarupa of shosha ChNi6/13	CC	DK	KH	L&GD	TT-Theory, VV-Viva	F&S	II	
CO2, CO3, CO6	Explain sadhyasadhya of shosha ChNi6/15, 16	CK	MK	K	L&GD	TT-Theory, VV-Viva	F&S	II	
CO4, CO6, CO7	Relate concept of dharaneeya adharaneeya vegato the context of shoshanidana	CAP	MK	KH	DIS	CL-PR	F	II	
CO3, CO4, CO7	Justify the importance of ashtaaharavidhiviseshaayatana in the context of prevention of shosha	CAP	MK	KH	DIS, FC	CL-PR	F	II	
CO1, CO2	Recite sutras ChNi6/3, 5, 7, 9, 11, 14	CK	MK	K	SDL, REC	P-REC	F&S	II	
CO1, CO2	Summarise the chapter as per sutra Ch6/17	CK	NK	K	SDL	T-OBT	F&S	II	

Topic 25Cha.Ni.07-Unmada nidana Adhyaya (Lecture :2 hours, Non lecture: 4 hours)									
CO1,CO2	Justifythe positionofthechapterintheSamhitaanditsimportanc e`	CC	MK	K	L& GD	INT,TT- Theory,VV- Viva	F&S	II	
CO2	Explainbasicmeaningandimportanceofkeytermssuchasashta vibhrama,doshonmadaandbhutonmada	CK	MK	K	L& GD, BS	QZ,COM,TT- Theory,VV- Viva	F&S	II	

CO2,CO3,C O6	DefineunmadaandenlistashtavibhramaChN7/5	CK	MK	K	L& GD	QZ,TT- Theory,VV- Viva	F&S	II	
CO2,CO3,C O6	Illustrateashtavibhramaindifferenttypesofunmada	CAP	NK	KH	L_VC ,CBL	TT- Theory,VV- Viva	F	II	
CO4,CO6,C O7	ExplainsankhyasampraptiofunmadaChNi7/3	CK	MK	K	L& GD	TT- Theory,VV- Viva	F&S	II	
CO4,CO6,C O7	Interpretunmadaabhimukhakarana(predisposingfactorsforunmada)inthecontemporaryscenarioChNi7/3-4	CC	DK	KH	L_VC ,CBL	TT- Theory,VV- Viva	F&S	II	
CO2,CO3,C O6	Interprettheroleofprajnaparadhaasanimportantetiologicalfact orinthebackgroundofunmadaCa.Ni.7/19-22	CC	DK	KH	L& GD, L_V C	CR-RED,TT- Theory,VV- Viva	F&S	II	
CO4,CO6,C O7	Summarisedifferentdescriptions ofconceptofprajnaparadhaas aetiologifactorChSu8,11,ChViChSa1,ChVi3	CC	MK	KH	DIS, FC	PRN	F	II	
CO2,CO3,C O6	OutlinethepurvarupaofunmadaChNi7/6	CC	DK	K	L_VC ,CBL	TT- Theory,VV- Viva	F&S	II	
CO2,CO4,C O5	ExplainchikitsasutraofunmadaChNi7/8,9	CC	MK	K	L& GD	TT- Theory,VV- Viva	F&S	II	
CO2,CO3,CO 4,CO6	DifferentiatedoshonamdaandbhutonmadaChNi7/10-11	CC	DK	KH	L&P PT	TT- Theory,VV- Viva	F&S	II	
CO2,CO3,C O6	Summarizecauses,featurespurpose(prayojana)andtreatmentof agantuunmadaChNi7/12-17	CK	DK	K	L&P PT	TT- Theory,VV-	F&S	II	

						Viva			
CO1,CO2	RecitesutrasChNi7/3,5,19-22	CK	MK	K	SDL ,RE C	P-REC	F&S	II	
CO1,CO2	SummarisethechapterbasedonSutraChNi7/24	CK	NK	K	SDL	T-OBT	F&S	II	

Topic 26Cha.Ni.08-Apasmara nidana adhyaya (Lecture :2 hours, Non lecture: 4 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT, TT-Theory, VV-Viva	F&S	II	
CO2	Explain basic meaning and importance of key terms such as nidana, arthakararoga, vyadhisankara, tiryag gatadosha	CK	MK	K	L&GD, BS	QZ, COM, TT-Theory, VV-Viva	F&S	II	
CO2,CO4,CO6	Define apasmara ChNi8/5	CK	MK	K	L, L&PP, T	TT-Theory, VV-Viva	F&S	II	
CO2,CO4,CO6	Explain apasmara abhimukhakarana (predisposing factors of apasmara) ChNi8/4	CK	MK	KH	L&GD, CBL	TT-Theory, VV-Viva	F&S	II	
CO2,CO4,CO6	Outline visesha-lakshana of apasmara ChVi8/8	CC	DK	KH	L&GD	TT-Theory, VV-Viva	F&S	II	
CO2,CO4,CO6	Explain cikitsa sutra of apasmara ChNi8/10	CK	MK	K	L&GD	TT-Theory, VV-Viva	F&S	II	
CO2,CO4,CO6	Explain nidana arthakararoga ChNi8/16-19	CC	MK	KH	L&GD, L_VC, CBL	TT-Theory, VV-Viva	F&S	II	
CO2,CO4,CO6	Explain vyadhisankara ChNi8/21-22	CC	MK	KH	L&PPT, L_VC, CBL	TT-Theory, VV-Viva	F&S	II	H-RN

CO2,CO4,C O5	DifferentiatesudhaandasuddhachikitsaChNi8/23	CC	MK	KH	L&G D,BS ,CBL	TT- Theory,VV- Viva	F&S	II	

CO2,CO4,C O6	DefineandrelatedifferenttypesofsadhyasadyataChNi 8/33-35	CC	MK	KH	DIS, PBL, CBL, PER	TT- Theory,VV- Viva	F&S	II	H-RN
CO2,CO4,C O5	Describetiryagatadosha-cikitsasutraChNi8/36-39	CK	MK	K	L& GD	TT-Theory	F&S	II	
CO6,CO8	Documentexperiencesofphysiciansonnidanarthakararoga(A ctivityno.9)	PSY - SET	DK	KH	DIS, TPW	C-INT	F	II	
CO4,CO6,C O7	SummarisetheinformationgatheredfromNidanasthanathrough Quiz(activityno.10)	CAP	DK	KH	FC,D	QZ	F	II	
CO1,CO2	RecitesutrasChNi8/3,5,16-22,33-35,36-39	CK	MK	K	SDL ,RE C	P-REC	F&S	II	
CO1,CO2	Summarisethechapterbasedonsutra42-44	CK	NK	K	SDL	T-OBT	F&S	II	

Topic 27Cha.Vi.01- Rasa vimana Adhyayam(Lecture :2 hours, Non lecture: 3 hours)

CO1,CO2	Explainssthanaadhikaranaof(objectives)ofVimanasthanaChV i1/3	CK	MK	K	L& GD, LS	CR-W,TT- The ory,VV-Viva	F&S	III	
CO1,CO2	JustifythepositionofthechapterintheSamhitaanditsimportanc e	CC	MK	K	L& GD	INT,TT- Theory,VV- Viva	F&S	III	

CO2,CO4	Explainbasicmeaningandimportanceofkeytermssuchasprakritisamasamaveta,vikirtivishamasamaveta,aharavidhiviseshaayatana,satmya	CK	MK	K	DIS,P rBL	TT- Theory,VV- Viva	F&S	III	
CO2,CO4	Explaintheprakritisamasamavetandvikrutivishamasamavetsiddhantawithsuitableexamples.ChVi1/9,10	CK	MK	KH	L& GD	TT- Theory,VV- Viva	F&S	III	H-DG
CO2,CO4,C O5	Explainchaturvidhaprabhava(rasa-dravya-dosh-vikaraprabhava)withexamplesChVi1/12	CK	MK	KH	L& GD	TT- Theory,VV- Viva	F&S	III	H-DG

CO2,CO4	Describe the dravya prabhava in taila, ghrita and madhu with the help of 'samanyavisheshasiddhanta' ChVi1/14	CC	MK	KH	L&G D,B L	DEB, TT-Theory, VV-Viva	F&S	III	
CO2,CO5,CO7	Explain the dravyas which should be avoided for regular consumption ChVi1/15-19	CC	MK	KH	L&G D,R LE	M-CHT, TT-Theory, VV-Viva	F&S	III	
CO2,CO4,CO7	Explain satmya and its types ChVi1/20	CC	MK	KH	L&G D,BS	TT-Theory, VV-Viva	F&S	III	
CO2,CO7	Summarize ashtaaharavidhivisheshayatana and its role in preservation of health. ChVi1/20-23	CK	MK	K	L&G D,PS M	DEB, TT-Theory, VV-Viva	F&S	III	H-SW
CO2,CO4,CO7	Relate concept of satmya with satmya pareeksha Ch.Vi8	CC	MK	KH	DIS	CL-PR	F	III	
CO2,CO7	Explain aharavidhividhana and bhojyasadgunya ChVi1/24,25	CC	MK	KH	L&G D	TT-Theory, VV-Viva	F&S	III	H-SW
CO3,CO7	Appreciate the importance of popularizing importance of dietary rules (see activity list)	CAP	DK	KH	PrBL	Logbook	F	III	
CO4,CO5	Differentiate and apply samanagunadravya and samanagunabhuyishta dravya ChVi1/7	CAP	NK	KH	DIS	CL-PR	F	III	
CO1,CO2	Recite sutras ChVi1/9,10,20,24	CK	MK	K	SDL ,RE C	P-VIVA, TT-Theory	F&S	III	
CO1,CO2	Summarize the chapter based on sutra ChVi1/27,28	CK	NK	K	SDL	T-OBT, VV-Viva	F&S	III	

Topic 28 Cha.Vi.02-Trividha kushheya Adhyayam (Lecture :2 hours, Non lecture: 0 hours)

CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	KH	L&GD	INT, TT-Theory, VV-Viva	F&S	III	

CO2	Explainbasicmeaningofkeytermssuchastrividhakukshi, matra-amatraahara, amadosha, amavisha	CK	MK	K	L&GD, BS	QZ, COM, TT-Theory, VV-Viva	F&S	III	
CO2, CO4, CO7	ExplainaharamatrabasedontrividhakukshiChVi2/3	CC	MK	KH	L&GD, IB L	C-INT, TT-Theory, VV-Viva	F&S	III	
CO2, CO7	Explainthematravatahara(idealquantityoffood)andamatravatwaofaharawithitstypesChVi2/6	CC	MK	KH	L&GD	TT-Theory, VV-Viva	F&S	III	
CO4, CO7	JustifyeffectsofheenamatraandatimatraaharaChVi2/7	CAP	MK	KH	L&GD, PBL, FC	TT-Theory, VV-Viva	F&S	III	
CO2, CO7	EnlistandexplainthementalfactorsaffectingdigestionoffoodChVi2/8	CC	MK	KH	L_VC, EDU	TT-Theory, VV-Viva	F&S	III	
CO4, CO5	Outlinehetu, lingaandaushadhaoftwotypesofamadoshaChVi2/10-13	CC	MK	KH	L&PPT, CBL, PER	TT-Theory, VV-Viva	F&S	III	
CO2, CO7	ExplaintheconceptofamavishaChVi2/12	CC	MK	KH	L&GD, CBL	TT-Theory, VV-Viva	F&S	III	
CO2, CO3, CO4	DefineamasayawithreferencetoitspositionChVi2/17	CK	MK	K	L&GD, D-M	TT-Theory, VV-Viva	F&S	III	
CO1, CO2	RecitesutrasChVi2/9	CK	MK	K	SDL, REC	P-REC, TT-Theory	F&S	III	

CO2	SummarizethechapterbasedonsutraChVi2/19	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	

Topic 29 Cha.Vi.03-Janapadodhwansaneeya Vimanam Adhyaya (Lecture :2 hours, Non lecture: 2 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT, TT-Theory, VV-Viva	F&S	III	
CO2	Explain basic meaning and importance of key terms like janapadodhwamsa, daiva and purushakara	CK	MK	K	L&GD, BS	QZ, COM, TT-Theory, VV-Viva	F&S	III	
CO2,CO5	Justify the importance of timely collection of medicines ChVi3/4	CAP	DK	K	L&GD, BS	TT-Theory, VV-Viva	F&S	III	
CO2,CO7	Enlist the common causes of janapadodhwamsa ChVi3/6	CC	MK	KH	L&GD, BS, FC	TT-Theory, VV-Viva	F&S	III	
CO2,CO7	Describe the lakshanas of dushti of vayu, jala, desha and kala. ChVi3/7	CC	MK	KH	L_VC, PBL, RP	TT-Theory, VV-Viva	F&S	III	
CO4,CO7	Interpret janapadodhwamsa in contemporary epidemiology (see also activity list)	CAP	NK	KH	DIS, BS, PBL, FV	Logbook, VV-Viva	F&S	III	
CO2,CO5	Summarize the treatment principles of janapadodhwamsa karavikaras ChVi3/12-18	CK	MK	KH	L&GD	TT-Theory, VV-Viva	F&S	III	
CO2,CO7	Explain the role of adharm in janapadodhwamsa ChVi3/20	CC	MK	KH	DIS, BS	DEB, TT-Theory	F&S	III	
CO2,CO7	Outline the concept of Niyata and Aniyata Ayu. ChVi3/28-35	CC	DK	KH	L&GD, PBL	DEB, TT-Theory, VV-Viva	F&S	III	

CO3,CO4,CO	RelateconceptofdaivaandpurushakarawithreferencesCaSha	CC	MK	KH	DIS,F	CL-PR	F	III	

7	2/44.CaSh6/27.				C				
CO2,CO4,CO7	DifferentiatedaivaandpurushakaraChVi3/29-30	CC	MK	K	L&GD,BS	CR-W,TT-Theory,VV-Viva	F&S	III	
CO4,CO5	ExplainhetuviparitchikitsainjwaraChVi3/39-40	CC	MK	KH	L&GD,CBL	INT,TT-Theory,VV-Viva	F&S	III	
CO4,CO5	Explainapatarpanaanditstypes.ChVi42-44	CC	MK	KH	L&GD,CBL	TT-Theory,VV-Viva	F&S	III	
CO2,CO7	ExplainconceptofdeshaChVi3/47-48	CC	MK	K	L_VC,DIS,FV	PA,TT-Theory,VV-Viva	F&S	III	
CO2,CO4,CO7	Summarisethetermkarmawithreferencetodifferentcontexts	CC	MK	KH	DIS,FC	PRN	F	III	
CO1,CO2	RecitesutrasChVi3/6,10	CK	MK	K	SDL,REC	P-REC,TT-Theory	F&S	III	
CO1,CO2	SummarizethechapterbasedonsutraChVi3/49-52	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	
Topic 30Cha.Vi.04-Trividha roga vishesha vijnyaneeya adhyaya (Lecture :2 hours, Non lecture: 3 hours)									
CO1,CO2	JustifythepositionofthechapterintheSamhitaanditsimportance	CC	MK	KH	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2	Explainbasicmeaningandimportanceofkeytermssuchastrividharogavisheshavijnana	CK	MK	K	L&GD	QZ,COM,TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Explaintheapplicationofaptopadesha,pratyakshaandanumana	CC	MK	KH	L,CB	P-PS,TT-Theo	F&S	III	H-RN

	in clinical examination. ChVi4/3-8				L	ry, VV-Viva			
CO2	Recites sutra ChVi4/4,12	CK	MK	K	SDL, REC	P-VIVA, P-REC	F&S	III	
CO1, CO2	Summarise the chapter as per sutra no. ChVi.4/13-14	CK	NK	K	SDL	T-OBT, VV-Viva	F&S	III	
Topic 31 Cha. Vi. 05- Sroto vimana Adhyaya (Lecture :2 hours, Non lecture: 2 hours)									
CO1, CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	KH	L&GD	INT, TT-Theory, VV-Viva	F&S	III	
CO2	Explain basic meaning and importance of key terms such as srotas, srotodushti	CK	MK	K	L	TT-Theory, VV-Viva	F&S	III	
CO1, CO2	Explain importance of srotas ChVi5/3-4	CK	MK	K	L&GD, BS	QZ, COM, TT-Theory, VV-Viva	F&S	III	
CO2	Enlist the types of srotas ChVi5/7	CK	MK	K	L&GD	TT-Theory, VV-Viva	F&S	III	
CO2, CO3	Explain types and general causative factors of srotodushti ChVi5/23,24	CK	MK	K	L&GD	T-OBT, TT-Theory, VV-Viva	F&S	III	H-RN
CO4, CO5	Explain hetu, lakshan and chikitsa of specific srotodushti ChVi5/8,10-22,26-28	CK	MK	K	L&GD, CBL	TT-Theory, VV-Viva	F&S	III	H-RN
CO1, CO2	Recites sutras ChVi5/3,4,7,9-27	CK	MK	K	SDL, REC	P-REC, TT-Theory	F&S	III	

CO1,CO2	SummarizethechapterbasedonChVi5/28-30	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	

Topic 32Cha.Vi. 06-Roganika vimana adhyaya (Lecture :2 hours, Non lecture: 2 hours)									
CO1,CO2	JustifythepositionofthechapterintheSamhitaanditsimportanc e	CC	MK	K	L& GD	INT,TT- Theory,VV- Viva	F&S	III	
CO2	Explainbasicmeaningandimportanceofkeytermssuchasrogan eeka,anubandhya,anubandhy	CK	MK	K	L	TT- Theory,VV- Viva	F&S	III	
CO1,CO3	Enlistthetypesofdiseasesbasedonprabhav,bala,adhishtana,ni mmitta,ashay.ChVi6/3	CK	MK	K	L& GD	TT- Theory,VV- Viva	F&S	III	H-RN
CO2	Explaintherationalebehindclassificationofdiseases.ChVi6/4	CC	MK	KH	L& GD, BS	INT,TT- Theory,VV- Viva	F&S	III	
CO2,CO3	Enlistthediseasescausedbyshareeraandmanasadoshas.Explainth erelationbetweenshareeraandmanasadoshas.ChVi6/6-9	CK	MK	K	L& GD	TT- Theory,VV- Viva	F&S	III	
CO2,CO3	ExplainanubandhyaandanubandhadoshasCh.Vi6/11	CK	MK	K	L& GD	TT- Theory,VV- Viva	F&S	III	
CO2,CO3,C O7	Explainfourtypesofagni.ChVi6/12	CK	MK	K	L& GD, PL	TT- Theory,VV- Viva	F&S	III	
CO2,CO7	EnlisttypesofshareeraprakrutiChVi6/13	CK	MK	K	L& GD	P-ID,TT-Theo ry,VV-Viva	F&S	III	

CO2,CO7	SummarizethetreatmentprinciplesofPrakrutikadoshas(Vatala ,Pittal,ShlemalPrakrutis)ChVi6/14-18	CC	MK	KH	L& GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2	EnlistqualitiesofRajavaidyaChVi6/19	CK	MK	K	L,RP	P-RP,VV-Viva	F&S	III	
CO1	SummarizethechapterbasedonsutrasChVi6/42-44	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	
Topic 33Cha.Vi. 07- Vyadhita rupeeya vimana Adhyaya (Lecture :2 hours, Non lecture: 2 hours)									

CO1,CO2	JustifythepositionofthechapterintheSamhitaanditsimportanc e	CC	MK	KH	L& GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2	Explainbasicmeaningandimportanceofkeytermssuchasdvividahvyadhitapurusha	CK	MK	K	L	TT-Theory,VV-Viva	F&S	III	
CO2,CO3	Explain twotypesofvyadhitapurusha(guruvyadhitaandlaghuvyadhita)ChVi7/3,4	CC	MK	KH	L,RP	TT-Theory,VV-Viva	F&S	III	H-RN
CO2,CO8	Explain twotypesofvaidya(jnaniandajnani)ChVi7/4	CC	MK	KH	L& GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO3,CO4,CO5	Enlistthetypesofkrimis(seeactivitylistalso)ChVi7/9	CC	MK	KH	L&G D,FC ,EDU	QZ,PUZ,TT-Theory,VV-Viva	F&S	III	H-RN
CO4,CO5	ExplainthetrividhachikitsaChVi7/14	CK	MK	K	L& GD	TT-Theory,VV-Viva	F&S	III	

CO2	RecitesutraChVi7/28	CK	MK	K	REC	VV-Viva	F&S	III	
CO1,CO2	SummarizethechapterwiththehelpofSlokas31and32	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	
Topic 34Cha.Vi. 08-Rogabhishagjiteeyam Adhyaayam. (Lecture :5 hours, Non lecture: 11 hours)									
CO1,CO2	JustifythepositionofthechapterintheSamhitaanditsimportance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO1,CO2,C04	Explain the basic meaning and importance of sastrapareeksha,trividha upaya, tadvidyasambhasha, karya abhiivritti ghataka,dasavidhapareekshyabhava,dasavidhaaturapareeksha	CC	MK	K	L	TT-Theory,VV-Viva	F&S	III	
CO1,CO2	Explainshashtapareeksha.ChVi8/3	CC	MK	K	L&GD,BL	DEB,TT-Theory,VV-Viva	F&S	III	

CO2	Enlistthethreemeansofknowledge(trividhaupaya).ChVi8/6	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2	Explaintheadhyayanandadhyapanavidhi.(alsoseeactivitylist)ChVi8/7,8	CK	MK	K	L,W	SA,VV-Viva	F&S	III	
CO1,CO2	OutlinesambhashavidhiCVi8/16-18	CK	DK	KH	L&GD,E DU	DEB,TT-Theory,VV-Viva	F&S	III	
CO1	DescribethreetypesofparishatChVi8/19,20	CK	DK	K	L,RP,SDL	P-RP,VV-Viva	F&S	III	

CO1,CO2	EnlistvadamargapadaniChVi8/27	CK	DK	K	L,FC	TT-Theory,VV-Viva	F&S	III	
CO1,CO2	Explaindashavidhapareekshyabhavas.ChVi8/68-77,84	CK	MK	K	L&G D,B L	QZ,TT-Theory,VV-Viva	F&S	III	
CO3,CO4,CO6,CO7	ExplaindhatusamyapareekshaChVi8/89	CC	MK	KH	L,DIS	CHK,TT-Theory,VV-Viva	F&S	III	
CO1,CO2,CO6	Explaindashavidhaaturapareeksha.ChVi8/94-123	CC	MK	KH	L&G D,C BL	PUZ,TT-Theory,VV-Viva	F&S	III	H-RN
CO1,CO2	RecitethesutrasChVi.8/3,668-78.	CK	MK	K	SDL ,RE C	P-REC,TT-Theory	F&S	III	
CO1,CO2	Summarizethechapterwiththehelpofshlokas52-56	CC	NK	K	SDL	T-OBT,VV-Viva	F&S	III	
Topic 35Cha.Sha.01-Katithapurushheeya Adhyaya (Lecture :2 hours, Non lecture: 3 hours)									
CO1,CO2	Describethesthanaadhikarana(objectives)ofsharirasthanaCha.Sha8/69	CC	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	

CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CK	MK	K	L&GD	INT, TT-Theory, VV-Viva	F&S	II	
CO2	Explain basic meaning and importance of key terms purusha, manna, atma, yoga and moksha	CK	MK	K	L&GD, BS	QZ, COM, TT-Theory, VV-Viva	F&S	II	
CO2,CO4	Define ekadhatu purusha, shaddhatvatmak purush, chaturvimsahataikapurusha and rashipurusha, CaSha1/16,17,35	CK	MK	K	L&GD	TT-Theory, VV-Viva	F&S	II	
CO2,CO3,CO4	Explain lakshana, guna, vishaya and karma of manas and its role in jnanotpattikrama CaSha1/18-24	CC	MK	K	L&GD, FC	TT-Theory, VV-Viva	F&S	II	
CO2,CO4	Enlist ashtaprakruti and shodashavikara. CaSha1/63-64	CC	MK	KH	L&GD	TT-Theory, VV-Viva	F&S	II	
CO2,CO4	Explain srusti utpattikrama and pralaya CaSha1/66-69	CC	MK	KH	L&GD	TT-Theory, VV-Viva	F&S	II	
CO2,CO4,CO7	Identify atma linga as basic features of living organism CaSha1/70-74	CC	MK	K	DIS, FC	TT-Theory, VV-Viva	F&S	II	
CO2,CO5	Explain naishtikichikitsa CaSha1/86-94	CC	MK	KH	L&GD	TT-Theory, VV-Viva	F&S	II	
CO2,CO7	Explain dukha hetavah (causes of misery) CaSha1/98	CC	MK	KH	L&GD	TT-Theory, VV-Viva	F&S	II	

CO2,CO3,CO4,CO7	OutlineasatmyendriyarthasamyogaasacauseofdiseasesCaSha1/118-128.	CC	MK	KH	L&GD,FC	DEB,TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO	Defineandexplainprajnaaparadha,withtermsdhivibhramsha,	CC	MK	KH	L&G	TT-Theory,V	F&S	II	

7	dhrutivibhramsha,smritivibhramsha.CaSha1/99-102.				D	V-Viva			
CO2,CO4,CO7	Describevedana,vedanaadhishtanaandvedananivruttiCaSha1/134-137.	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO7	DefinestateofYogaCaSha1/138-141	CK	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO7	Outlinemokshaprapitiupaya.CaSha1/142-146	CC	DK	KH	L&GD,BS	P-VIVA,TT-Theory	F&S	II	
CO1,CO4,CO7	ExplainlakshanaofPrashaantaBhutaatma.CaSha1/155-156	CK	DK	K	L&GD	VV-Viva	F&S	II	
CO2,CO3,CO4,CO7	EnlistandexplainsmritihetuChSha1/148-149	CC	MK	KH	L&PPT	TT-Theory,VV-Viva	F&S	II	
CO3,CO7	Relatesmritihetewithprocessoflearning	CAP	NK	KH	L_VC,BS	VV-Viva	F	II	
CO3,CO8	Illustratesmritihetusthroughgame(activityno.11)	PSY-SET	DK	SH	EDU,SDL,PSM,GBL	O-GAME	F	II	

CO1,CO2	RecitesutrasCha.Sha.16-23,28-30,36,63,64,70-74, 98,102,109,137-139,148,149	CK	MK	K	SDL,RE C	P-REC,TT-Theory	F&S	II	
CO2	SummarizethechapterbasedonsutraCa.Sha1/156	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	II	
Topic 36Cha.Sha.02-Atulyagothreeyam Adhyaaya (Lecture :1 hours, Non lecture: 0 hours)									
CO1,CO2	JustifythepositionofthechapterintheShareerasthanaanditsimportance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	

CO2	Explain basic meaning and importance of key terms in thechapter atulya-gotra, beeja, dwireta, klipa, prajnaparadha,pratikarma,daiva	CK	DK	K	L&GD,BS	QZ,COM,TT-Theory,VV-Viva	F&S	II	
CO3,CO7	EnlistprerequisitesforconceptionChSha2/4	CK	MK	K	L&GD	QZ,TT-Theory,VV-Viva	F&S	II	
CO3,CO7	Summarizethefactorsaffectingconception,foetusChaSha 2/6-12	CK	DK	K	L&GD	QZ,TT-Theory,VV-Viva	F&S	II	
CO2,CO7	Enlistshodasadhatu(16factors)intheformationoffetusChSha2/3 2,33	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO7	Outlinefeaturesofmultiplepregnancies,dwireta(hermaphroditism)andothertypesofsexualabnormalitiesCash2/12-14,18-21	CK	DK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO7	Explainlakshanasofsadyogruhitgarbhinilakshana.CaSha 2/23-27	CK	DK	K	L&GD	TT-Theory,VV-Viva	F&S	II	

CO3,CO7	Explainativahikapurusha(factorscarryingfrompreviousbirthto onextbirth).CaSha2/31-32	CK	MK	K	L&G D,IB L	CR-W,TT- The ory,VV-Viva	F&S	II	
CO3,CO7	DifferentiatedaivakaraandpurushaakaraCaSha2/44.	CK	MK	K	L& GD	TT- Theory,VV- Viva	F&S	II	
CO3,CO7,C O8	Explainnirogalakshana.Casha1/46-47	CK	DK	K	L&G D,C BL	CHK,TT- Theo ry,VV-Viva	F	II	
CO1,CO2	RecitesutrasCha.Sha.2/26,27,35,44,45-47	CK	MK	K	SDL ,RE C	P-REC,TT- Theory	F&S	II	
CO1,CO2	SummarizethechapterbasedonCaSha2/48	CK	NK	K	SDL	T-OBT,VV- Viva	F&S	II	

Topic 37Cha.Sha.03-Khuddika garbhavakranti Adhyaya (Lecture :1 hours, Non lecture: 0 hours)									
CO1,CO2	Justifythe positionofthechapterintheShareerasthanaanditsimportance	CK	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	
CO2	Explainbasicmeaningandimportanceofkeytermssuchasmatrija,pitrija,sattvaja,satmyaja,rasaja,atmajabhavas,beejaandbeejabhaga	CK	MK	K	L&GD,BS	QZ,COM,TT-Theory,VV-Viva	F&S	II	
CO3,CO7	Enlistfactorsresponsiblefortheformation,growthoftheembryoChaSha 3/3	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO1,CO3,CO7	Outlinethesambhashaparishatongarbhautpatti(formationofembryo)andfactorscontributedfromdifferentagentslikesatva,satmyaetc.ChSha3/4	CK	DK	K	L&GD	PRN,DEB	F&S	II	
CO3,CO7	Explainmatruja,pitruja,atmaja,satmyaja,rasaja,satvajabhavasofgarbhaChSha3/6-14	CK	DK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO3,CO7	Explainroleofbeeja-beejabhagadushtiincongenitalabnormalitiesChSha3/17	CAP	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2	RecitesutrasnoChSha3/17	CK	MK	K	SDL,REC	P-REC,TT-Theory	F&S	II	
CO1	SummarizethechapterbasedonsutraChSha3/26-27.	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	II	
Topic 38Cha.Sha.04-Mahatee garbhavakranti Adhyaya (Lecture :1 hours, Non lecture: 2 hours)									
CO1,CO2	Justifythe positionofthechapterintheShareerasthanaanditsimportance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	

CO2	Explainbasicmeaningandimportanceofkeytermssuchasgarbh opaghatakarbhava,manasprakriti.	CK	MK	K	L& GD, BS	QZ,COM,TT- Theory,VV- Viva	F&S	II	

CO3,CO7	DefinegarbhaCh.Sha4/5	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO7	EnlistcomponentsofshaddhatvaatmakpurushCaSh4/6	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO7	Explainfunctionsofatmaintheformationofgarbha.Chsha4/8	CK	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO7	OutlinemaasanumasikgarbhaposhanaChSha4/9-11,20-24	CK	DK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO7	Explaingarbhopaghatakarabhavas.ChSh4/18	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO7	SummarizethecausesofcongenitalabnormalitiesChSha4/30-32	CK	MK	K	L&GD	P-POS,TT-Theory	F&S	II	
CO3,CO7	Explainqualitiesofsatva-raja-tama.ChaSh4/36	CK	MK	KH	L&GD	QZ,TT-Theory,VV-Viva	F&S	II	
CO3,CO7	Outlinefeaturesofshodashmanasaprakritis(sixteentypesofmentalconstitution).ChSha4/36-40	CK	DK	KH	L&GD, L_V, CBL	PM,TT-Theory,VV-Viva	F&S	II	
CO3,CO6	Identifysomeimportantfeaturesofmanasaprakritiinindividuals(also seeactivitylist)	PSY-SET	NK	SH	CBL,RP,D	P-RP,VV-Viva	F	II	
CO1,CO2	RecitesutrasChSha4/6,36	CK	MK	K	SDL,RE	P-REC,TT-Theory	F&S	II	

					C				
CO1,CO2	Summarizethechapteraspersutrasgivenattheendofthechapter CaSha4/42-45.	CK	NK	K	SDL	T-OBT,VV- Viva	F&S	II	

Topic 39Cha.Sha.05-Purushavichaya Shareera Adhyaya (Lecture :1 hours, Non lecture: 4 hours)									
CO1,CO2	Justifythe positionofthechapterintheSamhita	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	
CO2	Explainthebasicmeaningandimportanceofkeytermsinthechapter suchaslokapurushasamyata,hetvadipanchakaandsatyabuddhi	CK	MK	K	L&GD,BS	QZ,COM,TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO7	DefinelokapurushasamyasiddhantaChSh.4/13;5/3	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO4	Illustrateloka-purushasamyasiddhantawit hexamplesChSha5/5	CAP	DK	KH	DIS,BS,PER	TT-Theory,VV-Viva	F&S	II	
CO2,CO7	DefineanddescribesatyabuddhiChSh.5/7,16-19	CC	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO4	EnlistanddescribehadvadipanchakaChSh.5/8	CK	DK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO4,CO7	Illustratepravritti-nivrittiupaya(seeactivitylist)	CAP	DK	KH	D	P-PS,TT-Theory,VV-Viva	F	II	
CO1,CO2	RecitesutrasChSha5/3,5,8,16	CK	MK	K	SDL,REC	P-REC,TT-Theory	F&S	II	
CO1,CO2	Summarizethechapteras persutraChSh5/25,26	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	II	
Topic 40Cha.Sha.06-Sareeravichaya adhyaya (Lecture :1 hours, Non lecture: 2 hours)									

CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT, TT-Theory, VV-Viva	F&S	II	
CO2	Explain the basic meaning and importance of key terms in the	CK	MK	K	L&G	QZ, COM, TT-	F&S	II	

	chapters such as vriddhikarabhava, kalakaalamrityu and paramayu				D, BS	Theory, VV-Viva			
CO2	Defines hareera Ch. Sh. 6/4	CK	MK	K	L&GD	TT-Theory, VV-Viva	F&S	II	
CO2, CO4	Applies manyaviseshasiddhanta in shareera Ch. Sh. 6/11	CAP	MK	KH	L&GD	TT-Theory, VV-Viva	F&S	II	
CO2	Describes hareera vriddhikarabhava Ch. Sh. 6/12	CK	MK	K	L&GD	TT-Theory, VV-Viva	F&S	II	
CO2	Describe balavriddhikarabhava Ch. Sh. 6/13	CK	MK	K	L&GD	TT-Theory, VV-Viva	F&S	II	
CO2	Explain aharaparinama karabhava Ch. Sh. 6/14, 15	CK	MK	K	L&GD	TT-Theory, VV-Viva	F&S	II	
CO2, CO7	Classify shareera-gunas into malarupa and prasadarupa Ch. Sh. 6/16, 17	CK	MK	K	L&GD	TT-Theory, VV-Viva	F&S	II	
CO2	Explain the concept of kala and Akala Mrithyu Ch. Sh. 6/28	CK	DK	K	L&GD	TT-Theory, VV-Viva	F&S	II	

CO2,CO7	DefineparamaayukaranamCh.Sh6/30	CK	DK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO7	Analysedatarelatedtoakala-mrityu(seeactivitylist)	CAP	DK	KH	DIS,IBL,EDU	M-CHT	F	II	
CO1,CO2	RecitethesutraChSha6/4,5-11,12,13,17,28,30	CK	MK	K	SDL,RE C	P-REC,TT-Theory	F&S	II	
CO1,CO2	SummarizethechapteraspersutraChSh6/31-34	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	II	

Topic 41Cha.Sha.07- Sareerasankhya sareera Adhyaya (Lecture :1 hours, Non lecture: 2 hours)									
CO1,CO2	JustifythepositionofthechapterintheSamhitaanditsimportance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	
CO2	Explainthebasicmeaningandimportanceofkeytermsinthechaptersuchaschetanaadishtana,pranayathana,koshtanga,pratyang,anjalipramanaetc.	CK	MK	K	L&GD,BS	QZ,COM,TT-Theory,VV-Viva	F&S	II	
CO2,CO3,CO7	ExplainparamanubhedashariramChSha7/17	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO1,CO2	RecitesutraChSha7/17	CK	MK	K	SDL,RE C	P-REC,TT-Theory	F&S	II	
CO1,CO2	SummarizethechapteraspersutraChSha7/19,20	CK	NK	K	SDL	T-OBT	F&S	II	
Topic 42Cha.Sha.08-Jathisutreeya Adhyaya (Lecture :1 hours, Non lecture: 12 hours)									

CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT, TT-Theory, VV-Viva	F&S	II	
CO2	Explain basic meaning and importance of key terms in the chapter such as jathi, pumsavana, sutikagaram etc	CK	MK	K	L&GD, BS	QZ, COM, TT-Theory, VV-Viva	F&S	II	
CO2	Enlist garbha upagata karabhava Ch.Su8/21	CK	MK	K	L&GD	TT-Theory, VV-Viva	F&S	II	
CO2	Describe the infrastructure of sutikagaram Ch.Su8/33	CK	NK	K	PrBL, SDL	M-MOD, TT-Theory	F&S	II	V-BL
CO3,CO8	Demonstrate garbhopagata karabhava through skit (see activity list)	PSY-SET	DK	KH	ML, RP	QZ, CHK, VV-Viva	F	II	
CO1,CO2	Summarize the chapter as per the sutra Ch.Su8/68,69	CK	NK	K	SDL	T-OBT, VV-	F&S	II	

						Viva			
Topic 43 Cha.In.1-Varnasvariya Indriya Adhyaya (Lecture :1 hours, Non lecture: 1 hours)									
CO1,CO2	Describe sthana adhikarana (objectives) of Indriya sthana	CK	MK	KH	L&GD	INT, TT-Theory, VV-Viva	F&S	III	
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	KH	L&GD	INT, TT-Theory, VV-Viva	F&S	III	
CO2	Explain basic meaning and importance of key terms such as arishta, vikritibheda, varna, swara etc. related to rishta	CK	MK	K	L&GD, BS	QZ, COM, TT-Theory, VV-Viva	F&S	III	

CO2,CO6	EnlistfactorsforassessingrishtaRef:Ch.In1/3	CK	MK	K	L&G D,B L	TT- Theory,VV- Viva	F&S	III	
CO2,CO6	Enlistsixtypesofprakrutibheda.ChIn1/5	CK	MK	K	L&G D,E DU	TT- Theory,VV- Viva	F&S	III	
CO2,CO6	Enistvikritibheda(typesofvikriti)inthecontextofrishtaChIn1/ 6,7,17-23	CK	MK	K	L& GD	TT- Theory,VV- Viva	F&S	III	
CO2,CO6	ExplainprakrutaandvaikarikavarnaChIn1/8,9	CK	MK	K	L&G D,M L	TT- Theory,VV- Viva	F&S	III	
CO2,CO6	Summarizevarnavishayakarishhta(rishtarelatedtovarna)ChIn 1/9-13	CC	MK	KH	L& GD	TT- Theory,VV- Viva	F&S	III	
CO2,CO6	Explainprakrutaandvaikarikaswara(normalandabnormalvoic es)ChIn1/14	CK	MK	K	L&G D,E DU	QZ,TT- Theory,VV- Viva	F&S	III	
CO2,CO6	Summarizeswaravishayakarishhta(arishtarelatedtovoice)ChIn 1/15,24,25	CC	DK	KH	L& GD	TT- Theory,VV- Viva	F&S	III	

CO1,CO2	SummarizethechapterChIn1/26	CC	NK	KH	SDL	T-OBT,VV-Viva	F&S	III	
Topic 44Cha.In.2-Pushpitakam Indriya Adhyaya (Lecture :1 hours, Non lecture: 0 hours)									
CO1,CO2	Justifythepositionofthechapterinthesequence	CK	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2	Explainbasicmeaningandimportanceofkeytermssuchasniyat arishta,aniyatarishta	CK	MK	K	L&GD,BS	QZ,COM,TT-Theory,VV-Viva	F&S	III	
CO6	Outlinegandhavishayakarishtha(prognosticsignsidentifiedthroughsmell)ChIn2/7-16	CK	DK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO3,CO6	Summarizerasavishayakarishtha(prognosticsignsrelatedtotaste)ChIn2/17-22	CK	DK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO1,CO2	SummarisethechapterChIn3/23	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	
Topic 45Cha.In.3-Parimarshaneeyam Indriyam Adhyaya (Lecture :1 hours, Non lecture: 0 hours)									
CO1,CO2	JustifythepositionofthechapterintheSamhitaanditsimportance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2,CO6	EnlistSparshagamyabhava(palpablesigns)inarishtaChIn3/4	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO6	ExplainSparshavishayakArishtalakshna(based\onpalpation))ChIn3/5,6	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	

CO1,CO2	SummarisethechapterasperthesutrasgivenattheendofthechapterChIn3/7	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	
Topic 46Cha.In.4-Indriyaneekam Indriya adhyaya (Lecture :1 hours, Non lecture: 0 hours)									

CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CK	MK	K	L&GD	INT, TT-Theory, VV-Viva	F	III	
CO2,CO6	Explain indriya vishayaka arishtasamanyaniyama (general rule regarding involvement of indriya) ChIn4/3-6	CK	MK	K	L&GD	TT-Theory, VV-Viva	F&S	III	
CO1,CO2	Summarise the chapter as per the sutras given at the end of the chapter ChIn4/27	CK	NK	K	SDL	T-OBT, VV-Viva	F&S	III	
Topic 47 Cha.In.5-Purvarupeeyam Indriyam Adhyaya (Lecture :1 hours, Non lecture: 2 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT, TT-Theory, VV-Viva	F&S	III	
CO2,CO6	Enlist jvararupavishayakapoorvaroopi arishta (rishta based on purvarupa of jvara) ChIn5/3-5	CK	MK	K	L&GD	TT-Theory, VV-Viva	F&S	III	
CO2,CO3,CO4	Define swapna ChIn5/41-42	CK	MK	K	L&GD	TT-Theory, VV-Viva	F&S	III	
CO2,CO6	Enlist and explain swapna bheda (types of swapna) ChIn5/43	CC	MK	KH	L&GD	TT-Theory, VV-Viva	F&S	III	
CO1,CO2	Recite sutra ChIn5/41-43	CK	MK	K	SDL, REC	P-REC, TT-Theory	F&S	III	
CO1,CO2	Summarise the chapter as per sutra ChIn5/47	CK	NK	K	SDL	T-OBT, VV-Viva	F&S	III	
Topic 48 Cha.In.6-Katamanisharireeyam Indriyam Adhyaya (Lecture :1 hours, Non lecture: 0 hours)									

CO1,CO2	Justify the position of the chapter in the Samhita and explain basic meaning and importance of key terms in the chapter	CK	MK	K	L&GD	INT, TT-Theory, VV-Viva	F&S	III	
CO2,CO3,CO6	Outline arishta related to pureesha, mutra and swayathu Ch In 6 /11-19	CC	DK	K	L&GD	TT-Theory, VV-Viva	F&S	III	

CO1,CO2	Summarisethechapteraspersutrasgivenattheendofthechapter ChIn6/25	CK	NK	K	SDL	T-OBT,VV- Viva	F&S	III	
Topic 49Cha.In.7-Pannarupiyam Indriyam Adhyaya (Lecture :1 hours, Non lecture: 0 hours)									
CO1,CO2	JustifythepositionofthechapterintheSamhita	CK	MK	K	L& GD	INT,TT- Theory,VV- Viva	F&S	III	
CO2,CO3,C O6	Explainbasicmeaningandimportanceofchaya,pratichayaandp rabha	CC	MK	K	L& GD	TT- Theory,VV- Viva	F&S	III	
CO2,CO6	Explainpratichayavishayakaarishta.ChIn7/4-6	CK	MK	K	L& GD	TT- Theory,VV- Viva	F&S	III	
CO2,CO6	Explainchayavikrutiarishtas.ChIn7/4-6	CK	MK	K	L& GD	TT- Theory,VV- Viva	F&S	III	
CO2,CO6	EnlistfivetypeschayaChIn7/10-13	CK	MK	K	L& GD	TT- Theory,VV- Viva	F&S	III	
CO2,CO6	EnlistseventypesofprabhaChIn7/14-15	CK	MK	K	L& GD	TT- Theory,VV- Viva	F&S	III	
CO2,CO3,C O6	DifferentiatechayaandprabhaChIn7/16-17	CC	MK	K	L_VC	TT- Theory,VV- Viva	F&S	III	
CO1,CO2	SummarisethechapterChIn7/32	CK	NK	K	SDL	T-OBT,VV- Viva	F&S	III	
Topic 50Cha.In.8-Avakshiraseeyam Indriyam Adhyaya (Lecture :1 hours, Non lecture: 0 hours)									

CO1,CO2	Justify position of the chapter in Samhita	CC	MK	K	L&GD	INT, TT-Theory, VV-Viva	F&S	III	
CO1,CO2	Summarise the chapter as per sutra given at the end of the chapter	CK	NK	K	SDL	T-OBT, VV-Viva	F&S	III	

Topic 51 Cha.In.9-Yasya shyavanimittiya Indriya Adhyaya (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Justify position of the chapter in Samhita	CK	MK	K	L&GD	INT, TT-Theory, VV-Viva	F&S	III	
CO2	Explain basic meaning and importance of key terms such as ashta maharoga	CC	MK	K	L	TT-Theory, VV-Viva	F&S	III	
CO2, CO4, CO6	Enlist ashta maharogas ChIn 9/8-9	CC	MK	K	L&GD	TT-Theory, VV-Viva	F&S	III	
CO1, CO2	Summarise the chapter as per the sutra given at the end of the chapter ChIn 9/23, 24	CK	NK	K	SDL	T-OBT, VV-Viva	F&S	III	
Topic 52 Cha.In.10-Sadyomaraneeeyam Indriya Adhyaya (Lecture :1 hours, Non lecture: 0 hours)									
CO1, CO2	Justify position of the chapter and key terms in the chapter	CC	MK	K	L&GD	INT, TT-Theory, VV-Viva	F&S	III	
CO2, CO6	Explain sadyomaraneeeyashtas ChIn 10/3-20	CK	MK	K	L&GD	TT-Theory, VV-Viva	F&S	III	
CO1, CO2	Summarise the chapter as per the sutras given at the end of the chapter ChIn 10/21	CK	NK	K	SDL	T-OBT, VV-Viva	F&S	III	
Topic 53 Cha.In.11-Anujyotiyam Indriya Adhyaya (Lecture :1 hours, Non lecture: 0 hours)									
CO1, CO2	Justify the position of the chapter and explain key terms such as ashtas ChIn 11/29	CC	MK	K	L&GD	INT, TT-Theory, VV-Viva	F&S	III	
CO2, CO6	Define ashtas ChIn 11/29	CK	MK	K	L&GD	TT-Theory, VV-	F&S	III	

						Viva			
CO1,CO2	RecitesutraChIn11/29	CK	MK	K	SDL	P-VIVA,TT-Theory	F&S	III	

Topic 54Cha.In.12-Gomayachurniyam Indriya Adhyaya (Lecture :1 hours, Non lecture: 17 hours)									
CO1,CO2	Justifytheposttionofthechapterandexplainkeytermssuchasmu murshu,prasastadutaandmangalikadravya	CC	MK	K	L& GD	INT,TT- Theory,VV- Viva	F&S	III	
CO2,CO6	SummarizemumurshulakshanaChIn12/9-25	CK	MK	K	L& GD	TT- Theory,VV- Viva	F&S	III	
CO2,CO6	OutlineprashastadootalakshanaandmangalikadravyaChIn 12/71-80	CK	MK	K	L& GD	TT- Theory,VV- Viva	F&S	III	
CO2,CO4	DefinearogyainthecontextofarishtaChIn12/87	CC	MK	K	L& GD	TT- Theory,VV- Viva	F&S	III	
CO1,CO2	Summarisethechapteraspersutragivenattheendofthechapt erChIn12/89	CK	NK	K	SDL	T-OBT,VV- Viva	F&S	III	

List of Practicals (Term and Hours)

PRACTICALS (As a part of NLH) 100			
S.No	List of Topics	Term	Hours
1	SHLOKAPATHANA-1	1	10
2	LEARNING THROUGH VYAKHYANA-1	1	3
3	OBSERVING THE PRACTICAL UTILITY OF SNEHANA AND SWEDANA	1	2
4	IDENTIFICATION OF BAHUDOSHAKSHANA IN PATIENTS	1	2
5	ASSESSMENT OF DISEASES BASED ON TRIVIDHA BODHYASANGRAHA	1	2
6	IDENTIFICATION OF ASHTADOSHAINSTHOULYA	1	2
7	CLINICAL OBSERVATION ON NIJAAGANTUJARELATIONSHIP	1	2
8	CLINICAL OBSERVATION ON SHADUPAKRAMA	1	2
9	ASSESSMENT OF FAKTADUSHTIKARANA IN SPECIFIC CLINICAL CONDITIONS	1	2
10	OBSERVATION ON USE OF AGRYAAUSHADHAIN CLINICAL PRACTICE	1	2
11	ASSESSMENT OF DHATU-UPADHATU-MALAPRADO SHAJAVIKARA IN PATIENTS	1	3
12	SHLOKAPATHANA-2	2	10
13	LEARNING THROUGH VYAKHYANA-2	2	3
14	CASE TAKING IN RELATION TO NIDANAPANCHAKA	2	12
15	DIFFERENTIAL DIAGNOSIS OF SKIN DISEASES BASED ON GUIDELINES ON KUSHTA	2	2
16	PRAMANAPARIKSHA	2	2
17	IDENTIFICATION OF VIKARA VIGHATA BHAVA ABHAVA IN PATIENTS	2	2
18	EXPLORATION OF FLOKAPURUSHASAMYAVADAIN THE BACKGROUNDOF ONE HEALTH	2	2
19	SHLOKAPATHANA-3	3	10
20	LEARNING THROUGH VYAKHYANA-3	3	3
21	LEARNING THROUGH SAMHASHA PARISHAD	3	6
22	SROTAS PROFORMA	3	2

23	LEARNINGTHROUGHTANTRAYUKTI	3	5
24	ASSESSMENTOFHEALTHTHROUGHDHATUSAMYAPAREEKS HA	3	2
25	AGNIASSESSMENTBASEDONAPACHARA	3	2
26	TRIVIDHAROGAVISHESHAVIJNANAINDIAGNOSIS	3	3
27	ASSESSMENTOFUPASAYAANDANUPASAYAINPATIENTS	3	2

Table 4: Learning objectives (Practical)

A4 Course outcome	B4 Learning Objective (At the end of the session, the student should be able to)	C4 Domain/sub	D4 Must to know / desirable to know / Nice to know	E4 Level Does/ Show show/ Know show/ Know	F4 T-L method	G4 Assessment (Refer abbreviations)	H4 Formative/ summative	I4 Term	K4 Integration
Topic 1 SHLOKA PATHANA- 1									
CO1,CO2	Recite the selected slokas in each chapter	CK	MK	K	REC	PP- Practical, VV- Viva	F&S	I	
CO1,CO2	Compile slokas selected for recitation	CK	MK	K	SDL	PP- Practical, VV- Viva	F&S	I	
Topic 2 LEARNING THROUGH VYAKHYANA-1									
CO1,CO2	Interpret selected sutras with the help of Ayurveda Deepika Vyakhya of Carakasamhita	CC	MK	KH	L&G D, DI S ,TBL	PP- Practical, VV- Viva	F&S	I	
CO1,CO2	Prepare a narrative summary of vyakhya for the specified sutras	CAP	MK	KH	SDL	PP- Practical, VV- Viva	F&S	I	
CO1,CO2	Appreciate importance of Vyakhya in learning Samhita	AFT - REC	MK	KH	D	P-VIVA	F&S	I	

Topic 3 OBSERVING THE PRACTICAL UTILITY OF SNEHANA AND SWEDANA									
CO4,CO5	Identify and compile experiences of people undergoing sneha-	CAP	MK	KH	SDL,	PP-Practical	F&S	I	V-PC

	sweda				RLE				
Topic 4 IDENTIFICATION OF BAHUDOSHA LAKSHANA IN PATIENTS									
CO3,CO4,CO6,CO7	Assess Bahudoshalakshanainpatients	PSY - SET	MK	SH	CBL ,PT	PP- Practical,VV- Viva	F&S	I	
CO3,CO4,CO6,CO7	Appreciate the role and importance of assessing bahudoshalakshanainclinicalpractice	AFT - REC	MK	SH	CBL ,PR A	PP- Practical,VV- Viva	F&S	I	
Topic 5 ASSESSMENT OF DISEASES BASED ON TRIVIDHA BODHYA SANGRAHA									
CO3,CO4,CO6,CO7	Assess diseases based on trividha-bodhya-sangraha i.e. vikaraprakriti (nature of disease), samuthana (causative factors) and adhishtana (site of disease)	PSY - SET	MK	SH	CBL ,PR A	PP- Practical,VV- Viva	F&S	I	
CO3,CO4,CO6,CO7	Appreciate role and importance of trividha bodhya sangraha in clinical practice	AFT - REC	MK	SH	CBL ,PR A	PP- Practical,VV- Viva	F&S	I	
Topic 6 IDENTIFICATION OF ASHTA DOSHA IN STHOULYA									
CO3,CO4,CO6,CO7	Assess ashtadosha of a sthoulia in subjects	PSY - SET	MK	SH	CBL ,D	TT- Theory,VV- Viva	F&S	I	
CO3,CO4,CO6,CO7	Maintain good communication skills with patients	AFT - RES	MK	SH	CBL ,D,P RA	TT- Theory,VV- Viva	F&S	I	
Topic 7 CLINICAL OBSERVATIONS ON NIJA AGANTUJA RELATIONSHIP									
CO3,CO4,CO6,CO8	Identify relationship between nija and agantu in clinical conditions	PSY - SET	MK	SH	CBL ,PT, D	PP- Practical,VV- Viva	F&S	I	

CO4,CO8	Developgoodrapportwithpatients	AFT - VAL	MK	SH	CBL ,PT, D	P-VIVA,VV- Viva	F&S	I	

Topic 8 CLINICAL OBSERVATION ON SHADUPAKRAMA									
CO3,CO4,CO5,CO8	Identify shadupakram treatment plans of different diseases	PSY - SET	MK	SH	CBL ,PT, D	PP- Practical,VV- Viva	F&S	I	
CO5,CO8	Develop good communication skills in clinics	AFT - REC	MK	SH	CBL ,PT, D	PP- Practical,VV- Viva	F&S	I	
Topic 9 ASSESSMENT OF RAKTA DUSHTI KARANA IN SPECIFIC CLINICAL CONDITIONS									
CO3,CO4,CO6,CO7	Identify raktadushtikaranas in patients affected by raktadushti, especially, skin diseases	PSY - SET	MK	SH	CBL ,D,P RA	PP- Practical,VV- Viva	F&S	I	
CO3,CO4,CO6,CO7	Develop good communication skills with patients	AFT - REC	MK	SH	CBL ,D,P RA	PP- Practical,VV- Viva	F&S	I	
Topic 10 OBSERVATIONS ON USE OF AGRYA AUSHADHA IN CLINICAL PRACTICE									
CO1,CO4,CO5	Justify use of agraushadha in common clinical conditions	PSY - ME C	MK	SH	PER	P-VIVA	F&S	I	
CO8	Develop good communication skills	AFT - REC	MK	SH	DIS, PER	P-VIVA	F&S	I	
Topic 11 ASSESSMENT OF DHATU-UPADHATU-MALA PRADOSHAJA VIKARAS IN PATIENTS									
CO3,CO4,CO6,CO7	Identify dhatu-mala-upadhatu pradoshajavikaras in patients	PSY - SET	MK	SH	CBL, PT,D _BED	P-EXAM,VV- Viva	F&S	I	

CO3,CO4,C O8	Develop rapport with patients	AFT - REC	MK	SH	CBL, D_B ED	P-VIVA,VV- Viva	F&S	I	

Topic 12 SHLOKA PATHANA- 2									
CO2	Recite the selected slokas in each chapter	CK	MK	K	REC	P-VIVA	F&S	II	
CO2	Compile slokas selected for recitation	CK	MK	K	TBL ,SD L	P-VIVA	F&S	II	
Topic 13 LEARNING THROUGH VYAKHYANA-2									
CO2	Interpret selected sutras with the help of Ayurveda Deepika Vyakhya of Caraka Samhita	CAP	MK	KH	L&G D,DI S ,TBL	P-VIVA	F&S	II	
CO2	Prepare a narrative summary of vyakhya for the specified sutras	CAP	MK	KH	DIS, SDL	P-VIVA	F&S	II	
CO1,CO2	Appreciate importance of Vyakhya in learning Samhita	AFT - REC	MK	KH	D	P-VIVA	F&S	II	
Topic 14 CASE TAKING IN RELATION TO NIDANA PANCHAKA									
CO3,CO4,CO 6,CO7	Perform case taking based on nidana-panchaka	PSY - SET	MK	SH	CBL, D_B ED	P-VIVA	F&S	II	

CO8	Develop rapport with patients	AFT - REC	MK	SH	CBL, D_B ED	T- EMI,P- VIVA	F&S	II	
CO6,CO8	Develop clinical skills based on Ayurvedic clinical methods	PSY - SET	MK	SH	CBL, D_B E	PP-Practical	F&S	III	

					D				

Topic 15 DIFFERENTIAL DIAGNOSIS OF SKIN DISEASES BASED ON GUIDELINES ON KUSHTA

CO4,CO6,CO8	Assess skin diseases based on Ayurvedic parameters	PSY - SET	MK	SH	CBL, D_B ED	PP-Practical	F&S	II	
CO6,CO8	Develop skills based on Ayurvedic clinical methods	AFT - REC	MK	SH	D_B ED	PP-Practical	F&S	II	

Topic 16 PRAMANA PARIKSHA

CO3,CO4,CO6,CO7	Assess physiometry based on pramana- pareeksha mentioned in Ayurveda	PSY - SET	MK	SH	D	VV-Viva	F&S	II	
CO8	Appreciate importance of Ayurvedic methods of measurements	AFT - REC	MK	SH	D	VV-Viva	F&S	II	

Topic 17 IDENTIFICATION OF VIKARAVIGHATA BHAVA ABHAVA IN PATIENTS

CO2,CO3,CO4,CO6,CO7	Apply the concept of "vikaravisatabhavabhavapractivisesha" in understanding diseases	CAP	MK	KH	CBL ,CD	P-VIVA	F&S	II	
CO6	Perform case taking based on the concept of vikaravighatabhavaabhava	PSY -	MK	SH	CD,D	P-VIVA	F&S	II	

		SET							
Topic 18 EXPLORATION OF LOKA PURUSHA SAMYA VADA IN THE BACK GROUND OF ONE HEALTH									
CO4,CO7,C O8	Apply lokapurusha-samya-sidhanta in contemporary life	CAP	MK	KH	DIS, BS,Pr BL	VV-Viva	F&S	II	
Topic 19 SHLOKA PATHANA-3									
CO1,CO2	Recite the selected slokas in each chapter	CK	MK	K	REC	VV-Viva	F&S	III	

CO1,CO2	Compileslokasselectedforrecitation	CK	MK	K	SDL	VV-Viva	F&S	III	
Topic 20LEARNING THROUGH VYAKHYANA-3									
CO1,CO2	InterpretsselectedsutraswiththehelpofAyurvedaDeepikaVyakhyaofCarakasamhita	CAP	MK	KH	L,LS	VV-Viva	F&S	III	
CO1,CO2	Preparenarrativesummaryofvyakhyanaforthespecifiedsutras	CC	MK	KH	SDL	VV-Viva	F&S	III	
CO1,CO2	AppreciateimportanceofVyakhyainlearningSamhita	AFT - REC	MK	KH	D	P-VIVA	F&S	III	
Topic 21LEARNING THROUGH SAMHASHA PARISHAD									
CO1,CO2	DemonstrateSambhashaparishattodiscussdifferenttopics	PSY - ADT	MK	SH	D	P-VIVA	F&S	III	
CO8	AppreciatetheimportanceofcollectivethinkinginlearningAyurveda	AFT - VAL	MK	SH	DIS,D	P-VIVA	F&S	III	
Topic 22SROTAS PROFORMA									
CO4,CO6,CO8	Assessinvolvementofsrotasinclinicalconditions	PSY - SET	MK	SH	D_B ED	VV-Viva	F&S	III	
CO8	DevelopclinicalskillsbasedonAyurvedicclinicalmethods	AFT - REC	MK	SH	D_B ED	VV-Viva	F&S	III	
Topic 23LEARNING THROUGH TANTRA YUKTI									
CO1,CO2,CO4	Applytantrayuktiandinterpretthesutras	CAP	MK	KH	TBL ,D	P-VIVA	F&S	III	

CO1	Appreciate the importance of Tantrayukti in interpreting Samhita	CAP	MK	KH	DIS, TBL	P-VIVA, VV-Viva	F&S	III	

Topic 24 ASSESSMENT OF HEALTH THROUGH DHATU SAMYA PAREEKSHA									
CO3, CO4, CO6	Assess health of a person based through dhatu-samya-pareeksha	PSY - SET	MK	SH	CBL, D_B ED	P-VIVA	F&S	III	
CO8	Appreciate health of a person through interaction	AFT - RES	MK	SH	D_B ED	P-VIVA, VV-Viva	F&S	III	
Topic 25 AGNI ASSESSMENT BASED ON APACHARA									
CO3, CO4, CO7	Assess agni based on apachara-visesha	PSY - SET	MK	SH	DIS, D_B ED	P-VIVA	F&S	III	
CO8	Develop good rapport with patients	AFT - REC	MK	SH	CBL, D_B ED	P-VIVA	F&S	III	
Topic 26 TRIVIDHA ROGA VISHESHAVIJNANA IN DIAGNOSIS									
CO4, CO6, CO7	Demonstrate trividha rogavishesha vijnanan in clinical methods	PSY - SET	MK	SH	DIS, CBL, D	P-VIVA	F&S	III	
CO8	Appreciate the importance of Ayurvedic parameters in clinical methods	AFT - VAL	DK	SH	DIS, CBL, D	P-VIVA	F&S	III	
Topic 27 ASSESSMENT OF UPASAYA AND ANUPASAYA IN PATIENTS									

CO3,CO5,C O6	Identifyupasaya-anupasayainpatients	PSY - SET	MK	SH	CBL, D_B ED	P-VIVA	F&S	III	
CO8	Appreciatewellnessofpatients	AFT - REC	DK	SH	D_B ED	P-VIVA	F&S	III	

Table 4a: List of Practical

(As a part of NHL)

S.No	Name of practical	Term	Activity	Practical hrs
1	SHLOKAPATHANA-1	1	Purpose: To by heart sutras selected from Charakasamhita Teacher's role: Teachers should instruct the student to by heart the slokas when the respective portions are over. A logbook may be kept by the teacher to mark the date and signature to note the satisfactory recitation of the slokas by the students. The performance of students can be considered for formative assessment. During summative assessment, sloka recitation will be a part of practical examination. Students role: To by heart the selected slokas given below and to compile minimum 100 sutras (three terms) Sutras suggested: 1. Cha.Su.13-Sneha Adhyaya-13-17, 22, 57-59 2. Cha.Su.14-Sveda Adhyaya-4, 5, 39, 40, 64 3. Cha.Su.15-Upakalpaneeya Adhyaya-22 4. Cha.Su.16-Chikitsa prabhritiya Adhyaya-13-21, 27, 28, 34-36 5. Cha.Su.17-Kiyantashiraseeya Adhyaya-12, 41-44, 62, 112-118 6. Cha.Su.18-Trisotheeya Adhyaya-42-43, 44-47 7. Cha.Su.19-Ashtodareeya Adhyaya-5, 6 8. Cha.Su.20-Maharoga adhyaya-3, 4, 5, 11, 14, 17, 20-22 9. Cha.Su.21-Ashtauninditeeya adhyaya-3, 4, 16, 18, 19, 35, 50, 58 10. Cha.Su.22-Langhanabrimhaneeya Adhyaya-9-24 11. Cha.Su.23-Santarpaneeya Adhyaya-5-7, 26-29 12. Cha.Su.24-Vidhisoniteeya Adhyaya-14, 18, 20, 21, 22, 24 13. Cha.Su.25-Yajjapurusheeya Adhyaya-29, 31, 33, 45, 46, 47, 50 14. Cha.Su.26-Atreyabhadra kaapyeya Adhyaya-13, 36, 37, 61, 62, 66, 81, 85, 86 15. Cha.Su.27-Annapaanvidhi Adhyaya-351-352 16. Cha.Su.28-Vividhaasheetapeetiya Adhyaya-9-19, 35-39, 45	10

2	LEARNINGTHROUG HVYAKHYANA-1	1	Purpose: To familiarize and expose the student to the relevant vyakhyana of Charaka Samhita. The following specific portions in the Vyakhyana are selected for this purpose. 1. Cha.Su.20- Maharoga adhyaya-11,16,19 2. Cha.Su.26- Atreyabhadra kaapyeya Adhyaya-13,29 3. Cha.Su.28- Vividhaasheetapeetiya Adhyaya-7 Teacher's role: Teachers will teach those sutras along with the commentary and explain the importance of vyakhyana in better understanding of sutras. Students' role: Students will prepare an narrative summary of all the proposed vyakhyana to highlight their importance in interpreting the sutras. During viva students are asked to interpret the respective sutra along with its vyakhyana.	3
3	OBSERVINGTHEPR ACTICALUTILITYOF SNEHANAANDSWE DANA	1	Purpose: To familiarize commonly available sneha yoga and commonly undertaken sweda prayoga. (Ref: Ch Su 13,14) Teacher's role: Make five or six groups and instruct them to enlist available ghrita and taila yoga in hospital pharmacy. Enlist the types of sweda followed in panchakarma treatment in the hospital. Student's role: Studenting groups should document the assigned work in a prescribed format and present to all in the class.	2
4	IDENTIFICATIONOFB AHUDOSHALAKSHA NAINPATIENTS	1	Purpose: To assess bahudoshalakshana with the help of proforma in patients posted in hospital wards. (Ref: Ch Su 16/13-16) Teacher's role: Teachers should introduce the proforma in the class and guide the student how to furnish the proforma. Teacher may identify patients exhibiting bahudoshalakshana from the ward, those who are referred for Shodhana. Collect the	2

			proformas duly filled by students and analyzed the data and discuss with students. Students' role: Students should interact with give n patient and identify the Bahudoshalakshanas available in the patient and document in the proforma (minimum three cases).	
5	ASSESSMENT OF DISEASES BASED ON TRIVIDHA BODHYA SANGRAHA	1	Purpose: To orient students on the use of trividha-bodhya-sangraha (i.e., vikaraprakriti, adhishtana, samuthana) in understanding diseases and thereby enabling them using the unique assessment protocol mentioned in Carakasamhita. (Ref: ChSu18/44-47 along with Chakrapani commentary) Teacher's role: Introduce the concept of trividha bodhya sangraha, Introduce the case proforma in the class, demonstrate case taking based on trividha-bodhya-sangraha Students role: Fill up the observations in the proforma during their routine clinical posting (minimum 3 cases).	2
6	IDENTIFICATION OF ASHTADOSHAINSTHOU LYA	1	Purpose: To identify prevalence of ashtadosha of sthauilya in individuals (Ref: ChSu21/4) Teacher's role: Explain ashtadosha in the class; Introduce the questionnaire to document ashtadosha in individuals; Demonstrate the questionnaire in obese individuals Students role: Students will furnish the questionnaire among five people of different age groups and prepare a report based on the findings of the questionnaire survey.	2
7	CLINICAL OBSERVATION ON NIJA AGANTU JAR RELATIONSHIP	1	Purpose: To explore relationship between nija and agantu diseases (Ref: ChSu19/7) Teacher's role: Teacher explains nija-agantu relationship with examples in the class; Demonstrates some cases where diseases start as agantu and advance to nija and vice versa. Students' role: Observe minimum three	2

			cases in OP/IP and make reports to establish the relationship between nija and agantu.	
8	CLINICAL OBSERVATION ON SHADUPAKRAMA	1	Purpose: To explore application of shadupakrama in therapeutics (Ref ChSu22) Teacher's role: After teaching shadupakrama, teachers shall identify some cases in the hospital to demonstrate any one or more upakramas; Try to include cases with varieties of upakrama; Train students to see patients, explore the cases sheets and hospital records to find out upakramas adopted to a particular patient. Students' role: Observe minimum three cases from hospital and go through casesheet to identify types of upakrama adopted; Interact with interns, teachers to map the upakramas adopted in each patient; Make reports on type of upakrama, nature of medicine used and effects of upakramas based on the above observations; Document observations in three cases	2
9	ASSESSMENT OF FRAKTA DUSHTIKARANAIN SPECIFIC CLINICAL CONDITIONS	1	Purpose: To identify fraktadushtikaranas in cases where raktadushti is suspected (Ref: ChSu24/5-10) Teacher's role: Teach raktadushtikarana; Select some cases where raktadushti is suspected; Demonstrate presence of fraktadushtikaranas in one or two cases; Assign cases to students to identify presence of fraktadushtikarana Student's role: Identify presence of fraktadushtikaranas in three cases with the help of questionnaire provided; Document the observations	2
10	OBSERVATIONS ON USE OF AGRYA AUSHADHAIN CLINICAL PRACTICE	1	Purpose: To justify the importance of agryaushadha in clinical practice (Ref: ChSu25/38-40) Teacher's role: Identify some important agryaushadhas from the list given in Annapanachatushka; Divide the whole class into five or six groups and assign	2

			each group with two or three agryaushadhas Students role: Make monographs of agryaushadha; Interact with practitioners and collect details of use of these aushadhas in routine practice; Document the observations in the record book.	
11	ASSESSMENT OF DHATU-UPADHATU-MALAPRADOSHAJA VIKARAS IN PATIENTS	1	Purpose: To identify dhatu-upadhatu-malapradoshajavikaras in selected cases. (Ref Ch Su 27/9-22) Teacher's role: Demonstrate the procedure in a few cases. Students' role: Make five cases sheets reporting the findings of the assessment.	3
12	SHLOKA PATHANA-2	2	See Practical. 1 for instructions Sutra suggested: 1. Cha.Su.30- Arth dashamahamoolayam Adhyaya-3,4,10,11,12 2. Cha.Ni.01- Jwaranidana Adhyaya-3,5,7,8,9,10,11,38-40 3. Cha.Ni.02- Raktapittanidana Adhyaya-19,27 4. Cha.Ni.04- Pramehanidana adhyaya-3,4,48-49 5. Cha.Ni.05- Kushtanidana Adhyaya-3,4,5,8 6. Cha.Ni.06- Shoshanidana Adhyaya-3,5,7,9,11,14 7. Cha.Ni.07- Unmadanidana Adhyaya-5,19-22 8. Cha.Ni.08- Apasmaranidana adhyaya-3,5,17-22,33-35,37-39 9. Cha.Sha.1- Katithapurushheya Adhyaya-16-23,28-30,36,63,64,70-74,98,102,109,137-139,148,149 10. Cha.Sha.02- Atulyagothreya Adhyaya-26,27,35,44,45-47 11. Cha.Sha.03- Khuddikagarbhavakranti Adhyaya-17	10

			12. Cha.Sha.04- MahateegarbhavakrantiAdhyaya-6,36 13. Cha.Sha.05- PurushavichayaShareeraAdhyaya- 3,5,8,16	

			14. Cha.Sha.06- Sareeravichayaadhyaya-4,5- 11,12,13,17,28,30 15. Cha.Sha.07- SareerasankhyasareeraAdhyaya	
13	LEARNINGTHROUG HVYAKHYANA-2	2	SeePracticalNo.2forinstructions Suggested sutras: 1. Cha.Ni.4-Pramehanidanaadhyaya-4 2. Cha.Sha.1- KatithapurushheeyaAdhyaya- 21 3. Cha.Sha.6- Sareeravichayaadhyaya-9-11	3
14	CASE TAKING IN REL ATION TO NIDANAP ANCHAKA	2	Purpose: To map the disease process thro ugh nidana- panchaka (Ref: ChNi1) Teacher's role: Demonstrate the case proforma in patient s; Assign five patients to students for docu menting nidana panchaka Students role: Furnish the case proforma i n five patients	12
15	DIFFERENTIAL DIAG NOSIS OF SKIN DISEAS ES BASED ON GUIDELI NES ON KUSHTA	2	Purpose: To familiarize differential diagno sis of kusht through Ayurvedic parameters (Ref: ChNi5) Teacher's role: Demonstrate case taking in a few cases Students role: Furnish the case proforma f or minimum three cases of skin diseases	2
16	PRAMANAPARIKSHA	2	Purpose: To familiarize Ayurvedic metho ds of physiometry (Ref: ChSha7) Teacher' s role: Preparing measurement methods ba sed on angulee pramana and anjalee praman a as explained in Ayurveda; Demonstrating such methods in healthy individuals Students role: Assessing physiometry bas ed on the guidelines given by the teacher in t hree individuals/peers and document the o bservations	2
17	IDENTIFICATION OF V IKARA VIGHATA BH VA ABHAVA IN PATIE NTS	2	Purpose: To explore concept of vikara- vighata-bhava- abhava in clinical scenario. (Ref: ChNi4/3 along with Chakrapani commentary)	2

			Teachersrole:Divideclassintofourorfive groupsandassignmostcommonlyseendiseasestoeachgroup(Eg.Prameha);Conductgroupdiscussionstoidentifyriskfactors/protectivefactorsofrespecteddiseasestroughliteraturereview,interactionwithpeersandteachers;Sumupfindingsofgroupdiscussionsandpreparechecklistforeachdisease Student'srole:Conductgroupdiscussionstoidentifyrisk/protectivefactorsofdiseaseassignedtothem;Preparechecklistforeachdiseaseregardingprobablerisk/protective factors;Identifypresence/absenceofitems inthechecklistinminimumofthreecasesoftherespecteddisease	
18	EXPLORATION OF LOKA-PURUSHA-SAMYA IN THE BACKGROUND OF ONE HEALTH	2	Purpose:To explore loka-purusha-samyain the background of one health movement(Ref:ChSha5) Teacher'srole:Conduct discussions in the classtoidentify how nature is related to human being;Explore this relationship in the background of concept of one health;conduct discussions Studentsrole:Conduct the discussions and prepare a summary report	2
19	SHLOKA PATHANA-3	3	Refer Practical No.1 for instructions Sutra suggested: 1. Cha.Vi.01- Rasavimana Adhyaya-10,24 2. Cha.Vi.02- Trividhakusheeya Adhyaya-15-18 3. Cha.Vi.04- Trividharogavisheshavijnaneeya adhyaya-4,12 4. Cha.Vi.05- Srotovimana Adhyaya-3,4,7,9-27 5. Cha.Vi.06- Roganikavimana adhyaya-19 6. Cha.Vi.07- Vyadhitarupeeyavimana Adhyaya-28 7. Cha.Vi.08-	10

			RogabhisagjiteeyamAdhyaayam- 3,6,68-78 8. Cha.In.5- PurvarupeeyamIndriyamAdhyaya-43 9. Cha.In.11-AnujyotiyamIndriya	

			Adhyaya-29	
20	LEARNINGTHROUGH HVYAKHYANA-3	3	Refer Practical No.2 for instructions Sutra suggested: 1. Cha.Vi.01-Rasavimaana Adhyaya -10 2. Cha.Vi.08- Rogabhishagjiteeyam Adhyaya m-68-80	3
21	LEARNINGTHROUGH SAMBHASHAPARISHAD	3	Purpose: To familiarize the method of Sambhashaparishadin bringing out scientific discussions. (Ref: Ch Vi 8) Teacher's role: Prepare guidelines for conducting Sambhashaparishata as per descriptions in Vadamarga; Demonstrate parishat in the class either through video demonstration or otherwise; Divide the class into four or five groups and assign one topic each for them; Evaluate the group presentations based on the guidelines Student's role: Each group will prepare and demonstrate a parishat in the subject concerned; Prepare summary of the parishat Suggested topics: 1. Relevance of Daivavyapasarayacikitsa 2. Rakta as fourth dosha 3. Relevance of food classification 4. Specific agrya related to vihara (Eg: vishad orogavardhananam) 5. Importance of naming of disease 6. Relevance of viruddhaahara	6
22	SROTAS PROFORMA	3	Purpose: To assess status of srotodushti in different clinical conditions (Ref: Ch Vi 5) Teacher's role: Demonstrate the proforma for assessment of srotas in clinical conditions Students role: Furnish the srotas proforma in at least three cases	2
23	LEARNINGTHROUGH TANTRAYUKTI	3	Purpose: Demonstrate use of tantrayukti in different sutras Teachers role: Identify and demonstrate application of tantrayukti in different sutras	5

Student's role: Identify tantrayukti and prepare summary on justifying importance of tantrayukti in selected sutras
Suggested Tantrayuktis:

1. Adhikaran-
commonly seen in many sutras
2. Yoga- commonly seen in many sutras
3. Padartha-
commonly seen in many sutras
4. Vakyasesha-
commonly seen in many sutras
5. Upadesha- Ca. Su. 13/18-19, Ca. Su. 13/94
6. Niyoga- Ca. Su. 13/34, Ca. Ni. 3/17
7. Apadesha-
Ca. Su. 13/13, Ca. Su. 18/44-46, Ca. Su. 26/41, Ca. Ni. 2/12-17
8. Samuchaya- Ca. Su. 13/23-25, Ca. Su. 20/8, Ca. Su. 23/5-7, Ca. Su. 23/27-30, Ca. Ni. 3/7
9. Nidarshana- Ca. Su. 13/96-97, Ca. Su. 17/75(1), Ca. Su. 14/5, Ca. Su. 19/5, Ca. Su. 30/5
10. Nirvachana- Ca. Su. 16/31-32, Ca. Su. 16/34, Ca. Su. 17/95, Ca. Su. 21/9, Ca. Su. 25/4, 11. Ca. Su. 29/4, Ca. Su. 30/5, Ca. Su. 30/12, Ca. Su. 30/24
12. Vidhana-
Ca. Su. 15/11, Ca. Su. 15/16, Ca. Su. 16/27
13. Prasanga - Ca. Su. 17/113, Ca. Su. 20/8, Ca. Su. 25/4, Ca. Ni. 1/3, Ca. Sa. 1/118-126
14. Viparyaya-
Ca. Su. 25/31, Ca. Sa. 6/6, Ca. Sa. 6/9, Ca. Ni. 3/7, Ca. Ni. 3/9, Ca. Ni. 3/11
15. Ekantika-
Ca. Su. 15/5, Ca. Su. 20/22, Ca. Su. 21/20, Ca. Su. 25/31, Ca. Su. 30/25, Ca. Ni. 1/32
16. Atitaveksha-
Ca. Su. 22/31, Ca. Su. 28/25-30
17. Anagataveksha - Ca. Su. 15/5, Ca. Su. 28/30, Ca. Vi. 8/93, Ca. Vi. 8/135, Ca. Vi. 8/136
18. Swasangya- Ca. Su. 30/3
19. Prayojana- Ca. Su. 30/26, Ca. Sa. 5/5
20. Anumata- Ca. Su. 26/64-65, Ca. Su. 16/28, Ca. Sa. 1/16
21. Vikalpa- Ca. Su. 26/105
22. Pradesha-

Ca.Su.27/329, Ca.Vi.8/137

			23. Sambhava-Ca.Su.28/45 24. Hetwartha-Ca.Ni.2/21,Ca.Ni.4/4,Ca.Ni.7/28,Ca.Vi.3/40 25. Atidesha-Ca.Sa.6/11 26. Apavarga-Ca.Su.26/106 27. Uddhara-Ca.Su.25/29 28. Anaikantika-Ca.Su.15/4 29. PratyutsaraandUddhara-Ca.Su.25/10-28 30. Nirnaya-Ca.Su.25/29 31. Apavarga-Ca.Vi.1/10	
24	ASSESSMENT OF HEALTH THROUGH DHATU SAMYAPAREEKSHA	3	Purpose: To assess health status of a person based on dhatu samyapareeksha. (Ref: Ch Vi 8/89) Teacher's role: Demonstrate use of proforma for main health subjects Students role: Assess dhatu samyapareeksha in individuals using the proforma	2
25	AGNI ASSESSMENT BASED ON APACHARA	3	Purpose: To familiarise the assessment of agni based on apachara-visesha (Ref: Ch Vi 6/12) Teacher's role: Explain the concept of agni pareeksha based on apachara visesha; Demonstrate the questionnaire in a few subjects Students role: Assess agni of ten individuals using the proforma	2
26	TRIVIDHAROGAVISHESHAVIJNANA IN DIAGNOSIS	3	Purpose: To justify the role of trividharogavishesha vijnana (pratyaksha, anumana and aptopadesa) in clinical methods. (Ref: Ch Vi 4) Teacher's role: Demonstrate the use of pratyaksha, anumana and aptopadesa in case taking, stressing on use of sense organs (sight, smell, touch, vision and sound), methods of inference and importance of aptopadesa (writing respective references relevant to a particular case); Assigning cases to demonstrate the above methods Students role: Prepare report on application of trividharogavishesha vijnana in three cases	3

27	ASSESSMENT OF UPASAYA AND ANUPASAYA IN PATIENTS	3	Purpose: To justify importance of upasaya and anupasaya clinical examination (Ref: ChNi1 with Chakrapani commentary) Teacher's role: Demonstrate identification of upasaya and anupasaya in selected cases Students role: Identify upasaya and anupasaya in a minimum of three cases and document it	2
Total Hr				100

Activity

CO	Topic name	Activity Details	Hours
CO5, CO7	Cha.Su.15- Upakalpaneeya Adhyaya	Expert Lecture on Aturalaya: This activity will evoke an interest among students about planning for construction of Hospitals and Nursing homes. Topic: Standard guidelines to set up Ayurveda Clinics, Nursing Homes and Hospitals.	1
CO6, CO7, CO8	Cha.Su.19- Ashtodareeya Adhyaya	Activity on Disease classification: Teachers should give an insight to NAMA STE portal published by Ministry of AYUSH. Students should go through with the very standardised Ayurveda terminology related to disease classification and also National Ayurveda Morbidity codes.	2
CO4, CO6, CO8	Cha.Su.20- Maharoga adhyaya	Compilation/Making monograph on Nanatmajavikara: Steps (1) Teachers should make teams of 3-5 students. (2) An Editorial team for making monograph has to be made including experts of Roga Nidana. (3) Divide the 140 diseases into a available number of teams. (4) Teachers should provide a format to collect data on each disease which must include pictorial representation of disease and cross references. (5) The Editorial team will collect the data from all teams and edit in the form of a	3

		book.(6)ThecontentshouldbereviewedbyExpertsandmadeasE-Monograph(PDF)/Book.	
CO4,CO7	Cha.Su.21-Ashtauninditeeyaadhyaya	VideomakingonconceptofNidra: Steps(1)Teachershouldexplainthecontentonwhichstudentsshouldmakevideo(2)TheMinimumdurationofVideoshouldbe3minutes.(3)Videocanbeinregionallanguages.(4)Teachershouldselectthebestvideosandcanpublishinsocialmediaafterrectifyingthecontentofthevideo.	1
CO4,CO5,CO7	Cha.Su.25-YajjapurusheeyaAdhyaya	JustifyingconceptofHitaandAhitaahara: Steps(1)StudentsshouldbedividedintogroupsandassignsomeoftheHitaandAhitaaharadravya(2)Studentshouldfindanddiscussthe logical explanationsonjustifyingthegivendravyaasHitaorAhita	2
CO4,CO5,CO7	Cha.Su.26-AtreyabhadraakaapyeeyaAdhyaya	Applicationofparadiguna: Steps(1)Anyprobabledrugortreatmentplantobeselectedandassignedto variousgroups(2)Studentshouldviewthemthroughparadigunaanddocumentit.	2
CO5,CO8	Cha.Su.27-AnnapaanvidhiAdhyaya	Collectionofdifferentdravya's: Steps(1)Studentshouldcollectedifferentdravya'savailableintheirlocality.(2)Studentshouldexhibitthesameanddiscusswithexperts.(3)Documentopiniongivenbyexperts.	2
CO4,CO8	Cha.Su.29-DashapraanaayataneeyaAdhyaya	Skitondifferenttypesofvaidyainrelationto medicalethics: Steps(1)Theclasshastobedividedintoteamsandtheyshouldbeassignedtowrite astoryforskit,consideringdifferentqualitiesofvaidya(2)TheyshouldperformtheskitafterScreeningdonebyconcernedteachers	2
CO4,CO6	Cha.Ni.08-Apasmaranidanaadhyaya	DocumentationofNidanarthakara roga: Studentshoulddiscussanddocumentthe experiencesofpractisingphysiciansoftheir	2

		Hospital or outside about Nidanarthakararoga.	
CO3,CO4,CO6,CO7	Cha.Ni.08- Apasmaranidanaadhyaya	Quiz on Nidanasthana: Steps (1) Teachers should give a written test including important multiple choice questions of nidanasthana. (2) The highest scoring students should be selected and made into different teams as per the convenience. (3) These selected students should be conducted quiz with different rounds considering the content of the Nidanasthana.	2
CO3,CO4,CO7	Cha.Sha.1- Katithapurushheeya Adhyaya.	Game on Ashtasmrutikarana: Steps (1) Plan the memory check games by using different materials such as Drugs, Books and instruments. (2) Students should be subjected for memory check sessions. (3) Later their experiences should be interpreted through Ashtasmrutikarana.	2
CO4,CO6,CO7	Cha.Sha.04- Mahateegarbhavakranti Adhyaya	Identify film/Tv serial characters having different qualities of Trividhasatwa and their varieties: Steps (1) Students have to be divided into teams and each team should be assigned some of the satwa. (2) The team should collect the video clip of those characters and have to present to all after getting scrutinized by teachers.	2
CO4,CO8	Cha.Sha.05- Purushavichaya Adhyaya	Adopting pravrutti and nivrutti upayas in presentera: Steps (1) Teachers should make teams and assign different pravrutti and nivrutti upayas. (2) Teams should present the pravrutti and nivrutti upayas considering relevance in presentera.	2
CO4,CO7,CO8	Cha.Sha.06- Sareeravichaya adhyaya	Analysing Data on causes of akalamruttyu: Students should search and collect data from online sources published by Govt or Private Authorities about the causes of Akalamruttyu. Analyse and present the data and discuss on Akalamruttyu in the class.	2

CO4,CO7	Cha.Sha.08- JathisutreeyaAdhyaya	Streetplayonawarenessofgarbhophagatak arabhava: Steps(1)Teachershouldmaketeam sandexplainaboutthestructureofstreetplay(2) Studentshouldcreateanarrativestorytopresent theconceptinpublic (3)Minimumdurationoftheplayis15minutes	2
CO7,CO8	Cha.Vi.01- RasavimaanaAdhyayam	DigitalPostersforpublicawarenessonAhara vidhi: Steps(1)Teachershouldassignthetopic tothestudentsindividuallyoringroup. (2)Studentshouldmakeadigitalpostersorinfo graphicswiththehelpofvariousonline tools such as C ANVA etc.	2
CO4,CO7,CO8	Cha.Vi.03- JanapadodwansaneeyaVi manamAdhyaya	ShortDocumentaryonanyoftheJanapadod hwamsakarabhava: Steps(1)Teachershould guidethestudentsonJanapadodhwamsakarabh ava(2)Studentshouldbetaughtonwhatisdocu mentariesandshouldfixthedurationofvideo.(3)Teamsshouldbemadeandtheyhavetoshootan deditthevideoonanyofthejanapadodhwamsa karabhava.(4)Presentthedocumentariesandsh areexperience.	2
CO4,CO8	Cha.Vi. 8- RogabhishagjiteeyamAd hyaayam.	IdentifyingAdhyayanavidhi: Steps(1)Teachershouldguidethestudentstoiden tifyanddocumentdifferentindividualandgroup learningtechniques.(2)Studentshouldpresenta ndshareexperienceontheirlearningtechniques	2
CO3,CO4,CO7	Cha.In.5- PurvarupeeyamIndriyam Adhyaya	Identifyingtypesofswapna: Steps(1)Teacher shouldassisttomakeaProformafor differenttypesofSwapna.(2)Studentshouldassesstheprofor mawithHealthyindividualsordiseasedandanal ysetheData.	2
CO3,CO4,CO7,CO 8	Cha.In.12- GomayachurniyamIndriy aAdhyaya	Discussionondeathsigns: Steps(1)Teachersh ouldassignsetofstudentstointeractwith	1

		concerned ICU Doctors/Nurses or assistants. (2) Students should interact with them based on a rishta lakshana and document it.	
CO3, CO6, CO7	Cha.In.01- Varnaswareeya Adhyaya	Use of various standard tools for assessing factors related to arishta: Students are assigned with some of the standard tools to assess various factors relevant in arishta- vijnana available in the following source: https://www.carakasamhitaonline.com/mediawiki-1.32.1/index.php?title=Varnasvariyaam_Indriyam_Adhyaya#Assessment_of_complexion	2

Hours indicated are included in calculations of Table 3 and 4

Table 5- Teaching learning method

Sr No	Teaching learning methods in the course	No of Activities
1	Lecture	30
2	Lecture with Powerpoint presentation	17
3	Lecture & Group Discussion	364
4	Lecture with Video clips	20
5	Discussions	37
6	Brainstorming	58
7	Inquiry-Based Learning	14
8	PBL	6
9	CBL	48
10	Project-Based Learning	5
11	TBL	1
12	Team project work	2
13	Flipped classroom	29
14	Blended Learning	9
15	Edutainment	9
16	Mobile learning	7

17	Roleplays	15
18	Self-directed learning	105
19	Problemsolving method	2
20	Workshops	2
21	Game-Based Learning	4
22	Demoon Model	1
23	Library Session	4
24	Peer learning	6
25	Reallife experience	4
26	Recitation	40
27	Presentations	3
28	Casediagnosis	1
29	Drug analysis	4
30	Demonstration	9
31	Demonstration bedside	4
32	Field visit	3

These are overall teaching learning methods listed in Table 3 and 4. Teachers can select the best possible method among the given methods as per objective, available time etc.

Table 6: Assessment Summary: Assessment is subdivided in A to H points

6 A-Number of Papers and Marks Distribution

Subject Code	Papers	Theory	Practical/Clinical Assessment					Grand Total
			Practical	Viva	Elective	IA	Sub Total	
AyUG-SA2	1	100	-	75	100	15	100	200

6 B - Scheme of Assessment (formative and Summative)

PROFESSIONAL COURSE	DURATION OF PROFESSIONAL COURSE		
	First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)
Second	3PA&First TT	3PA&Second TT	3PA&UE

PA:PeriodicalAssessment;**TT:**TermTest;**UE:**UniversityExaminations.

UniversityExaminationshallbeonentiresyllabus

6 C - Calculation Method for Internal assessment Marks

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERMASS ESSMENT	
	A	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average(A+B+C/ 3)	Converted to 15 Marks (D/15 *15)	Term Test(Marks converted to 15) (15 Marks)	SubTotal _/30 Marks	Term Assessment(... ./15)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks) (MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert total to 15 marks.							

6 D - Evaluation Methods for Periodical Assessment

S. No	Evaluation Methods
1	Activities Indicated in Table 3-Column G 3 as per Indicated I, II or III term in column I 3

Evaluation Methods in MSE

1. Practical/Clinical Performance
2. Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3. Open Book Test (Problem Based)
4. Summary Writing (Research Papers/Samhitas)
5. Class Presentations; Workbook Maintenance
6. Problem Based Assignment
7. Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8. Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9. Small Project etc.

6 E Question Paper Pattern

II PROFESSIONAL BAMS EXAMINATIONS AyUG-SA2 PAPER-1

Time: 3 Hours Maximum Marks: 100 INSTRUCTIONS:

All questions compulsory

		Number of Questions	Marks per question	Total Marks
Q1	MULTIPLE CHOICE QUESTIONS (MCQ)	20	1	20
Q2	SHORT ANSWER QUESTIONS (SAQ)	8	5	40
Q3	LONG ANSWER QUESTIONS (LAQ)	4	10	40
				100

6 F Distribution of theory examination

Paper1						
Sr. No	A List of Topics	B Term	C Marks	MCQ (1 Mark)	SAQ (5 Marks)	LAQ (10 Marks)
1	Cha.Su.13-SnehaAdhyaya	1	37	Yes	Yes	Yes
2	Cha.Su.14-SvedaAdhyaya	1		Yes	Yes	Yes
3	Cha.Su.15-UpakalpaneeyaAdhyaya	1		Yes	Yes	Yes
4	Cha.Su.16-ChikitsaprabhritiyaAdhyaya	1		Yes	Yes	Yes
5	Cha.Su.17-KiyantashiraseeyaAdhyaya	1		Yes	Yes	Yes
6	Cha.Su.18-TrisotheeyaAdhyaya	1		Yes	Yes	Yes
7	Cha.Su.19-AshtodareeyaAdhyaya	1		Yes	Yes	No
8	Cha.Su.20-Maharogaadhyaya	1		Yes	Yes	No
9	Cha.Su.21-Ashtauninditeeyaadhyaya	1		Yes	Yes	Yes
10	Cha.Su.22-LanghanabrimhaneeyaAdhyaya	1		Yes	Yes	Yes
11	Cha.Su.23-SantarpaneeyaAdhyaya	1		Yes	Yes	Yes
12	Cha.Su.24-VidhishoniteeyaAdhyaya	1		Yes	Yes	Yes
13	Cha.Su.25-YajjapurusheeyaAdhyaya	1		Yes	Yes	Yes
14	Cha.Su.26-AtreyabhadraakaapyeeyaAdhyaya	1		Yes	Yes	Yes
15	Cha.Su.27-AnnapaanavidhiAdhyaya	1		Yes	Yes	No
16	Cha.Su.28-VividhashitapeeteeyaAdhyaya	1		Yes	Yes	Yes

17	Cha.Su.29-DashapraanaayataneeyaAdhyaya	2		Yes	Yes	No
18	Cha.Su.30-ArthedashamahamooleeyaAdhyaya	2		Yes	Yes	Yes
19	Cha.Ni.01-JwaranidanaAdhyaya	2	19	Yes	Yes	Yes
20	Cha.Ni.02-RaktapittanidanaAdhyaya	2		Yes	Yes	Yes
21	Cha.Ni.03-GulmanidanaAdhyaya	2		Yes	Yes	No
22	Cha.Ni.04-Pramehanidanaadhyaya	2		Yes	Yes	Yes
23	Cha.Ni.05-KushtanidanaAdhyaya	2		Yes	Yes	Yes
24	Cha.Ni.06-ShoshanidanaAdhyaya	2		Yes	Yes	Yes
25	Cha.Ni.07-UnmadanidanaAdhyaya	2		Yes	Yes	Yes
26	Cha.Ni.08-Apasmaranidanaadhyaya	2		Yes	Yes	Yes
27	Cha.Vi.01-RasavimanaAdhyayam	3	24	Yes	Yes	Yes
28	Cha.Vi.02-TrividhakuksheeyaAdhyayam	3		Yes	Yes	Yes
29	Cha.Vi.03-JanapadodhwansaneeyaVimanamAdhyaya	3		Yes	Yes	Yes
30	Cha.Vi.04-Trividharogavisheshavijnthaneeyaadhyaya	3		Yes	Yes	Yes
31	Cha.Vi.05-SrotovimanaAdhyaya	3		Yes	Yes	Yes
32	Cha.Vi.06-Roganikavimanaadhyaya	3		Yes	Yes	Yes
33	Cha.Vi.07-VyadhitarupeeyavimanaAdhyaya	3		Yes	Yes	Yes

34	Cha.Vi.08-RogabhishagjiteeyamAdhyaayam.	3	13	Yes	Yes	Yes
35	Cha.Sha.01-KatithapurushheeyaAdhyaya	2		Yes	Yes	No
36	Cha.Sha.02-AtulyagothreeyamAdhyaaya	2		Yes	Yes	No
37	Cha.Sha.03-KhuddikagarbhavakrantiAdhyaya	2		Yes	Yes	No
38	Cha.Sha.04-MahateegarbhavakrantiAdhyaya	2		Yes	Yes	Yes
39	Cha.Sha.05-PurushavichayaShareeraAdhyaya	2		Yes	Yes	No
40	Cha.Sha.06-Sareeravichayaadhyaya	2		Yes	Yes	No
41	Cha.Sha.07-SareerasankhyasareeraAdhyaya	2		Yes	Yes	No
42	Cha.Sha.08-JathisutreeyaAdhyaya	2	7	Yes	Yes	No
43	Cha.In.1-VarnasvariyaIndriyaAdhyaya	3		Yes	Yes	No
44	Cha.In.2-PushpitakamIndriyaAdhyaya	3		Yes	No	No
45	Cha.In.3-ParimarshaneeyamIndriyamAdhyaya	3		Yes	No	No
46	Cha.In.4-IndriyaneekamIndriyaadhyaya	3		Yes	No	No
47	Cha.In.5-PurvarupeeyamIndriyamAdhyaya	3		Yes	Yes	No
48	Cha.In.6-KatamanisharireeyamIndriyamAdhyaya	3		Yes	No	No
49	Cha.In.7-PannarupiyamIndriyamAdhyaya	3		Yes	Yes	No
50	Cha.In.8-AvakshiraseeyamIndriyam	3		Yes	No	No

	Adhyaya					
51	Cha.In.9- YasyashyavanimittiyaIndriyaAdhyaya	3		Yes	No	No
52	Cha.In.10- SadyomaraneeyamIndriyaAdhyaya	3		Yes	Yes	No
53	Cha.In.11-AnujyotiyamIndriyaAdhyaya	3		Yes	Yes	No
54	Cha.In.12- GomayachurniyamIndriyaAdhyaya	3		Yes	Yes	No
Total Marks			100			

6 G Blue print of paper I & II (if applicable)

Paper No:1		
Question No	Type of Question	Question Paper Format
Q1	Multiple choice Questions 20 Questions 1 mark each All compulsory Must know part- 15 MCQ Desirable to know- 3 MCQ Nice to know part- 2 MCQ	1. Cha.Su.13-Sneha Adhyaya/Cha.Su.14-Sveda Adhyaya a 2. Cha.Su.17-Kiyantashiraseeya Adhyaya/Cha.Su.15-Upakalpaneeya Adhyaya 3. Cha.Su.20-Maharoga adhyaya/Cha.Su.18-Trisotheeya Adhyaya/Cha.Su.19-Ashtodareeya Adhyaya 4. Cha.Su.22-Langhanabrimhaneeya Adhyaya/Cha.Su.21-Ashtauninditeeya adhyaya 5. Cha.Su.23-Santarpaneeya Adhyaya/Cha.Su.24-Vidhishoniteeya Adhyaya 6. Cha.Su.28-Vividhashitapeeteeya Adhyaya/Cha.Su.26-Atreyabhadra kaapyeya Adhyaya/Cha.Su.25-Yajjapurusheeya Adhyaya 7. Cha.Su.30-Arthedashamahamooleeya Adhyaya/Cha.Su.29-Dashapraanaayataneeya Adhyaya 8. Cha.Ni.02-Raktapittanidana Adhyaya/Cha.Ni.01-Jwaranidana Adhyaya 9. Cha.Ni.04-Pramehanidana adhyaya/Cha.Ni.03-Gulmanidana Adhyaya 10. Cha.Ni.05-Kushtanidana Adhyaya/Cha.Ni.06-Shoshanidana Adhyaya 11. Cha.Ni.08-Apasmaranidana adhyaya/Cha.Ni.07-Unmadanidana Adhyaya 12. Cha.Vi.02-Trividhakuksheeya Adhyayam/Cha.Vi.03-Janapadodhwansaneeya Vimanam Adhyaya/Cha.Vi.01-Rasavimana Adhyayam 13. Cha.Vi.04-Trividharogavisheshavijnthaneeya adhyaya/Cha.Vi.05-Srotovimana Adhyaya 14. Cha.Vi.06-Roganikavimana adhyaya/Cha.Vi.07-Vyadhitarupeeyavimana Adhyaya 15. Cha.Vi.08-Rogabhishagjiteeyam Adhyaayam. 16. Cha.Sha.02-Atulyagothreeyam Adhyaaya/

			Cha.Sha.01-KatithapurusheeyaAdhyaya
			17. Cha.Sha.04-MahateegarbhavakrantiAdhyaya
			/Cha.Sha.03-
			KhuddikagarbhavakrantiAdhyaya/C
			ha.Sha.05-Purushavichaya
			ShareeraAdhyaya
			18. Cha.Sha.07-SareerasankhyasareeraAdhyaya

		/Cha.Sha.06-Sareeravichayaadhyaya/ Cha.Sha.08-JathisutreeyaAdhyaya 19. Cha.In.1- VarnasvariyaIndriyaAdhyaya/Cha.In.2 -PushpitakamIndriyaAdhyaya/Cha.In.4- IndriyaneekamIndriyaadhyaya/Cha.In.5- PurvarupeeyamIndriyamAdhyaya 20. Cha.In.9- YasyashyavanimitiyaIndriyaAdhyaya/ Cha.In.11- AnujyotiyamIndriyaAdhyaya/Cha.In.8- AvakshiraseeyamIndriyamAdhyaya/ Cha.In.12- GomayachurniyamIndriyaAdhyaya
Q2	ShortanswerQuestionsEightQuestions 5MarksEach Allcompulsory Mustknow- 7SAQDesirabletoknow- 1SAQNoquestionsonNice toknow	1. Cha.Su.13-SnehaAdhyaya/Cha.Su.14- SvedaAdhyaya/Cha.Su.16- ChikitsaprabhritiyaAdhyaya/Cha.Su.20- Maharogaadhyaya/Cha.Su.18- TrisotheeyaAdhyaya/Cha.Su.17- KiyantashiraseeyaAdhyaya/Cha.Su.15- Upakalpaneeya Adhyaya/Cha.Su.19-AshtodareeyaAdhyaya 2. Cha.Su.28-VividhashitapeeteeyaAdhyaya/ Cha.Su.26- AtreyabhadraakaapeeyaAdhyaya /Cha.Su.25- YajjapurusheeyaAdhyaya/Cha.Su.22- LanghanabrimhaneeyaAdhyaya/Cha.Su.23- SantarpaneeyaAdhyaya/Cha.Su.24- VidhishoniteeyaAdhyaya/Cha.Su.21- Ashtauninditeeyaadhyaya/Cha.Su.30- ArthedashamahamooleeyaAdhyaya/Cha.Su. .29-Dashapraanaayataneeya Adhyaya/Cha.Su.27-Annapaanavidhi Adhyaya 3. Cha.Ni.04- Pramehanidanaadhyaya/Cha.Ni.05- KushtanidanaAdhyaya/Cha.Ni.03- GulmanidanaAdhyaya/Cha.Ni.08- Apasmaranidanaadhyaya/Cha.Ni.02- RaktapittanidanaAdhyaya/Cha.Ni.06 -ShoshanidanaAdhyaya/Cha.Ni.01- JwaranidanaAdhyaya/ Cha.Ni.07-UnmadanidanaAdhyaya 4. Cha.Vi.04- Trividharogavisheshavijnaneeyaadhyaya/C ha.Vi.02-TrividhakuksheeyaAdhyayam/ Cha.Vi.03- JanapadodhwansaneeyaVimanam

Adhyaya/Cha.Vi.01-Rasavimana

Adhyayam

5.Cha.Vi.08-

RogabhishagjiteeyamAdhyaayam.

/Cha.Vi.06-Roganikavimanaadhyaya/

Cha.Vi.05-SrotovimanaAdhyaya/Cha.Vi.

07-VyadhitarupeeyavimanaAdhyaya

		6. Cha.Sha.02- AtulyagothreeyamAdhyaaya/Cha.Sha.01- KatithapuruseeyaAdhyaya/Cha.Sha.04- MahateegarbhavakrantiAdhyaya /Cha.Sha.03- KhuddikagarbhavakrantiAdhyaya 7. Cha.Sha.07-SareerasankhyasareeraAdhyaya /Cha.Sha.06- Sareeravichayaadhyaya/Cha.Sha.08 -JathisutreeyaAdhyaya/Cha.Sha.05- PurushavichayaShareeraAdhyaya 8. Cha.In.11- AnujyotiyamIndriyaAdhyaya/Cha.In.1- VarnasvariyaIndriyaAdhyaya/Cha.In.7- PannarupiyamIndriyamAdhyaya/Cha.In.1 0- SadyomaraneeyamIndriyaAdhyaya/Cha.I n.12- GomayachurniyamIndriyaAdhyaya/Cha.I n.5-PurvarupeeyamIndriyamAdhyaya
Q3	LonganswerQuestionsFo urQuestions 10markseachAl lcompulsory Allquestionsonmustknow .NoQuestionsonNicetokn owandDesirabletoknow	1. Cha.Su.13- SnehaAdhyaya/Cha.Su.14- SvedaAdhyaya/Cha.Su.16- ChikitsaprabhritiyaAdhyaya/ Cha.Su.18-TrisotheeyaAdhyaya/Cha.Su.17- KiyantashiraseeyaAdhyaya/Cha.Su.15- UpakalpaneeyaAdhyaya 2. Cha.Su.28-VividhashitapeeteeyaAdhyaya/ Cha.Su.26- AtreyabhadraakaapyeeyaAdhyaya /Cha.Su.25- YajjapuruseeyaAdhyaya/Cha.Su.22- LanghanabrimhaneeyaAdhyaya/Cha.Su.2 3-SantarpaneeyaAdhyaya/Cha.Su.24- VidhishoniteeyaAdhyaya/Cha.Su.21- Ashtauninditeeyaadhyaya/ Cha.Su.30-Arthedashamahamooleeya Adhyaya 3. Cha.Ni.04- Pramehanidanaadhyaya/Cha.Ni.05- KushtanidanaAdhyaya/Cha.Ni.08- Apasmaranidanaadhyaya/Cha.Ni.02- RaktapittanidanaAdhyaya/Cha.Ni.06 -ShoshanidanaAdhyaya/Cha.Ni.01- JwaranidanaAdhyaya/

Cha.Ni.07-UnmadanidanaAdhyaya

4.Cha.Vi.04-

Trividharogavisheshavijnyaneeeyaadhyaya/
Cha.Vi.02-

TrividhakuksheeyaAdhyayam/Cha.Vi.08-
RogabhishagjiteeyamAdhyaayam./Cha.Vi.
06-Roganikavimanaadhyaya/Cha.Vi.03-
JanapadodhwansaneeyaVimanamAdhyaya/
Cha.Vi.05-

SrotovimanaAdhyaya/Cha.Vi.07-

VyadhitarupeeyavimanaAdhyaya/Cha.Vi.0
1-RasavimanaAdhyayam.

6 H Distribution of Practical Exam

S.No	Heads	Marks
1	VivaonPracticalrecord	10
2	Shlokarecitation	10
3	Vivaonvyakhyana	5
4	VivaonSutrasthana	20
5	VivaonNidanasthana	10
6	VivaonVimanasthana	10
7	VivaonShareerasthana	5
8	VivaonIndriyasthana	5
9	Electives (SetSB) -I	10
10	IA	15
Total Marks		100

References Books/ Resources

S.No	Book	Resources
1	CharakasamhitawithCakrapaniCommentary	Yadavji Trikamji, editor. Agnivesha. Charaka Samhita .Ayurveda Dipika. Chakrapanidatta(comm)(Sanskrit) Varanasi: Chaukambha Sanskrit Sansthan
2	Charak Samhita (English Commentary)	Ram Karan Sharma and Bhagawan Dash, editor. Charak Samhita (English Commentary): Varanasi: Chowkambha Sanskrit Series
3	Charak Samhita (Hindi commentary)	Harishchandra Singh Kushvaha, editor and translator. Charak Samhita (Hindi Commentary): Varanasi: Chaukambha Orientalia
4	Charak Samhita (Hindi commentary)	Jayadev Vidyalkar, editor. Charak Samhita (Hindi commentary): Motilal Banarsi Dass Publishers Pvt. Ltd
5	Charak Samhita (Hindi commentary): Vaidya Atridev Vidyalkar	Charak Samhita (Hindi commentary): Vaidya Atridev Vidyalkar
6	Charak Samhita (Hindi commentary)	Gorakhanath Chaturvedi and Kashinath Pandeya Shastri, editor. Charak Samhita (Hindi commentary): Varanasi: Chaukambha Bharati Academy
7	Charak Samhita (Hindi commentary)	Brahmanand Tripathi, editor. Charak Samhita (Hindi commentary): Varanasi: Chaukambha Surbharati Prakashan
8	Charak Samhita (Hindi commentary): Dr. Ravidatta Tripathi	Vidyadhar Shukla and Ravidatta Tripathi Charak Samhita (Hindi commentary): Varanasi: Chaukambha Sanskrit Pratishthan
9	Charaka Samhita (Hindi commentary)	Banwari Lal Gaur, editor. Charaka Samhita (Hindi commentary): Rashtriya Ayurved Vishwavidyalaya
10	Legacy of Caraka	MS Valiathan, Legacy of Caraka (English): Hyderabad: Orient Longman
11	Charakasamhita	Charaka-Samhita– National Institute of Indian Medical Heritage– http://niimh.nic.in/ebooks/ecaraka
12	Charakasamhita	Charakasamhitaonline.com- www.carakasamhitaonline.com
13	Illustrated Carakasamhita, Dr. R. Vidyanaath	R. Vidyanaath, editor. Illustrated Carakasamhita (English Commentary): Varanasi: Chaukambha Prakashan
14	Namaste Portal	NAMASTE-Portal(ayush.gov.in)
15	CCRAS Prakriti tool	CCRAS Prakriti Tool http://www.ccras.res.in/
16	Sanskrit English Dictionary	Monnier Williams. A Sanskrit English Dictionary. Delhi. Motilal Banarsidass publishers Pvt Ltd.

17	Shabdakalpadruma	RajaRadhaKantaDeva,ShabdaKalpaDrum:Varanasi:ChowkhambaSanskritSeriesOffice
18	VaidyakShabdaSindhu	KavirajShriNagendraNathSenVaidyaShastri,VaidyakShabdaSindhu:Varanasi:ChowkhambaOrientalia

Abbreviations

Assessment

S.No	Short form	Discription
1	T-EMI	Theoryextendedmatchingitem
2	T-EW	TheoryEssaywriting
3	T-MEQs	TheoryMEQs
4	T-CRQs	TheoryCRQs
5	T-CS	Theorycasestudy
6	T-OBT	Theoryopenbooktest
7	P-VIVA	PracticalViva
8	P-REC	PracticalRecitation
9	P-EXAM	Practicalexam
10	PRN	Presentation
11	P-PRF	PracticalPerformance
12	P-SUR	PracticalSurvey
13	P-EN	Practicalenact
14	P-RP	PracticalRoleplay
15	P-MOD	PracticalModel
16	P-POS	PracticalPoster
17	P-CASE	PracticalCasetaking
18	P-ID	Practicalidentification
19	P-PS	PracticalProblemsolving
20	QZ	Quiz
21	PUZ	Puzzles
22	CL-PR	ClassPresentation,
23	DEB	Debate
24	WP	Wordpuzzle
25	O-QZ	Onlinequiz

26	O-GAME	Onlinegame-basedassessment
27	M-MOD	MakingofModel
28	M-CHT	MakingofCharts
29	M-POS	MakingofPosters
30	C-INT	Conductinginterview
31	INT	Interactions
32	CR-RED	Criticalreadingpapers
33	CR-W	CreativityWriting
34	C-VC	Clinicalvideocases,
35	SP	Simulatedpatients
36	PM	Patientmanagementproblems
37	CHK	Checklists
38	OSCE	OSCE
39	OSPE	OSPE,
40	Mini-CEX	Mini-CEX
41	DOPS	DOPS
42	CWS	CWS
43	RS	Ratingscales
44	RK	Recordkeeping
45	COM	Compilations
46	Portfolios	Portfolios
47	Logbook	Logbook
48	TR	Trainersreport
49	SA	Self-assessment
50	PA	Peerassessment
51	360D	360-degreeevaluation
52	TT-Theory	Theory
53	PP-Practical	Practical
54	VV-Viva	Viva

Domain

S.No	Short form	Discription
1	CK	Cognitive/Knowledge
2	CC	Cognitive/Comprehension
3	CAP	Cognitive/Application
4	CAN	Cognitive/Analysis
5	CS	Cognitive/Synthesis
6	CE	Cognitive/Evaluation
7	PSY-SET	Psychomotor/Set
8	PSY-GUD	Psychomotor/Guided response
9	PSY-MEC	Psychomotor/Mechanism
10	PSY-ADT	Psychomotor Adaptation
11	PSY-ORG	Psychomotor/Origination
12	AFT-REC	Affective/ Receiving
13	AFT-RES	Affective/Responding
14	AFT-VAL	Affective/Valuing
15	AFT-SET	Affective/Organization
16	AFT-CHR	Affective/ characterization

T L method

S.No	Short form	Discription
1	L	Lecture
2	L&PPT	Lecture with Power point presentation
3	L&GD	Lecture & Group Discussion
4	L_VC	Lecture with Video clips
5	DIS	Discussions
6	BS	Brainstorming
7	IBL	Inquiry-Based Learning
8	PBL	PBL
9	CBL	CBL
10	PrBL	Project-Based Learning
11	TBL	TBL
12	TPW	Team project work
13	FC	Flipped classroom
14	BL	Blended Learning
15	EDU	Edutainment
16	ML	Mobile learning
17	ECE	ECE
18	SIM	Simulation
19	RP	Role plays
20	SDL	Self-directed learning
21	PSM	Problem solving method
22	KL	Kinesthetic Learning
23	W	Workshops
24	GBL	Game-Based Learning
25	D-M	Demo on Model

26	LS	Library Session
27	PL	Peer learning
28	RLE	Real life experience
29	REC	Recitation
30	SY	Symposium
31	TUT	Tutorial
32	PER	Presentations
33	PT	Practical
34	XRy	X ray identification
35	CD	Case diagnosis
36	LRI	Lab report interpretation
37	DA	Drug analysis
38	D	Demonstration
39	D_BED	Demonstration bedside
40	D_L	Demonstration Lab
41	DG	Demonstration Garden
42	FV	Field visit
43	PRA	Practical

Swasthavritta evam Yoga

Table 2: Contents of Course

Paper1PrinciplesofSwasthavritta,YogaandNaturopathy					
Sr. No	A2 List of Topics	B2 Term	C2 Marks	D2 Lecture hours	E2 Non- Lecture hours
1	SwasthaandSwasthya DefinitionofSwasthavrittaanditsobjective.Swasthalakshanas,Arogyalakshanas,Dhatusamyalakshanas.ConceptofHealth&Operationaldefinitionofhealth. ImportanceofShodhanainSwasthainrelationtoSanchita&AsanchithaDosha&ClassificationofSwasthapurushaasSanchitadoshaandAsanchitaDosha.Dimensionsofhealth-Physical,MentalandSocial.Conceptofwell-being;objectivecomponentofwell-being-standardoflivingandleveloflivingandsubjectivecomponentofwell-being-QualityofLife.Onehealthconcept/VasudhaivaKutumbak	1	6	3	0

	am”or“OneEarth·OneFamily-OneFuture”.				
2	Healthy Lifestyle- Dinacharya(Daily regimen) Concept of Primordial, Primary, Secondary and Tertiary Prevention along with the examples in Ayurveda. Importance of Ahara and Vihara as the health promotive and disease preventive measures. Importance of Niyata kala vihara (Dinacharya, Ritucharya) and Aniyata kala Vihara (Vegadharana, Vegaudirana, Ritushodhana, Brumhana and Bhutadiasparshana) for health promotion and disease prevention. Concept of waking up at 'Brahmuhurta' in the present scenario and the effect of early rise on health, sleep, alertness and memory. Usha Jalapana' (Drinking water in early morning). Importance of Malatyag in vata kala-early morning (Good Bowel Habits.). Mukhaprakshalana and face washes used currently. Concept of Dantadhavana and modern-day brushing techniques and dentifrices. Concept of Jihwani rlekha and the tools used in today's era and their benefits. Concept of Anjana as a health promotive measure. Kavala and Gandusha for oral hygiene including mouth washes available in the market. Abhyanga as a health promotive measure. Importance of the Tambula. Prayogika Dhoomapana (Practicable & non-practicable Dhoomapana-inhalation of herbal fumes/herbal inhalers with their benefits and contraindications. Illeffects of tobacco smoking of various sorts viz. beedi, cigarette, hookah on health. Applied aspects of Sarvanga Abhyanga, Padabhyanga, Shiroabhyanga and their possible physiological effects. Application of Abhyanga according to different age groups and occupation/activity. Different snehas/oils to be used for daily abhyanga as per seasons and geographical variations. Concept of Vyayama and present-	1	38	8	5

	daypracticessuchasaerobicexercises,musclestrengthening exercises etc. to be practiced as per prakriti, age and occupation. Ardhashakti lakshanas of vyayama and the consequences of vyayama. Udwartana, Utsadana Udgharshana. Sanna- Types of different types of bath and Physiological effects of snana on body and mind. Importance and benefits of Anulepana. Merits and demerits of present-day applications like face powder, face pack, balm, lotions, lipsticks, deodorants and perfumes etc. Importance of proper clothing (Vastradharana) in social life.				
3	Ratricharya Ratricharya and its relation to health. Ratricharya and its relation to the proper time of sleep. Relation between Nidra and health. Effects of Yukta & Ayukta nidra. Effects of Ratri Jagarana, Diwaswapna, Anidra, Atinidra and Akala Nidra. Ahara and Vihara causing sound sleep as well as disturbed sleep. Formulation of the duration of sleep according to age and Sleep in healthy and ailing persons. Various Aspects of Sleep like: a. Daytime Sleepiness and Alertness b. Sleep Deprivation c. Sleep and Host Defense d. Master Circadian Clock and Master Circadian Rhythm e. Human Circadian Timing System and Sleep-Wake Regulation f. Circadian Rhythms in Sleepiness, Alertness, and Performance g. Circadian Disorders of the Sleep-Wake Cycle. Sleep apnea, insomnia, narcolepsy and restless legs syndrome. Solutions to Asatmya jagarana (sleep disorders). Importance of observing brahmacharya and abrahmacharya in ratricharya in relation to health. Brahmacharya with special reference to lifestyle guidelines. Reproductive and sexual health according to Ayurveda.	1		6	1
4	Ritucharya Classification of kaala, Adanakala and visargakala, identification of seasons based on the ritulakshanas in different geographical areas. Sanchaya-Prakopa-Prashamana of Dosha with their gunas in each ritu. Relation of Agni, Bala and Ritu with its application. Ritushodhana for the prevention of diseases. Pathya-Apathya in regard to Ahara-Vihara in all six ritus in present scenario. Importance of ahara and vihar in ritus and di and Yamadanshtrakala. Rituharita kiasarasayanawith research updates. Effects of Rituviparyaya on health and its relation to janapada and hwamsa/marakavyadhis with present day examples.	1		5	2

5	Roganutpadaniya Conceptofvegadharanaandvega- udiranainrelationtohealthandmorbidity.Symptomsandm anagementprinciplesofadharaniyavegajanyavyadhisfro m	1	13	2	1

	bruhatrayee. Concept of vegaudirana (viz. Use of snuffing powder, forcible evacuation of bowels & bladder etc.). Importance of dharaniyavegas in promotion of mental health.				
6	Sadvritta Sadavrittameasures for the maintenance of personal, social and spiritual health. Observance of Sadvritta for the prevention of Adharma. Achara Rasayana" and its role in the prevention and control of diseases. Characteristics of a mentally healthy person, warning signals of poor mental health, types of mental illness and causes of mental illness. Mental health services and comprehensive mental health programme. Role of trigunas and satvavajay in mental health promotion in present era. Digital health promotion	1		2	1
7	Ahara Significance of Ahara for health and well-being according to Ayurveda & Contemporary science. Classification of ahara dravyas as per Ayurveda & Contemporary science. Aharavidhividhana, Aharasevanakala & Dwadashaashana pravicharana. Applied aspect of Pathyahara, Apathyahara, Samashana, Adhyashana, Vishamashana. Ahara & viharaleading to Santarpanajanya evam Apatarpanajanyavyadhi and importance of upavasa and concept of intermittent fasting. Benefits of Shadrasabhojana. Importance of Ashtaaharavidhivisheshaayatani in present era. Importance of Nityasevaniya dravyas in the maintenance of health. Properties (Guna & karmas) of Ahara dravyas in the following Vargas with their nutritive value: Dhanyavarga – Shuka Dhanya (Cereals and Millets), Shami Dhanya (Pulses), Shaka and Haritavarga (Leafy and Non leafy vegetables), Kandavarga (roots and tubers), Phalavarga (Fruits), Tailavarga (Fats and Oils), Ikshuvarga (Sugarcane Products) & Madyavarga (Alcoholic Beverages), Dugdhavarga (Milk and Milk products), Ahara Upayogi Varga (Spices & Condiments), Kr itannavarga (Prepared Food), Mamsavarga (Meat types) and Jala Varga. Definition of Pro-biotics and Pre-biotics and their utility. Proximate principles of Food-Recommended Daily Allowance according to various conditions, Sources and deficiency diseases of Protein, Carbohydrate, Fats, Vitamins, and Minerals. Definition of Balanced diet and diet for an individual depending on age, body weight and physiological status and Social Aspects of Nutrition. Food hygiene, Sanitation of eating places, Preservation of food, Food handlers, Food borne diseases, Food fortification, Food adulteration and Food toxicants. Milk Hygiene, Milk composition, Source of infection for Milk, Milk borne	1	20	20	15

	diseases, Clean and Safe milk and Pasteurization of milk Meat Hygiene, Meat inspection, Slaughterhouse and Freshness of fish and egg. Safety and hygiene measures for Fruits and Vegetables. Formulation of Pathya- Apathya diet for prevention of lifestyle disorders such as Obesity, Diabetes mellitus, Cardiovascular diseases and Acid peptic diseases. Description of Food safety and standards regulation (Ayurveda Ahara Regulations), 2022 and Food safety and standards Act, 2006. Different Dietary Supplements and Ergogenic Aids. Impact of different dietary patterns: Mediterranean diet, Keto Diet, DASH diet, the MIND diet, Veg diet, Ovo-lacto-vegetarian, Pesco-vegetarian, Plant-based diet, Intermittent diet, the Nordic diet, importance of organic foods, merits and demerits of genetically modified food and inflammatory foods such as fried foods, cookies, hot dogs, red meat, refined grains, pizza, burger etc., and instant foods like Maggi etc., Concept of slow and fast foods and impact of cooking processes like boiling, steaming, sautéing, fermenting etc. (samskara) on health. Definition of Nutraceuticals, Nutrigenomics, Nutrigenetics. Concept of Viruddha ahara with classical and modern-day examples and the application of this in the prevention of diseases				
8	Rasayana for Swastha Definition of Rasayana and benefits of Rasayana. Classification and types of Rasayana with examples. Urjaskara Rasayana as per age and occupations/Activities . Antioxidant & immunomodulatory effects of Rasayana with reference to research articles. Importance of lifestyle counselling with its methods.	1	5	2	2

9	Yoga Etymology/derivationoftheword'Yoga'.DefinitionsofYogaaccordingtoPatanjaliYogasutras,BhagavadGitaandCharakaSamhita.DifferencebetweenRajayoga,Hathayogaa ndKarmayoga.YogabhyasaPratibhandhakasandYogaSiddhikarabhavas.MitaharaandPathya-apathyasduringYogabhyasa.ConceptofPanchakoshatheory.DescriptionofAshtangasofYoga-Yama,Niyama,Asana.Pranayama ,Pratyahara,Dharana,DhyanaandSamadhi.Suryanamaskara.DescriptionofShatkarmas-Dhauti,Basti,Neti,Trataka,Nauli,andKapalabhati.Bandha-procedureandbenefitsofMulabandha,Jalandharabandha andUddiyanabandha.Mudras-ShanmukhimudraandJnanamudra.ShatchakrasandtheirimportanceinYogapractice.DescriptionofIda-Pingala-Sushumnanadisandtheirimportanceinyogapractice.ConceptofMokshaaccordingtoCharaka,Muktatmalakshanaa ndMokshaupayas.ImportanceofInternationalDayofYoga(IDY).	2	18	22	6

	Adverse effect of improper Yoga practices			
10	Naturopathy Basic principles of Naturopathy. Concept of Panchabhutopasana. Therapeutic effects of Mud therapy. Therapeutic effect of Sunbath. Fasting therapy- its types and benefits. Hydrotherapy- types of water used based on the temperature and therapeutic effects of Hydrotherapy. Therapeutic effects of Massage	2	5	4
Total Marks		100	75 hr	37 hr

Paper 2 Public Health					
Sr. No	A2 List of Topics	B2 Term	C2 Marks	D2 Lecture hours	E2 Non- Lecture hours
11	Janapadodhwamsa/Maraka Vyadhi Causes of Janapadodhwamsa/marakavyadhi. Manifestation and control measures of Janapadodhwamsa. Principles and uses of epidemiology. Dynamics of disease transmission. Theory of disease causation- epidemiological triad and natural history of disease. Concept of prevention, modes of intervention, risk factors, incidence and prevalence. Susceptible host and host defense. Immunizing Agents. Concept of vyadhikshamatwa. Investigation of an epidemic. Prevention and control of an epidemic. Sankramakaroga as per Ayurveda. Epidemiological determinants, brief pathology, transmission, incubation period, clinical features, diagnosis and preventive measures of 1. Droplet Infections such as Chicken Pox, Measles, Rubella, Diphtheria, Pertussis, Mumps, Tuberculosis, SARS, Influenza, Pneumonia, Covid-19 and Leprosy. 2. Waterborne Infections/intestinal infections- Cholera, Polio, Viral Hepatitis, Typhoid. 3. Intestinal infestations- Ascariasis, Hookworm and Tapeworm. 4. Emerging and re-emerging diseases. Explain Role of Ayurveda in Epidemics like COVID-19, Zika Virus, H1N1, H3N2, etc., 5. Sexually transmitted diseases (STDs) with prevention and control- HIV/AIDS, Syphilis and Gonorrhea. Role of Ayurveda in the prevention and control with recent research updates of Life style diseases such as DM, Obesity, Coronary artery disease (CAD) and Cancer. Epidemic Diseases (Amendment) Ordinance	2	10	37	10

	nanceAct,2020.,				
12	Environmentalhealth Air: PropertiesofVayuandcompositionofair.Changesin	2	16	10	5

	air of the occupied room. Comfort zone and indices of thermal comfort. Air pollution - causes, prevention and control. Effects of air pollution on health and social aspects. Effects of Global warming with recent updates. Definition of ventilation and types of Ventilation. Effects of high altitude and mountain air on health. Water: Safe and wholesome water and water requirements. Properties of water from different sources. Water pollution and health hazards. Contemporary and Ayurvedic methods of water purification. Hard Water - its effects on health and methods of removal of hardness. Quality of water stored in different vessels as per classics. Rainwater harvesting - methods and its importance. Soil: Types of soil and relation between soil and health. Land pollution - its prevention and control. Land purification as per the classics. Social goals of Housing and Housing standards. The Building and other construction workers (Regulation of employment and conditions of services) Act, 1996 Effects of housing on health. Overcrowding and its impact on health. Light: Good lighting, natural lighting and artificial lighting. Biological effects of lighting. Noise: Definition of noise and its sources, effects on health and control measures. Radiation: Radiation - sources and effects on health and control measures. Waste disposal: Types of solid waste, Storage and collection of refuse. Methods of disposal of solid waste (Rural & urban). Excreta Disposal methods & Sanitary Latrines. Modern Sewage disposal methods. Disposal methods of Excreta during camps, fairs, and festivals. Bio-medical waste management and Bio-medical waste management rules, 2016. Environment protection Act, 1986.				
13	Disaster management Definition of disaster and disaster management. Effects of natural and man-made disasters. Epidemiologic surveillance and disease control measures.	2		1	2
14	Occupational Health Definition of occupational health and Ergonomics. Occupational Hazards and Occupational diseases. Prevention and control of Occupational diseases. ESI Act, 1948 and The factories Act. 1948. Role of Ayurveda in various Occupational health problems. The Merchant Shipping/ Medical Examination Rules, 2000	2	20	3	3

15	School health services Health problems of school children. Aspects of school health services. Duties of school medical officers. Healthy environment in the school.	2
16	Disinfection	2

2	3
2	3

	Definition of different terms used in relation to disinfection. Types of disinfection. Natural agents, Physical agents and Chemical agents of disinfection. Recommended disinfection procedures of feces & urine, sputum, and room. Ayurvedic disinfection methods.				
17	Primary healthcare Definition of Primary Health Care. Principles and elements of primary healthcare. Levels of healthcare. Structure of Primary healthcare at village, sub-center, Primary health center (PHC), Community health center (CHC) and Rural hospital levels. Primary healthcare in Health insurance, Private agencies, Voluntary health agencies, NGOs and the AYUSH sector. Role of Ayurveda in Primary Health Care.	2	20	2	1
18	Mother and Child healthcare Objectives of Maternal and Child Care services. MCH problems & indicators of MCH care.	2		1	1
19	Family welfare programme Definition of Demography and sources of demographic statistics in India. Demographic cycle & definition of life expectancy. Definition of family planning, eligible couple and target couple. Objectives of family planning. Problems of population explosion. National population policy. Methods of Contraceptive (Fertility Regulating Methods).	2		2	2
20	Preventive Geriatrics Health problems of the aged and prevention and control measures. Relation between lifestyle and healthy aging. Role of Rasayana in preventive geriatrics.	2		1	1
21	World Health Organization and International health agencies Definition of World Health Organization. Structure, regions, and works of the World Health Organization. Functions of various international health agencies - United Nations health agencies, Bilateral health agencies and Non-Governmental agencies. Contribution of the World Health Organization to the global acceptance of Ayurveda.	2	19	3	1
22	Vital Statistics Definition of Vital Statistics. Sources of Vital statistics. Fertility, Morbidity and Mortality rates. Registration of Birth and Death Act, 1969	2		1	1
23	Health Administration Health administration including AYUSH at the Central, State, District, and Village levels.	2		2	1

24	NationalHealthProgrammes	2	15	7	3

	National Health Programs: Leprosy (NLEP), AIDS (NACP), Blindness (NPCB), Polio, National TB Elimination program, Vector borne disease control program, RCH program, ICDS program, Universal Immunization program, National mental health program, National Program for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases & Stroke (NPCDCS), Swachha Bharat mission, Ayushman Bharat Yojana, Ayushman Bharat Digital Mission, National health mission (NRHM & NUHM), National AYUSH Mission (NAM). National nutrition programs: National Iodine Deficiency Disorders Control program, National Iron Plus Initiative for Anemia Control, National Vitamin A prophylaxis program, Mid-Day Meal program & Balwadi nutrition program.				
25	National Health Policy National Health Policy (NHP) and the scope of Ayurveda in NHP.	2		1	1
Total Marks			100	75 hr	38 hr

Table 3: Learning objectives (Theory) of Course

Paper1PrinciplesofSwasthavritta,YogaandNaturopathy									
A3 Courseoutco me	B3 Learning Objective (At the end of the session, the studentsshould be able to)	C3 Doma in/sub	D3 Must to know / desirable toknow / Niceto know	E3 Level Does/ Show show/ Know show/ Know	F3 T-L meth od	G3 Assessment	H3 Form ative/ summ ative	I3 Term	J3 Integr ation
Topic 1Swastha and Swasthya (Lecture :3 hours, Non lecture: 0 hours)									
CO1	DefineSwasthavrittaanddescribeitsobjective.	CK	MK	K	L	TT-Theory	S	I	
CO1	DescribeandcompareSwasthalakshanasArogyalakshanas,Dhat usamyalakshanas.DescribeConceptofHealth&Operationaldefi nitionofhealth.	CC	MK	K	L&P PT	TT-Theory	S	I	
CO1	DescribetheImportanceofShodhanainSwasthainrelationtoSanc hita&AsanchithaDosha&ClassifySwasthapurushaasSanchitad oshaandAsanchitaDosha.	CC	MK	KH	L	M-CHT	S	I	
CO1	ExplainthePhysical,MentalandSocialdimensionsofhealth.	CK	MK	KH	L& GD	T-EW	S	I	
CO1,CO2	Describetheobjectivecomponentofwell-being- standardoflivingandleveloflivingandsubjectivecomponentofw ell-being -QualityofLife.	CK	MK	KH	L	T-EW	S	I	
CO1,CO2,C O7	Explainonehealthconcept/VasudhaivaKutumbakam”or“OneE arth·OneFamilyOneFuture”	CK	DK	K	L	T-EW	F	I	

Topic 2 Healthy Life style -Dinacharya (Daily regimen) (Lecture :8 hours, Non lecture: 5 hours)									
CO1,CO2	Explain the Primordial, Primary, Secondary, and Tertiary Preventive measures in the context of Ayurveda with examples	CK	MK	KH	L&P PT, S DL	TT-Theory	F&S	I	
CO1,CO2	Explain the importance of Ahara and Vihara as the health promotive and disease preventive measures.	CK	MK	KH	L&P PT	TT-Theory	S	I	
CO1,CO2	Describe the importance of Niyatakalavihara (Dinacharya, Ritucharya) and Aniyatakala Vihara (Vegadharana, Vegaudirana, Ritushodhana, Brumhana and Bhutadiasparshana) for health promotion and disease prevention.	CAN	MK	KH	L&P PT	T-EW	S	I	
CO1,CO2	Explore and analyse the concept of waking up at 'Brahma muhurta' in the present scenario and the effect of early rise on health, sleep, alertness and memory	CAN	DK	KH	IBL	DEB	F	I	
CO1,CO2	Describe the time, quantity and benefit of 'Usha Jalapana' (Drinking water in early morning).	CC	MK	K	L&P PT	T-EW	S	I	
CO1,CO2	Explain the Importance of Malatyagainvatakaala-early morning (Good Bowel Habits)	CK	MK	KH	L&P PT	TT-Theory	S	I	
CO1,CO2	Explain the procedure, dravyas and benefit of Mukhaprakshalana and face washes used currently.	CK	MK	KH	L&P PT	T-EW	F&S	I	
CO1,CO2	Describe the time, procedure, benefits, contraindications and herbs used as perrasa for dantadhavana and modern-day brushing techniques and dentifrices.	CC	MK	KH	L&P PT	T-EW	F&S	I	
CO1,CO2	Describe jihwanirlekhana, explain the tools used in today's era and their benefits.	CAP	MK	KH	SDL	TT-Theory	F&S	I	
CO1,CO2	Explain the Anjanadravyas for Swastha and their benefits	CK	MK	K	L	INT	F&S	I	V-

									SHL
CO1,CO2	Describe the occupation/activity in which Anjana can be used as a health promotive measure	CS	NK	KH	SDL	O-QZ	F	I	
CO1,CO2	Explain the dravyas used with their doses for Pratimarsha Nasya and their benefits.	CC	MK	KH	L&P PT	T-EW	F&S	I	V-PC
CO1,CO2	Describe the various kaal for administering Pratimarsha Nasya as per day and season (ritu)	CAP	MK	KH	L&P PT	P-VIVA	F&S	I	V-PC
CO1,CO2	Describe the occupation/activity in which Pratimarsha Nasya can be used as a health promotive measure.	CAP	MK	KH	L&G GD	INT	F&S	I	V-PC
CO1,CO2	Describe the ingredients, procedure and benefits of kavala and gandusha for oral hygiene including mouthwashes available in the market	CAP	MK	KH	L&P PT	TT-Theory	F&S	I	
CO1,CO2	Mention different snehas/oils to be used for daily abhyanga as per seasons and geographical variations.	CK	MK	K	L&P PT	INT	F&S	I	
CO1,CO2	Justify the importance of the classical tambul by comparing it with the present-day betel chewing.	CE	DK	KH	TBL	TT-Theory	F	I	
CO1,CO2	Explain the practical application of Prayogika Dhoomapana (inhalation of herbal fumes/herbal inhalers) with their benefits and contraindications	CAP	MK	SH	BL	TT-Theory	S	I	
CO1,CO2	Explain the ill effects of tobacco smoking of various sorts viz. beedi, cigarette, hookah on health	CAP	MK	KH	ECE	P-CASE	F&S	I	
CO1,CO2	Describe the applied aspects of Sarvanga Abhyanga, Padabhyanga, Shiroabhyanga and	CAP	MK	KH	DIS	T-EW	F&S	I	V-PC
CO1,CO2	Explain the application of Abhyanga according to different age groups and occupation/activity.	CAP	DK	KH	SDL	T-CS	F	I	V-PC

CO1,CO2	Explaintheindications,contraindicationsandbenefitsofVyayama.	CK	MK	KH	L&P PT	T-EW	F&S	I	
CO1,CO2	Describethetypes&benefitsofvyayamaandpresent-daypracticessuchasaerobicexercises,musclestrengtheningexercisesetc.tobepRACTICEDasperprakriti,ageandoccupation.	CAP	MK	KH	DIS	CR-RED	F&S	I	
CO1,CO2	Describeassessmentofardhashaktilakshanasofvyayamaandtheconsequencesofativayama.	CE	MK	KH	DIS	TT-Theory	F&S	I	
CO1,CO2	Describeandcomparethedravyas,benefits,andapplicationofUdvarthana,UdgharshanaandUtsadana.	CAN	MK	KH	L&P PT	M-CHT	F&S	I	V-KC
CO1,CO2	ExplainthephysiologicaleffectsofSnanaonbodyandmindandexplainthereasonsforcontraindicationsofSnana.	CAN	MK	KH	L&P PT	CR-W	F&S	I	
CO1,CO2	ExplaintheimportanceandbenefitsofAnulepana.	CK	MK	KH	L&P PT	P-VIVA	F&S	I	
CO1,CO2	Describethemeritsanddemeritsofpresent-dayapplicationslikefacepowder,facepack,balm,lotions,lipsticks,deodorantsandperfumes.	CAP	NK	KH	PrBL	CL-PR	F	I	
CO1,CO2	Explaintheimportanceofproperclothing(vastradharana)insociallife.	CK	MK	KH	L&P PT	INT	F&S	I	
Topic 3Ratricharya (Lecture :6 hours, Non lecture: 1 hours)									
CO1,CO2	Describe ratri bhojanvidhi and its relation to health.	CK	MK	KH	L&P PT	T-EW	F&S	I	
CO1,CO2	Describe ratri shayana vidhi in relation to the proper time of sleep.	CK	MK	KH	L&P PT	T-EW	F&S	I	
CO1,CO2	Explain the relation between Nidra and health.	CK	MK	KH	L&P PT	T-EW	F&S	I	

CO1,CO2	Describe effects of Yukta & Ayukta nidra.	CK	MK	KH	L&P PT	T-EW	F&S	I	
CO1,CO2	Explain the effects of Ratri Jagarana, Diwaswapna, Anidra, Atinidra and Akala Nidra.	CK	MK	K	L&P PT	T-EW	F&S	I	
CO1,CO2	Identify Ahara and Vihara Causing sound sleep as well as disturbed sleep.	CAN	DK	KH	SDL	INT	F	I	
CO1,CO2	Formulate the duration of sleep according to age, Sleep in healthy and ailing persons.	CE	DK	KH	SDL	INT	F	I	
CO1,CO2,C O8	Explain various Aspects of Sleep like: a. Daytime Sleepiness and Alertness b. Sleep Deprivation c. Sleep and Host Defenses. Master Circadian Clock and Master Circadian Rhythm. Human Circadian Timing System and Sleep-Wake Regulation f. Circadian Rhythms in Sleepiness, Alertness, and Performance g. Circadian Disorders of the Sleep-Wake Cycle	CK	DK	KH	L&P PT	C-INT	F	I	
CO1,CO2,C O8	Explain Sleep apnoea, insomnia, narcolepsy and restless leg syndrome. Explain solutions to Asatmya jagarana (sleep disorders.)	CK	DK	KH	L&P PT	C-INT	F	I	
CO1	Explain the importance of observing brahmacharya and abrahmacharya in relation to health	CAP	MK	KH	L& GD	TT-Theory	F&S	I	
CO1	Describe Brahmacharya with special reference to lifestyle guidelines	CAP	MK	KH	L& GD	TT-Theory	F&S	I	
CO1	Describe reproductive and sexual health according to Ayurveda	CAP	MK	KH	L& GD	TT-Theory	F&S	I	
Topic 4 Ritucharya (Lecture :5 hours, Non lecture: 2 hours)									

CO1	Explain classification of kaala , distinguish Adana kala andvisarga kala , identificationof seasons based on the ritulakshanas in differentgeographical areas.	CAP	MK	K	L&P PT	M-CHT	F&S	I	
CO1	Analyse the Sanchaya- Prakopa- Prashamana of Doshawith their gunas in each ritu.	CAN	MK	K	L&P PT	PUZ	F&S	I	
CO1	Describe the Relation of Agni , Bala and Ritu with itsapplication.	CAP	MK	K	L&P PT	CL-PR	F&S	I	
CO1	Explain ritu shodhana for the prevention of diseases.	CC	MK	KH	L	T-EW	F&S	I	
CO1	Analyse Pathya - Apathya in regards to Ahara -Vihara in allsix ritus in present scenario.	CAN	MK	K	FC	CL-PR	F&S	I	
CO1	Explain the importance of ahara and vihara in ritu sandhiand yamadanshra kala.	CK	MK	KH	SDL	T-EW	F&S	I	
CO1	Describe rituharitaki as a rasayana with research updates.	CE	DK	K	SDL	CR-RED	F	I	
CO1	Explain the effects of Rituviaryaya on health and its relationto janapadaudhwansa/maraka vyadhis with present dayexamples.	CAP	MK	K	L&P PT	CL-PR	F&S	I	
Topic 5Roganutpadaniya (Lecture :2 hours, Non lecture: 1 hours)									
CO1,CO2	Explainvegadharanaandvega-udiranainrelationtohealthandmorbidity.	CK	MK	K	L&P PT	T-EW	F&S	I	
CO1,CO2	Comparethesymptomsandmanagementprinciplesofadharan iyavegajanyavyadhisfrombruhattrayee.	CAN	MK	K	L&P PT	T-EW	F&S	I	
CO1,CO2	Explainwithexamplestheconceptofvega-udirana(viz.Useofsnuffingpowder,forcibleevacuationofbowel s&bladderetc.).	CK	MK	K	L&P PT	T-EW	F&S	I	
CO1,CO2	Explaintheimportanceofdharaniyavegasinpromotionof	CK	MK	K	L&PP	T-EW	F&S	I	

	mentalhealth.				T				
Topic 6Sadvritta (Lecture :2 hours, Non lecture: 1 hours)									
CO1	Describedigitalhealth	CK	DK	KH	L&GD	TT-Theory	F&S	I	
CO1,CO2	ExplainPromotionofDigitalhealth	CAP	DK	KH	L&GD	TT-Theory	F&S	I	
CO1,CO2	DescribeDigitalhealthproblems	CAP	DK	KH	DIS	PP-Practical	F&S	I	V-SH L
CO1,CO2	UnderstandandadopttheSadavrittameasuresforthemaintenanc eofpersonal,socialandspiritualhealth.	AFT - VAL	DK	D	RP	INT	F	I	
CO1,CO2	ExplainhowtheobservanceofSadvrittahelpsforthe preventionof Adharma.	CC	MK	KH	DIS	T-EW	F&S	I	
CO1,CO2	Describe'AcharaRasayana"anditsroleinthe preventionand contr olof diseases.	CK	MK	K	L&P PT	TT-Theory	F&S	I	
CO1,CO2	Explaincharacteristicsofamentallyhealthyperson,warningsig nalsofpoormentalhealth,typesofmentalillnessandcausesofme ntalill-health.	CK	MK	K	L&P PT	TT-Theory	F&S	I	
CO1,CO2	Describethementalhealthservicesandcomprehensivementalhea lthprogramme.	CK	MK	K	L&P PT	TT-Theory	F&S	I	
CO1,CO2	Explaintheroleoftrigunasandsatvavajayainmentalhealthpromo tioninpresentera.	CAP	DK	KH	CBL	INT	F	I	V-KC
Topic 7Ahara (Lecture :20 hours, Non lecture: 15 hours)									
CO1	ExplainsignificanceofAharaforhealthandwell- beingaccordingtoAyurveda&ContemporaryscienceExplain	CK	MK	K	L	T-EW	F&S	I	

	significance of Ahara for health and well-being according to Ayurveda & Contemporary science								
CO1	Classify aharadrvyas as per Ayurveda & Contemporary science	CK	MK	K	L&P PT	T-EW	F&S	I	
CO1	Enumerate and explain the features of Aharavidhividhana, Aharasevanakala & Dwadashashanapravicharana.	CK	MK	K	L&P PT	T-EW	F&S	I	
CO1	Discuss the applied aspect of Pathyahara, Apathyahara, Samashana, Adhyashana, Vishamashana. Discuss the Ahara & vihara leading to Santarpanajanya evam Apatarpanajanyavyadhi and importance of upavasa and effects of practice of intermittent fast in health	CAN	MK	KH	L&P PT	T-EW	F&S	I	
CO1	Explain the benefits of Shadrasabhojana	CAP	MK	KH	L&P PT	T-EW	F&S	I	
CO1	Enumerate and explain the importance of Ashtaharavidhivishesha yanani in present era	CK	MK	KH	L&P PT	T-EW	F&S	I	
CO1	Explain the importance of Nityasevaniyadrvyas in the maintenance of health	CAP	MK	KH	L&P PT	T-EW	F&S	I	H-DG
CO1	Explain the properties (Guna & karmas) of Aharadrvyas in the following vargas with their nutritive value: Dhanyavarga – Shuka Dhanya (Cereals and Millets), Shami Dhanya (Pulses), Shaka and Haritavarga (Leafy and Non leafy vegetables), Kandavarga (roots and tubers), Phalavarga (Fruits), Tailavarga (Fats and Oils), Ikshuvarga (Sugarcane Products) & Madyavarga (Alcoholic Beverages), Dugdhavarga (Milk and Milk products), Ahara Upayogi Varga (Spices & Condiments), Kritannavarga (Prepared Food), Mamsavarga (Meat types) and Jala Varga	CC	MK	KH	L&P PT	T-EW	F&S	I	H-DG

CO1	DefinePro-bioticsandPre-bioticsandexplaintheirutility	CK	DK	KH	IBL	INT	F	I	
CO1	ExplaintheProximateprinciplesofFood,RecommendedDailyAllowanceaccordingtovariousconditions,Sources,anddeficiencydiseasesofProtein,Carbohydrate,Fats,Vitamins,andMinerals.	CC	MK	K	L_VC	COM	F&S	I	
CO1	DefineBalanceddietandexplainsdietforanindividualdependingonage,bodyweightandphysiologicalstatusandexplaintheSocialAspectsofNutrition	CK	MK	KH	L&GD	T-EW	F&S	I	
CO1	Explain Food hygiene, Sanitation of eating places, Preservationof food, Food handlers, Foodborne diseases, Food fortification,Foodadulteration,andFoodtoxics	CC	NK	KH	L&P PT,M L	P-REC,CHK	F	I	
CO1	ExplainMilkHygiene,Milkcomposition,SourceofinfectionforMilk,Milkbornediseases,CleanandSafemilkandPasteurizationofmilk	CC	DK	KH	L&P PT,M L	P-REC,CHK	F	I	
CO1	ExplainMeatHygiene,Meatinspection,SlaughterhouseandFreshnessoffishandegg	CC	DK	KH	L&P PT,M L	P-REC,CHK	F	I	
CO1	ExplainsafetyandhygienemeasuresforFruitsandVegetables	CC	NK	K	ML	O-QZ	F	I	
CO1	Formulate a Pathya-Apathya diet for prevention of lifestyle disorders such as Obesity, Diabetes mellitus,Cardiovascular diseasesandAcidpepticdiseases	CAP	DK	D	SDL	P-REC,CHK	F	I	
CO1	DescribeFoodsafetyandstandardsregulation(AyurvedaAharaRegulations),2022andFoodsafetyandstandardsAct,2006.	CK	NK	K	ML	INT	F	I	
CO1	ExplaindifferentDietarySupplementsandErgogenicAids	CK	NK	K	IBL	TT-Theory	F	I	
CO1	Explaintheimpactofdifferentdietarypatterns:Mediterranean	CC	NK	KH	L&G	INT	F	I	

	diet,KetoDiet,DASHdiet,theMINDdiet,Vegandiet,Ovo-lacto-vegetarian,pesco-vegetarian,plant-baseddiet,Intermittentdiet,theNordicdiet,importanceoforganicfoods,meritsanddemeritsofgeneticallymodifiedfoods				D				
CO1	DescribetheSlowandFastfoods.Explaintheimpactofcookingprocesseslikeboiling,steaming,sautéing,fermentingetc.(samskara)onhealthandeffectofinstantfoodslikeMaggietc,...	CC	NK	KH	DIS	TT-Theory	F	I	
CO1	DefineNutraceuticals,Nutrigenomics,Nutrigenetics	CK	DK	K	L&P PT	T-EW	F	I	
CO1	ExplaintheconceptofViruddhaaharawithclassicalandmodern-dayexamplesandtheapplicationofthisinthe preventionof diseases	CK	MK	KH	ECE	T-EW	F&S	I	H-AT
Topic 8 Rasayana for Swastha (Lecture :2 hours, Non lecture: 2 hours)									
CO1	Explaintheimportanceoflifestylecounsellingwithitsmethods	CC	NK	K	L&GD	TT-Theory	F&S	I	
CO1	DefineRasayanaandmentionthebenefitsofRasayana	CK	MK	K	L&P PT	T-EW	F&S	I	
CO1	ClassifythetypesofRasayanawithexamples	CK	MK	K	L&P PT	T-EW	F&S	I	
CO1	ExplainUrjaskaraRasyanasasperageandoccupations/Activities	CAP	MK	K	L&GD	T-CS	F&S	I	
CO1	Explaintheantioxidant&immunomodulatoryeffectsofRasayanawithreferencetoresearcharticles	CC	NK	K	L&GD	CR-RED	F	I	
Topic 9 Yoga (Lecture :22 hours, Non lecture: 6 hours)									
CO1	DescribeadverseeffectsofimproperYogapractices	CK	DK	KH	L&G	TT-Theory	F&S	II	

					D				
CO3	DescribeGlobalimportanceofInternationalDayofYoga(IDY)	CK	NK	K	L&P PT	INT	F	II	
CO3	Explaintheetymology/derivationoftheword'Yoga'.	CK	MK	K	L&P PT	T-EW	F&S	II	
CO3	DefineYogaaccordingtoPatanjaliYogasutras,BhagavadGitaandCharakaSamhita.	CK	MK	K	L&P PT	TT-Theory	F&S	II	
CO3	DistinguishbetweenRajayoga,HathayogaandKarmayoga.	CAN	MK	KH	L&P PT	M-CHT	S	II	
CO3	ExplainYogabhyasaPratibhandhakasandYogaSiddhikarabhas.	CK	MK	K	L&P PT	T-EW	F&S	II	
CO3	DescribeMitaharaandPathya-apathyasduringYogabhyasa.	CC	MK	KH	L&P PT	T-EW	F&S	II	
CO3	ExplainPanchakoshatheory.	CC	MK	KH	L&P PT	M-POS	F&S	II	
CO3	ListouttheAshtangasofYoga.	CK	MK	K	L&P PT	T-EW	F&S	II	
CO3	DescribeYamaandNiyamawithmeaningaccordingtoYogasutrasandHathayogapradipika.	CC	MK	K	L&P PT	T-EW	F&S	II	
CO3	DefineAsanaandexplaintheimportanceofasana.Distinguishbetweenasanaandphysicalexercise.	CK	MK	K	L&P PT	TT-Theory	F&S	II	
CO3	Describetheprocedure,benefits,indications,andcontraindicationsofStandingYogaPosturessuchasArdhakatichakrasana,Padahasthasana,Ardhachakrasana,andTrikonasana.	CC	MK	KH	L_VC	PRN	F&S	II	

CO3	Describe the procedure, benefits, indications and contraindications of Sitting Yogapostures such as Swastikasana, Gomukhasana, Padmasana, Vajrasana, Bhadrasana, Shashankasana, Ushtrasana, Pashchimottanasana, Suptavajrasana, Ardhamatsyendrasana, and Siddhasana.	CC	MK	KH	L_VC	PRN	F&S	II	
CO3	Describe the procedure, benefits, indications and contraindications of Supine Yogapostures such as Pawanmuktasana, Sarvangasana, Matsyasana, Halasana, Chakrasana, Shavasana and Setu bandhasana.	CC	MK	KH	L_VC	PRN	S	II	
CO3	Describe the procedure, benefits, indications, and contraindications of Prone Yogapostures such as Bhujangasana, Shalabhasana, Dhanurasana, and Makarasana.	CC	MK	KH	L_VC	PRN	F&S	II	
CO3	Describe the procedure, benefits and contraindications of Suryanamaskara.	CC	MK	KH	L_VC	PRN	S	II	
CO3	Define pranayama and explain its types, benefits, time of practice, and avara-pravara-madhyamalakshanas.	CC	MK	KH	L&P PT	T-EW	F&S	II	
CO3	Describe the procedure of Nadishudhi Pranayama, its benefits, and Nadishudhilakshana.	CC	MK	KH	L_VC	PRN	S	II	
CO3	Enumerate the Kumbhakabhedas.	CK	MK	K	L&P PT	TT-Theory	S	II	
CO3	Describe the procedure and benefits of Suryabhedana, Ujjayi, Sheetali, Sitkari, Bhastrika, Bhramari, Murcha, and Plavini.	CC	MK	KH	L_VC	PRN	F&S	II	
CO3	Enlist Shatkarmas of Yoga, indications and their importance.	CK	MK	K	L&P PT	TT-Theory	S	II	
CO3	Describe the procedure, benefits, indications, contraindications, and precautions of Dhauti, Basti, Neti, Trataka, Nauli, and	CC	MK	KH	L_VC	T-EW	S	II	

	Kapalabhati.								
CO3	Explain the term bandha & Describe the procedure and benefit of Mulabandha, Jalandharabandha, and Uddiyanabandha.	CC	MK	KH	L_VC	T-EW	S	II	
CO3	Describe Mudras and explain the benefit of Shanmukhimudra and Jnanamudra.	CC	DK	KH	L_VC	T-EW	F	II	
CO3	Describe Shatchakras and explain their importance in Yogapratice.	CAP	DK	KH	L&P PT	T-OBT	F	II	
CO3	Describe Ida-pingala-sushumnanadis and their importance in yogapratice.	CAP	NK	K	L&P PT	T-EW	F	II	
CO3	Define Pratyahara and explain its importance in Yogapratice.	CAP	MK	KH	L&P PT	TT-Theory	S	II	
CO3	Define Dharana and explain its importance in Yogapratice.	CAP	MK	KH	L&P PT	TT-Theory	S	II	
CO3	Define Dhyaana and explain its importance in Yogapratice.	CAP	MK	KH	L&P PT	TT-Theory	S	II	
CO3	Describe Cyclic Meditation and Mindfulness meditation and their benefits.	CAP	DK	KH	L&P PT, L _VC	CL-PR	F	II	
CO3	Define Samadhi and explain its types and importance.	CK	MK	K	L&P PT	TT-Theory	S	II	
CO3	Define Moksha according to Charaka and explain Mukta malakshana and Moksha upayas.	CK	DK	K	L & GD	INT	F	II	
Topic 10 Naturopathy (Lecture :5 hours, Non lecture: 4 hours)									
CO3	Explain the basic principles of Naturopathy.	CK	DK	K	L&PP	INT	F&S	II	

					T				
CO3	Describe the concept of Panchabhutopasana.	CK	DK	KH	L&P PT	INT	F&S	II	
CO3	Explain the procedure and therapeutic effects of Mud therapy.	CAP	MK	KH	L_VC	TT-Theory	F&S	II	
CO3	Explain the procedure and therapeutic benefits of Sunbath.	CAP	MK	KH	L_VC	TT-Theory	F&S	II	
CO3	Explain Fasting therapy and its types and benefits.	CK	MK	KH	L&P PT	TT-Theory	F&S	II	
CO3	Explain hydrotherapy, types of water used based on the temperature and therapeutic effects of Hydrotherapy.	CAP	MK	KH	L_VC	TT-Theory	F&S	II	
CO3	Describe types, methods and benefits of massage.	CAP	MK	KH	L_VC	TT-Theory	F&S	II	

Paper 2 Public health									
A3 Course outcome	B3 Learning Objective (At the end of the session, the student should be able to)	C3 Domain/sub	D3 Must to know / desirable to know / Niceto know	E3 Level Does/ Show show/ Know show/ Know	F3 T-L method	G3 Assessment (Refer abbreviations)	H3 Formative/summative	I3 Term	J3 Integration
Topic 1 Janapadodhwamsa / Maraka Vyadhi (Lecture :37 hours, Non lecture: 10 hours)									
CO1	Understanding the Epidemic Diseases (Amendment) Ordinance	CK	MK	KH	L&G	TT-Theory	F&S	II	

	Act,2020.,				D				
CO1	ExplainthecausesofJanapadodhwamsa/marakavyadhiStatet hemanifestationandcontrolmeasuresof JnapadodhwamsaExplaintheimportanceofPanchakarmaandRa sayanainpreventingJanapadodhwamsa	CK	MK	KH	L&P PT	T-EW	F&S	I	
CO1	DefineEpidemiology,enumerateanddescribetheprinciplesandu sesofepidemiology.	CK	MK	KH	L& GD	T-EW	S	I	
CO3	Describethebasictermsofepidemiology.Explainanddiscussthe dynamicsofdiseasetransmission.Explainthetheoryofdiseasecaus ation,epidemiologicaltriadandnaturalhistoryofdisease.	CK	MK	KH	L&P PT	T-EW	S	II	
CO2	Explaintheconceptofprevention,modesofintervention,riskfact ors,incidenceandprevalence.	CK	MK	KH	L&P PT	T-EMI	S	II	
CO2	ExplainSusceptiblehostandhostdefense.DescribeImmunizin gAgents.Explaintheconceptofvyadhikshamatwa.Enlistmetho dstoimproveVyadhikshamatwa.ClassifyBala,enlistfactorsof Balavriddhikarabhava.	CK	MK	KH	L&P PT	T-EW	F&S	II	
CO2	Explaintheinvestigationofanepidemic.Explainpreventionandc ontrolofanepidemic.	CK	MK	KH	L&P PT	T-EW	F&S	II	
CO1	ExplainSankramakarogaasperAyurveda.	CK	MK	K	L&P PT	T-EW	S	II	
CO2	ExplainEpidemiologicaldeterminants,briefpathology ,transmission,incubationperiod,clinicalfeatures,diagnosisand preventivemeasuresof1.DropletInfectionssuchasChickenPox ,Measles,Rubella,Diphtheria,Pertussis,Mumps,Tuberculosis, SARS,Influenza,Pneumonia,Covid-19andLeprosy	CK	MK	KH	L&P PT,E DU, D_B ED	T-EW	F&S	II	

CO2	2. Waterborne Infections/intestinal infections- Cholera, Polio, Viral Hepatitis, Typhoid	CK	MK	K	L&P PT, D _BE D	T-EW	S	II	V-KC
CO2	3. Intestinal infestations – Ascariasis, Hook worm, Tape worm 4. Emerging and re-emerging diseases. Explain Role of Ayurveda in Epidemics like COVID-19, Zika Virus, H1N1, H3N2, etc	CK	MK	KH	L&GD, D_B ED	T-EW	S	II	
CO2	5. Sexually transmitted diseases (STDs) with prevention and control- HIV/AIDS, Syphilis and Gonorrhea.	CK	MK	KH	L&GD, D_B ED	T-EW	S	II	
CO2	Explain the role of Ayurveda in the prevention and control with recent research updates of Lifestyle diseases such as DM, Obesity, Coronary artery disease (CAD) and Cancer	CK	MK	KH	L&P PT, D _BE D	T-EW	S	II	
Topic 2 Environmental health (Lecture : 10 hours, Non lecture: 5 hours)									
CO1	Understanding the Environment Protection Act, 1986	CK	MK	KH	L&GD	TT-Theory	F&S	II	
CO1	Describe the properties of Vayu and state the composition of air.	CK	DK	KH	L	INT	F	II	
CO1	Specify the changes in air of the occupied room.	CK	DK	KH	L	INT	F	II	
CO1	Explain comfort zone and indices of thermal comfort.	CK	DK	KH	L	INT	F	II	
CO2	Comprehend the causes, prevention and control of air pollution. Discuss the effects of air pollution on health and social aspects	CC	DK	KH	L	DEB	F	II	
CO2	Elaborate the effects of Global warming with recent updates	CAP	DK	KH	L&GD	CR-RED	F	II	

CO2	Defineventilationandillustrateitstypes.	CAP	DK	KH	L&GD	DEB	F	II	

CO2	Explaintheeffectsofhighaltitudeandmountainaironhealth.	CAP	DK	KH	L&GD	DEB	F	II	
CO1	Explainsafeandwholesomewaterandstatewaterrequirements.	CK	MK	KH	L&PPT	TT-Theory,VV-Viva	F&S	II	
CO1	Explainthepropertiesofwaterfromdifferentources.	CK	MK	KH	L&PPT	TT-Theory,VV-Viva	F&S	II	
CO1,CO6	Explainwaterpollutionandhealthhazards.	CAP	MK	KH	L&PPT,DIS	CL-PR	F&S	II	
CO1,CO6	DescribethecontemporarymethodsofwaterpurificationalongwithAyurvedicmethods.	CAP	MK	KH	L&PPT,DIS	CL-PR	F&S	II	
CO1,CO6	ElucidatetheeffectsofHardWateronhealthandmethodsofremovalofhardness.	CAP	MK	KH	L&PPT,DIS	CL-PR	F&S	II	
CO7	Describethequalityofwaterstoredindifferentvesselsasperclassics.	CAP	DK	SH	L	DEB	F	II	
CO7	Explaintherainwaterharvestingmethodsanditsimportance	CAN	NK	SH	L	DEB	F	II	
CO7	Enlistthetypesofsoil.	CK	DK	KH	L&PPT	INT	F	II	

CO7	Interprettherelationbetweensoilandhealth.	CK	DK	KH	L&P PT	INT	F	II	
CO7	ExplainLandpollutionanditspreventionandcontrol	CK	DK	KH	L&P PT	INT	F	II	
CO7	Explainlandpurificationaspertheclassics.	CAN	NK	KH	L& GD	T-OBT	F	II	
CO7	ExplaintheSocialgoalsofHousingandHousing	CE	DK	KH	L&G	T-EW	F	II	

	standards. Understanding of The building and other construction workers Act, 1996				D				
CO7	Analyze the effects of housing on health.	CE	DK	KH	L&GD	T-EW	F	II	
CO7	Explain overcrowding and its impact on health	CE	DK	KH	L&GD	TT-Theory	F	II	
CO7	Explain good lighting, natural lighting and artificial lighting	CK	DK	KH	L&PPT	M-POS	F	II	
CO7	Explain the biological effects of lighting.	CK	DK	KH	L&PPT	M-POS	F	II	
CO7	Define noise. Illustrate its sources, effects on health and control measures.	CK	DK	KH	L&PPT	PRN	F	II	
CO7	Enlist the sources of Radiation and explain its effects on health and describe control measures.	CK	DK	KH	L	PRN	F	II	
CO7	Enlist Different types of solid waste and Explain the Storage and collection of refuse.	CK	MK	KH	L,D-M	TT-Theory	S	II	
CO7	Explain the Methods of disposal of solid waste (Rural & urban)	CK	MK	KH	D-M	M-MOD	S	II	
CO7	Describe Bio-medical waste management and Bio-Medical waste management rules, 2016	CK	MK	KH	D-M	TT-Theory	S	II	
CO7	Enlist excreta Disposal methods and explain Sanitary Latrines	CAN	DK	KH	D-M	DEB	F	II	
CO7	Explain the Modern Sewage disposal method	CAN	DK	KH	D-M	DEB	F	II	
CO7	Describe the disposal methods of Excreta during camps, fairs, and festivals	CAN	DK	KH	D-M	DEB	F	II	

Topic 3 Disaster management (Lecture :1 hours, Non lecture: 2 hours)									
CO5	Definedisasterandexplaindisastermanagement	CK	DK	KH	L&GD	PRN	F	II	
CO5	Explaineffectsofnaturalandman-madedisasters	CK	DK	KH	L&GD	PRN	F	II	
CO2	Explainepidemiologicsurveillanceandidentifydiseasecontrolmeasures	CAP	DK	KH	L&GD	PRN	F	II	
Topic 4 Occupational Health (Lecture :3 hours, Non lecture: 3 hours)									
CO1	UnderstandtheMerchantShipping/MedicalExaminationRules, 2000	CK	DK	KH	L&GD	TT-Theory	F	II	
CO7,CO8	DefineOccupationalHealthandErgonomics.	CK	MK	K	L&GD	TT-Theory	F&S	II	
CO7,CO8	ExplainoccupationalHazards.	CK	MK	K	L&GD	T-EW	F&S	II	
CO7,CO8	Enlistoccupationaldiseasesandexplaintheirprevention&control.	CK	MK	K	L&GD	T-EW	F&S	II	
CO1	ExplainESIAct,1948andThefactoriesAct,1948	CK	MK	K	L&PPT	T-EW	S	II	
CO1	Describethethe roleofAyurvedainvariousOccupationalhealthproblems.	CK	MK	KH	L&GD	TT-Theory	S	II	
Topic 5 School health services (Lecture :2 hours, Non lecture: 3 hours)									
CO2	StatetheHealthproblemsofschoolchildren.	CC	MK	KH	L&PPT	T-EW	F&S	II	

CO2	Mention the aspects of school health services.	CC	MK	KH	L&P PT	T-EW	F&S	II	
CO2	Mention the duties of school medical officers.	CC	MK	KH	FV	T-EW	F&S	II	
CO2	Explain how to maintain a healthy environment in the school.	CC	MK	KH	FV	T-EW	F&S	II	
Topic 6 Disinfection (Lecture :2 hours, Non lecture: 3 hours)									
CO1,CO2,CO 6,CO7	Define the term disinfection	CK	MK	K	L	TT-Theory	F&S	II	
CO1,CO2,CO 6,CO7	Enlist and explain the types of disinfection.	CK	MK	K	L&P PT	P-VIVA,P-PS	F&S	II	
CO1,CO2,CO 6,CO7	Describe the Natural agents, Physical agents, and chemical agents of disinfection	CK	MK	K	L&P PT	T-EW	F&S	II	
CO1,CO2,CO 6,CO7	Demonstrate the recommended disinfection procedures of feces & urine, sputum, and room.	PSY - ME C	DK	KH	L_VC	P-VIVA,QZ	F	II	
CO1,CO2,CO 6,CO7	Explain Ayurvedic disinfection methods.	CK	DK	K	L&P PT	QZ	F	II	
Topic 7 Primary health care (Lecture :2 hours, Non lecture: 1 hours)									
CO1,CO2,C O3,CO4,CO 5,CO8	Define Primary Health Care.	CK	MK	K	L	TT-Theory	S	II	
CO1,CO2,C O3,CO4,CO 5,CO8	Describe the principles and elements of primary health care and the levels of health care.	CK	MK	K	L&P PT	T-EW	F&S	II	
CO1,CO2,CO 3,CO4,CO5,C	Describe the Structure at village, sub-centre, PHC, CHC, Rural hospital levels	CK	MK	K	L&P PT	T-EW	F&S	II	

O8									
CO1,CO2,C O3,CO4,CO 5,CO8	DescribeprimaryhealthcareinHealthinsurance,Privateagencie s, Voluntaryhealthagencies,NGOs,andtheAYUSHsector	CK	DK	K	L&P PT	T-OBT	F	II	
CO1,CO2,C O3,CO4,CO 5,CO8	DescribetherolesofAyurvedainPrimaryHealthCare.	CK	MK	K	L&P PT	TT-Theory	F&S	II	
Topic 8Mother and Child health care (Lecture :1 hours, Non lecture: 1 hours)									
CO2,CO3,C O8	DescribethobjectivesofMaternalandChildCareservices.	CK	MK	K	L	T-EW	F&S	II	
CO2,CO3,C O8	ExplaintheMCHproblems&enlisttheindicatorsofMCHcare	CC	MK	K	L&P PT	T-EW	F&S	II	
Topic 9Family welfare programme (Lecture :2 hours, Non lecture: 2 hours)									
CO4,CO5,C O6	Definedemographyandenlistthesourcesofdemographicstatisti csinIndia.	CK	MK	K	L&P PT	TT-Theory	F&S	II	
CO4,CO5,C O6	Describethedemographiccycle&definelifexpectancy.	CK	MK	K	L&P PT	CL-PR	F&S	II	
CO2,CO4,C O5	Definefamilyplanning,eligiblecoupleandtargetcouple.Enlist &explaintheobjectivesoffamilyplanning.	CK	MK	K	L&P PT	TT-Theory	F&S	II	
CO2,CO4,C O5	Explaintheproblemsofpopulationexplosionanddescribenation alpopulationpolicy.	CK	MK	K	DIS	TT-Theory	F&S	II	
CO2,CO4,C O5	ClassifyanddescribethContraceptivemethods(FertilityRegula tingMethods).	CK	MK	K	L_VC	M-CHT	F&S	II	
Topic 10Preventive Geriatrics (Lecture :1 hours, Non lecture: 1 hours)									

CO8	Enlist the health problems of the aged and explain their prevention and control measures	CK	MK	K	DIS	INT	F&S	II	
CO8	Explain the relation between lifestyle and healthy aging.	CC	MK	K	DIS	INT	F&S	II	
CO8	Describe the role of Rasayan in preventive geriatrics.	CC	MK	K	L&P PT,W	INT	F&S	II	
Topic 11 World Health Organization and International health agencies (Lecture :3 hours, Non lecture: 1 hours)									
CO4	Define and describe the structure, regions, and works of the World Health Organization	CK	MK	KH	L&GD	T- EW,P- VIVA	F&S	III	
CO4	Describe the functions of various international health agencies- United Nations health agencies, bilateral health agencies, and Non-Governmental agencies	CK	MK	KH	L&GD	T- EW,P- VIVA	F&S	III	
CO4	Describe the contribution of the World Health Organization to the global acceptance of Ayurveda	CK	MK	KH	L&GD	T- EW,P- VIVA	F&S	III	
Topic 12 Vital Statistics (Lecture :1 hours, Non lecture: 1 hours)									
CO1	Understanding of Registration of Birth and Death Act, 1969	CK	MK	KH	L&GD	TT-Theory	F&S	II	
CO4,CO8	Define Vital Statistics. Enumerate the sources of Vital statistics	AFT - RES	MK	SH	DIS	T- EW,P- VIVA	F&S	III	
CO4,CO8	Describe Fertility, Morbidity and Mortality rates	AFT - RES	MK	SH	L&GD	T- EW,P- VIVA	F&S	III	

Topic 13Health Administration (Lecture :2 hours, Non lecture: 1 hours)									
CO4,CO8	Describe the health administration including AYUSH at the Central, State, District, and Village levels	CK	DK	KH	L&GD	T-EW, P-VIVA	S	III	
Topic 14National Health Programmes (Lecture :7 hours, Non lecture: 3 hours)									
CO4,CO8	State the vision/objective and outline the goals, strategies and plan of action of National Health Programs- Leprosy(NLEP), AIDS(NACP), Blindness(NPCB), Polio, National TB Elimination Program, Vector borne disease control program, RCH program, ICDS program, Universal Immunization Program, National mental health program, National Program for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases & Stroke(NPCDCS), Swachha Bharat mission, Ayushman Bharat Yojana, Ayushman Bharat Digital Mission, National health mission(NRHM&NUHM), National AYUSH Mission(NAM). National nutrition programs- National Iodine Deficiency Disorders Control program, National Iron Plus Initiative for Anemia Control, National Vitamin A prophylaxis program, Mid-Day Meal program & Balwad nutrition program.	CK	MK	KH	L&P PT, DIS ,FV	T-EW, P-VIVA	F&S	III	
Topic 15National Health Policy (Lecture :1 hours, Non lecture: 1 hours)									
CO4	Describe the National Health Policy(NHP) and the scope of Ayurveda in NHP.	CK	MK	KH	L, L & PP T	T-EW, P-VIVA	F&S	III	

List of Practicals [Term and Hours]

PRACTICALS(Marks-100)			
S.No	List of Topics	Term	Hours
1	Dinacharya	1	25
2	Disinfectants	1	2
3	Ahara	1	30
4	HealthEducation(IEC)	2	10
5	Yogaperformance	2	35
6	Communitysurvey	3	20
7	LocalHealthEducationalVisits	3	36
8	VisittoObserveNationalHealthProgramsandAyurvedaCentre	3	12
9	Monitoringofhealthandhygiene	1	5

Table 4: Learning objectives (Practical)

A4 Course outcome	B4 Learning Objective (At the end of the session, the student should be able to)	C4 Domain/sub	D4 Must to know / desirable to know / Nice to know	E4 Level Does/ Show show/ Know show/ Know	F4 T-L method	G4 Assessment (Refer abbreviations)	H4 Formative/ summative	I4 Term	K4 Integration
Topic 1 Dinacharya									
CO1	Collect and Compare different Dantadhwana Churnas/Toothpastes available in the market and choose/advises the appropriate one based on the need.	PSY - ADT	DK	D	PrBL	PRN	F	I	
CO1	Collect and Compare different Jiwha Nirlekhana Yantra (Tongue cleaners) available in the local area/market and choose/advises the appropriate one for swastha	PSY - ADT	DK	D	PrBL	PRN	F	I	
CO1	Collect different dravya/kashaya/mouthwashes available in the market for kavala and gandusha; demonstrate the procedure of kavala and gandusha with appropriate liquids/dravyas for swastha	PSY - ADT	MK	D	PrBL, D, PRA	PRN	F&S	I	
CO1	Collect different types of Anjana (Collyriums) available in the market, Demonstrate Anjana procedure as per local traditions and	PSY - ADT	MK	D	PrBL, PT, D	PRN	F&S	I	

	advisedifferent typesofAnjanaforSwatha.								
CO1	DemonstratePratimarshaNasyawithAnutaila/SesameoilandprescribetheappropriatetailaforPratimarshaNasyaforSwatha.	PSY - ADT	MK	D	PrBL ,PT, D	DOPS	F&S	I	
CO1	DemonstratePrayogikaDhoomapanaandadviseprayogikadhoomapanadravyaforSwatha.	PSY - ADT	MK	D	PrBL ,PT, D	DOPS	F&S	I	
CO1	DemonstratetheprocedureofAbhyangatechniquesforfullbodyabhyanga,padabhyangaandshiroabhyangaandprescribesuitabletailaforAbhyanaforSwatha.	PSY - ADT	MK	D	PrBL ,PT, D	DOPS	F&S	I	
CO1	DemonstratetheprocedureofUdwartanatechniquesandprescribesuitabledravyaforUdwartanaforSwatha.	PSY - ADT	MK	D	PrBL ,PT, D	DOPS	F&S	I	
CO2	Prescribeappropriatedinacharyamoduleregardingaharaandvihaarasperageandoccupation/activity.	CE	MK	SH	PrBL	P-CASE	F&S	I	
CO2	Advise/counselpeopleregardinghealthylifestylebasedontheAyurvedicprinciples(onestudentshouldcounselatleastfivepersonandshouldbedocumented).	CE	MK	SH	PrBL	P-CASE	F&S	I	
Topic 2Disinfectants									
CO7	Identifyanddemonstratethesuitability,dose,dilution,andcontactperiodofthefollowingdisinfectants:Bleachingpowder,Detto l,Lysol,Savlon.	PSY - ADT	MK	SH	CBL	PP-Practical	S	II	
CO7	Observe the procedure of fumigation of the operation theatre.	AFT - REC	NK	D	D	P-VIVA	F	II	

CO7	Writethemodeofworkingandusesofanautoclave.	CK	DK	KH	SDL	T-EW	F	II	

Topic 3 Ahara									
CO8	Collect and compile different regional staple food articles.	PSY - SET	MK	D	SDL	COM	F	I	H-DG
CO8	Mention the nutritive value of the following preparations per 100g and calculate the food portions/serving size of the following recipes: a. Yushab. Yavaguc. Odanad. Krusharae. Peyaf. Panakag. Takrah. Mandai. Vilepi	CE	MK	D	PT	P-EN	F&S	I	
CO8	Plan a dietary Menu according to different Prakriti (preparation of diet chart considering all Ahara Vargas forekadoshaja, dvidoshaj aprakriti)	PSY - GU D	MK	SH	TBL	P-MOD, P-POS	F	I	
CO8	Plan the dietary menu for different occupations/Activities, Age groups, and physiological conditions. (diet chart for 1-5 years child, 6-18 years, 18 & above till 60 years, above 60 years, sedentary, sedentary intellectuals, night shifts, drivers, standing professionals. physiological conditions like Garbhini, Sutika, Kshirapa, Ksheerada, Ksheerannada, Annada etc.,..)	PSY - GU D	MK	D	CBL	P-CASE	F&S	I	
CO8	Plan Ahara-Vihara based on the different Ritus (preparation of diet and lifestyle charts for each ritu)	PSY - GU D	MK	D	PrBL	M-CHT	F	I	
CO8	Plan a dietary menu for anyone individual according to prakriti, agni, Sara, satva, age, sex, occupation/activity, and season based on the regional food habits with serving sizes with different food exchange/options.	PSY - GU D	MK	D	IBL	P-CASE	F	I	

CO8	Document the maintenance of various equipment and appliances used in the kitchen/diet section of the hospitals such as cooking gas, pressure cooker, mixer-grinder, microwave oven, refrigerator	AFT - RES	NK	D	PL	PP-Practical	F	I	

CO8	Assess various Anthropometric variables like Weight, height, and BMI (including differentiation between Sara) and Mid-arm Circumference in order to assess the state of nutrition.	AFT - RES	MK	D	PSM	PP-Practical	F	I	
Topic 4 Health Education (IEC)									
CO5	Demonstrate communication methods for health education.	PSY - SET	MK	SH	DIS ,W	P-RP, M-POS, OSPE ,DOPS	F&S	II	
CO5	Demonstrate/present different health education materials (dina charyap practices, sadvrittap practices, family planning methods, breast feeding techniques, environmental hygiene, preventive and control measures of communicable and non-communicable diseases etc.) to the target population in the community.	AFT - RES	MK	SH	DIS, TPW ,RP	DOPS, Log book	F&S	II	
Topic 5 Yoga performance									
CO3	Perform four Standing Postures namely - Ardha katichakrasana, Padahastasana, Ardha chakrasana, and Trikonasana step by step with Sthiti, main procedure, and vishrama.	PSY - ADT	MK	SH	KL	DOPS	S	II	
CO3	Perform eleven Sitting Postures namely - Swasthikasana, Gomukhasana, Padmasana, Vajrasana, Bhadr asana, Shashankasana, Ushtrasana, Pashchimottanasana, Supt avajrasana, Ardhamatsyendrasana, and Siddhasana step by step with Sthiti, main procedure, and vishrama.	PSY - ADT	MK	SH	KL	DOPS	S	II	
CO3	Perform seven Supine Postures namely - Pavanamuktasana, Sarvangasana, Matsyasana, Halasana, Chak rasana, Shavasana, and Setubandhasana step by step with Sthiti, main procedure and visrama	PSY - ADT	MK	SH	KL	DOPS	S	II	
CO3	Perform four Prone Postures namely - Bhujangasana,	PSY -	MK	SH	KL	DOPS	S	II	

	Shalabhasana, Dhanurasana, and Makarasana step by step with Sthiti, main procedure and vishrama.	ADT							
CO3	Perform Nadishuddhi Pranayama with inhalation-retention-exhalation in the ratio of 1:4:2 in a comfortable sitting posture.	PSY - ADT	MK	SH	KL	DOPS	S	II	
CO3	Perform Kumbhakabhedas namely- Suryabhedana, Ujjayi, Sitkari, Sheetali, Bhastrika and Bhramari.	PSY - ADT	MK	SH	KL	DOPS	S	II	
CO3	Perform Jalaneti, Kapalabhati and Trataka.	PSY - ADT	MK	SH	KL	DOPS	S	II	
CO3	Demonstrate and instruct Common Yoga Protocol of IDY (International Day of Yoga).	PSY - ADT	DK	SH	EDU	DOPS	F	II	
Topic 6 Community survey									
CO6	Conduct minimum 05 Family surveys using structured questionnaire in specific rural populations and report the survey finding and discuss possible solutions to the family.	PSY - SET	MK	D	ECE	DOPS	F&S	III	
CO6	Conduct minimum 05 Family surveys using structured questionnaire in specific urban populations and report the survey finding and discuss possible solutions to the family.	PSY - SET	MK	D	ECE	DOPS	F&S	III	
Topic 7 Local Health Educational Visits									
CO2	Report the functioning of milk dairies such as methods of processing and preservation of milk, testing of milk before and after pasteurization and the standards of milk & milk products.	PSY - SET	MK	KH	EDU ,FV	P-VIVA, RK	F&S	III	
CO2, CO7	Report and explain the various processes involved in large-scale water purification.	PSY - ME	MK	KH	D-M, FV	P-VIVA, RK	F&S	III	

		C							
CO2,CO7	ExplainandReporttheprocessesinvolvedinmodernsewagetreatment.	PSY - ME C	MK	KH	D- M,F V	P-EXAM,RK	F&S	III	

CO1,CO2,CO5,CO6,CO8	Explainandreportthevariousmeasuresadoptedintheindustryforthe preventionandcontrolofoccupationaldiseases.	CC	MK	KH	TPW ,FV	P-VIVA,RK	F&S	III	
CO1,CO2,CO8	ExplainandReportthefoodsafetystandardsandmethodsoffoodprocessingtechniques.	CC	MK	K	PrBL ,RLE ,FV	P-VIVA,RK	F&S	III	
CO3,CO6	Reportandexplainvariousnaturopathictreatmentmethods.	CC	MK	KH	L_VC ,EDU ,FV	P-EXAM,RK	F&S	III	

Topic 8 Visit to Observe National Health Programs and Ayurveda Centre

CO4,CO8	Report the functioning of National Health Programs at Primary health centers/Community health centers/District hospitals and Govt. Ayurveda Dispensary	PSY - SET	MK	SH	L_VC ,IBL ,FV	T-EW,P- VIVA,R K	F&S	III	V-KC
CO4	Report the functioning of a Primary Health Centre/Community Health Centre/Rural Hospital/District Hospital with regard to the implementation of different National Health Programmes viz. infectious disease control, immunization, ANC, Family planning etc.	AFT - RES	DK	D	FV	Logbook	F	III	
CO4	Report the structure and functioning of an Ayurvedic Dispensary/ Taluk Hospital/District Hospital available in the district.	AFT - RES	DK	D	FV	Logbook	F	III	

Topic 9 Monitoring of health and hygiene									
CO2,CO6,CO7,CO8	Collect the demographic profile of all allotted 2 subjects/Individuals (one from the community and one from employees of the college/hospital) and conduct clinical examination (Assess Prakriti, Sattva, Saara, etc.)	AFT - RES	MK	D	IBL	P-CASE, RK	F&S	I	
CO2,CO6,CO7,CO8	Conduct periodic check-ups for all allotted individual/employer (2) health status/occupational health status and if any treatment	AFT - RES	MK	D	PT	P-CASE, OSCE	F	I	
	is prescribed then coordinate the treatment under the overall guidance of the Mentor								
CO2,CO6,CO7,CO8	Counsel the adopted individuals/employer (2) and analyze the health trajectory (individual following the prescribed regimen) of the adopted individual/employer under the overall guidance of the mentor	AFT - RES	MK	D	PT	P-SUR, RK	F	II	
CO2,CO6,CO7,CO8	Document the maintenance of water sanitation, waste disposal, food hygiene, etc., in the hospital canteen/pathy section/cafeteria	CE	MK	KH	PrBL	RK	F	I	

Table 4a: List of Practical

S.No	Name of practical	Term	Activity	Practical hrs
1	Dinacharya	1	1. Analyze the composition of different Dantadhwana Churnas/ Tooth pastes and toothbrushes available in the market 2. Analyze different Jivwa Nirlekhana Yantra (Tongue cleaners) available in the local area/market 3. Demonstrate the procedure of kavala and gandusha with appropriate liquids/dravyas for swastha 4. Demonstrate Anjana procedure as per local traditions and advise different types of Anjana for swastha. 5. Demonstrate Pratimarsha Nasya with Anutaila/Sesame oil and prescribe the appropriate taila for Pratimarsha Nasya for swastha. 6. Demonstrate Prayogika Dhoomapana (Practicable and Non-practicable Dhoomapana) and advise prayogika dhoomapana dravya for swastha. 7. Demonstrate the procedure of Abhyanga techniques for full body abhyanga, padabhyanga and shiroabhyanga and prescribe suitable Taila for Abhyanga for Swastha. 8. Demonstrate the procedure of Udwartana techniques and prescribe suitable dravya for Udwartana for Swastha. 9. Prescribe appropriate dinacharya module regarding ahara and vihara as per age and occupation/activity. 10. Advise/counsel people regarding healthy lifestyle based on the Ayurvedic principles (one student should counsel at least five persons and should be documented).	25
2	Disinfectants	1	Identify and demonstrate the suitability, dose, dilution, and contact period of the following disinfectants: Bleaching powder, Dettol, Lysol, Savlon. Observe the procedure of fumigation of the operation theatre. Write the mode of working and uses of a autoclave.	2

3	Ahara	1	Collect, compile and document regionwise different varieties of Ahara Varga (Millets, cereals, pulses, vegetables, varieties of milk/oil/honey/available in the market). Demonstrate the therapeutic indication and nutritive values of Pathyakalpanasa. Mandab. Peyac. Vilepid. Yavague. Odana f. Krisharag. Yushah. Takra. Prepare the dietary regime according to different Prakriti. Prepare/Prescribe the dietary regime for different occupations/activities, age groups, and physiological conditions. Prepare/Prescribe the diet and lifestyle regimen (pathya-apathya) with reference to Ahara and Vihara for each ritu. Conduct diet counselling according to prakriti, agni, sara, satva, age, sex, occupation/activity, and prevailing season based on the regional food habits with serving sizes with different food exchange/options for 5 persons. Assess various anthropometric variables like weight, height, and BMI and mid-arm circumference etc., in order to assess the state of nutrition of five individuals.	30
4	Health Education (IEC)	2	Demonstrate communication methods for health education. Demonstrate/Present different health education materials (dinacharya practices, Sadvritta practices, family planning methods, breastfeeding techniques, etc.) patients and general public.	10
5	Yoga performance	2	Perform four Standing Postures namely- Ardhakatichakrasana, Padahasthasana, Ardha chakrasana, and Trikonasana step by step with sthiti, main procedure and vishrama. Perform eleven Sitting Postures namely- Swasthikasana, Gomukhasana, Padmasana, Vajrasana, Bhadrasana, Shashankasana, Ushtrasana, Pashchimottanasana, Suptavajrasana, Ardhamatsyendrasana, and Siddhasana step by step with sthiti, main procedure and vishrama. Perform seven Supine Postures namely- Pavanamuktasana, Sarvangasana,	35

			Matsyasana, Halasana, Chakrasana, Shavasana, and Setubandhasana step by step with Sthiti, main procedure and vishrama. Perform four Prone Postures namely- Bhujangasana, Shalabhasana, Dhanurasana, and Makarasanastep by step with Sthiti, main procedure and vishrama. Perform Jalani and kapalbhati. Perform Anuloma-Viloma Pranayama in a comfortable sitting posture. Perform Nadishuddhi Pranayama with inhalation-retention-exhalation in the ratio of 1:4:2 in a comfortable sitting posture. Perform Kumbhakabhedas namely- Suryabhedana, Ujjayi, Sitkari, Sheetal, Bhastrika and Bhramari. Demonstrate and instruct Common Yoga Protocol of IDY (International Day of Yoga).	
6	Community survey	3	Conduct minimum 05 Family surveys using a structured questionnaire in specific rural populations and report the survey findings and discuss possible solutions to the family. Conduct minimum 05 family surveys using a structured questionnaire in specific urban populations and report the survey findings and discuss possible solutions to the family.	20
7	Local Health Educational Visits	3	Report the functioning of milk dairies such as methods of processing and preservation of milk, testing of milk before and after pasteurization, and the standards of milk & milk products. Report the various processes involved in water purification plant. Report the processes involved in modern sewage treatment plant. Report the various measures adopted for the prevention and control of occupational diseases in any industry. Report the food safety standards and methods of food processing techniques adopted in any food industry. Report the various treatment modalities adopted in Naturopathy and Yoga centers. Note: Swasthavritta, Agada Tantra.	36

			Dravyaguna&Rasashastra- Combinedoutcampusvisitscanbepalledw hereverfeasible.	
8	VisittoObserveNationalH ealthProgramsandAyurve daCentre	3	ReportthefunctioningofaPrimaryhealthc entre/Communityhealthcentre/Ruralhos pital/Districthospitalwithregardstothei mplementationofdifferentNationalHealt hProgrammesviz.infectiousdiseasecontr ol,immunization,ANC,Familyplanning etc. ReportthestructureandfunctioningofaA yurvedaDispensary/TalukHospital /DistrictHospitalavailableinthedistrict.	12
9	Monitoringofhealthandh ygiene	1	Conductperiodiccheck- ups,collectdemographicprofileandclinic alexaminationofallotted2subjects/Indivi duals-AssessPrakriti,Satva, Sara, etc.)for theirhealth status /occupationalhealthstatusandifanytreat mentisprescribedthencoordinatethetreat mentundertheoverallguidanceoftheteach er/Mentor.Counselandadvicetheallotted 2subjectsahhealthyregimeprescriptionan danalyzetheirhealthstatusafterfollowing thehealthyregimeundertheoverallguidan ceoftheteacher/mentor.Documentthema intenanceofwatersanitation,wastedisposa lincludingbiomedicalwasteinthehospital .	5
Total Hr				175

[-]

Activity

CO	Topic name	Activity Details	Hours
CO1	Dinacharya	Demonstration, Making posters, Real-life experiences, Roleplay, We-based activities	5

		Example- Collection and analysis of different toothpaste/toothbrushes, mouthwashes and collyriums available in the market including GMP pharmacies	
CO1	Ratricharya	Chart preparation and real-life experiences of Ratribhojana and Sleep principles	1
CO1	Ritucharya	Assessment of changes happening in the human body in particular ritu Poster preparation of food recipes in different ritus	2
CO1	Sadvritta	Roleplay	1
CO1	Ahara	Listing of Ahitakara (Junk) food habits, Gathering information of Organic farming and Organic food items, Application of Ashtaaharavidhivese shaayatana in real life- Team base project, Roleplay, Presentation & Collection of Research updates in the field of Ayurvedic food	15
CO1	Roganutpadaniya	Survey and documentation on effect of Adharan eeyavega on different occupations	1
CO1	Rasayana for swastha	Poster making and Library work	2
CO1	Nidra	Survey on sleep and awakening patterns amongst staff and students	1
CO7	Yoga	Participation in International day of Yoga, Poster presentation of Yogic practices as per diseases, Preparation of Short video on Yoga and Conducting Quiz	7
CO2, CO5	Disaster management	Group discussion	2
CO1	Janapadodwamsa	Assignment, Symposiums and Problem-based learning	10
CO1, CO5	Environmental health	Seminars, Quiz and mPBL	5
CO3	Disinfection	PBL	3
CO2	Family welfare programme	Roleplay, Web-based learning and Discussion	2

CO7,CO8	Motherandchildhealthcare	PBL	1
CO8	Preventivegeriatrics	GroupdiscussionandSeminar	1
CO4,CO8	Nationalhealthprograms	Web-basedlearning,AssignmentsandParticipating in celebration ofhealth relateddays	3
CO3	Schoolhealthservices	RoleplayandPresentations	2
CO7,CO8	Occupationalhealth	Postermaking,PBLandGroupdiscussion	3
CO2,CO3,CO4,CO5,CO8	Primaryhealthcare	Groupdiscussions	2
CO3	Naturopathy	Web-basedlearning,TutorialsandGroupdisussions	4
CO4	WorldhealthorganizationsandInternationalhealthagencies	Web-basedlearningandQuiz	1
CO8	HealthStatistics	PresentationsandSeminars	1

#Hours indicated are included in calculations of Table 3 and 4.

Table 5- Teaching learning method

Sr No	Teaching learning methods in the course	No of Activities
1	Lecture	14
2	LecturewithPowerpointpresentation	61
3	Lecture&GroupDiscussion	16
4	LecturewithVideoclips	15

5	Discussions	6
6	Inquiry-Based Learning	1
7	Project-Based Learning	1
8	TBL	1
9	Flipped classroom	1
10	Blended Learning	1
11	ECE	1
12	Self-directed learning	8
13	Demoon Model	6

These are overall teaching learning methods listed in Table 3 and 4. Teachers can select the best possible method among the given methods as per objective, available time etc.

Table 6: Assessment Summary: Assessment is subdivided in A to H points

6 A-Number of Papers and Marks Distribution

Subject Code	Papers	Theory	Practical/Clinical Assessment					Grand Total
			Practical	Viva	Elective	IA	Sub Total	
AyUG-SW	2	200	100	60	10	30	200	400

6 B - Scheme of Assessment (formative and Summative)

PROFESSIONAL COURSE	DURATION OF PROFESSIONAL COURSE		
	First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months) ***
Second	3PA&First TT	3PA&Second TT	3PA&UE

PA: Periodical Assessment; **TT:** Term Test; **UE:** University Examinations.

*** University Examination shall be on entire syllabus !

6 C - Calculation Method for Internal assessment Marks

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERMASS ESSMENT	
	A 6	B	C	D	E	F	G	H
	1(15 Marks)	2(15 Marks)	3(15 Marks)	Average(A+B+C/3)	Converted to 30 Marks(D/15*30)	Term Test(Marks converted to 30)	SubTotal _/60 Marks	Term Assessment(.../30)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. **Conduct Theory (100 Marks) (MCQ (20*1 Marks), SAQ (8*5), LAQ (4*10)) and Practical (100 Marks) Then convert to 30 marks.							

6 D - Evaluation Methods for Periodical Assessment

S. No	Evaluation Methods
1	Activities Indicated in Table 3-Column G 3 as per Indicated I, II or III term in column I 3

Evaluation Methods in MSE

1. Practical / Clinical Performance
2. Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3. Open Book Test (Problem Based)
4. Summary Writing (Research Papers/ Samhitas)
5. Class Presentations; Work Book Maintenance
6. Problem Based Assignment
7. Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8. Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9. Small Project etc.

6 E Question Paper Pattern

II PROFESSIONAL BAMS EXAMINATIONS AyUG-SW PAPER-1

Time:3HoursMaximumMarks:100INSTRUCTIONS:

Allquestionscompulsory

		Number ofQuestion s	Marks perquestio n	Total Marks
Q1	MULTIPLECHOICEQUESTIONS(MCQ)	20	1	20
Q2	SHORTANSWERQUESTIONS(SAQ)	8	5	40
Q3	LONGANSWERQUESTIONS(LAQ)	4	10	40
				100

Similar for Paper II (I

6 F Distribution of theory examination

Paper1PrinciplesofSwasthavritta,YogaandNaturopathy						
Sr. No	A List of Topics	B Term	C Marks	MCQ (1 Mark)	SAQ (5 Marks)	LAQ (10 Marks)
1	SwasthaandSwasthya	1	6	Yes	Yes	No
2	HealthyLifestyle-Dinacharya(Dailyregimen)	1	38	Yes	Yes	Yes
3	Ratricharya	1		Yes	Yes	No
4	Ritucharya	1		Yes	Yes	Yes
5	Roganutpadaniya	1	13	Yes	Yes	No
6	Sadvritta	1		Yes	Yes	No
7	Ahara	1	20	Yes	Yes	Yes
8	RasayanaforSwastha	1	5	Yes	Yes	No
9	Yoga	2	18	Yes	Yes	Yes
10	Naturopathy	2		Yes	Yes	No
Total Marks			100			

Paper2Publichealth						
Sr. No	A List of Topics	B Term	C Marks	MCQ (1 Mark)	SAQ (5 Marks)	LAQ (10 Marks)
11	Janapadodhwamsa/MarakaVyadhi	2	10	Yes	Yes	Yes
12	Environmentalhealth	2	16	Yes	Yes	Yes

13	Disastermanagement	2		Yes	Yes	No
14	OccupationalHealth	2	20	Yes	Yes	No
15	Schoolhealthservices	2		Yes	Yes	No
16	Disinfection	2		Yes	Yes	No
17	Primaryhealthcare	2	20	Yes	Yes	Yes
18	MotherandChildhealthcare	2		Yes	Yes	No
19	Familywelfareprogramme	2		Yes	Yes	No
20	PreventiveGeriatrics	2		Yes	Yes	No
21	WorldHealthOrganizationandInternational healthagencies	2	19	Yes	Yes	No
22	VitalStatistics	2		Yes	Yes	No
23	HealthAdministration	2		Yes	Yes	No
24	NationalHealthProgrammes	2	15	Yes	No	Yes
25	NationalHealthPolicy	2		Yes	Yes	No
Total Marks			100			

Paper No:1		
Question No	Type of Question	Question Paper Format
Q1	Multiple choice Questions 20 Questions 1 mark each All compulsory Must know part- 15 MCQ Desirable to know- 3 MCQ Nice to know part- 2 MCQ	1. Swastha and Swasthya 2. Healthy Lifestyle-Dinacharya (Daily regimen) 3. Ratricharya 4. Ritucharya 5. Rogan utpadaniya 6. Ahara 7. Sadvritta 8. Rasayana for Swastha 9. Yoga 10. Naturopathy 11. Swastha and Swasthya 12. Healthy Lifestyle-Dinacharya (Daily regimen) 13. Ritucharya 14. Ratricharya 15. Rogan utpadaniya 16. Sadvritta 17. Ahara 18. Rasayana for Swastha 19. Yoga 20. Naturopathy
Q2	Short answer Questions Eight Questions 5 Marks Each All compulsory Must know- 7 SAQ Desirable to know- 1 SAQ No question on Nice to know	1. Swastha and Swasthya 2. Healthy Lifestyle-Dinacharya (Daily regimen) 3. Ratricharya 4. Ritucharya 5. Rogan utpadaniya 6. Sadvritta 7. Naturopathy/Yoga 8. Ahara
Q3	Long answer Questions Four Questions 10 marks each All compulsory All questions on must know . No questions on Nice to know and Desirable	1. Healthy Lifestyle-Dinacharya (Daily regimen) 2. Ritucharya 3. Ahara 4. Yoga

	toknow	
Paper No:2		
Question No	Type of Question	Question Paper Format
Q1	MultiplechoiceQuestions20Questions 1markeachAll compulsory Mustknowpart-15MCQDesirabletoknow-3MCQNicetoknowpart-2MCQ	1. Janapadodhwamsa/MarakaVyadhi 2. Environmentalhealth 3. Disastermanagement 4. OccupationalHealth 5. Schoolhealthservices 6. Disinfection 7. Primaryhealthcare 8. MotherandChildhealthcare 9. Familywelfareprogramme 10. PreventiveGeriatrics 11. WorldHealthOrganizationandInternational healthagencies 12. VitalStatistics 13. HealthAdministration 14. NationalHealthPolicy 15. NationalHealthProgrammes 16. Janapadodhwamsa/MarakaVyadhi 17. Environmentalhealth 18. OccupationalHealth 19. NationalHealthProgrammes 20. Familywelfareprogramme
Q2	ShortanswerQuestionsEightQuestions 5MarksEachAll compulsory Mustknow-7SAQDesirabletoknow-1SAQNoquestionsonNicetoknow	1. Janapadodhwamsa/MarakaVyadhi 2. Disastermanagement 3. Environmentalhealth 4. Schoolhealthservices 5. OccupationalHealth 6. MotherandChildhealthcare 7. Familywelfareprogramme 8. PreventiveGeriatrics
Q3	LonganswerQuestionsFourQuestions 10markseachAll compulsory Allquestionsonmustknow.NoQuestionsonNicetoknowandDesirable	1. Janapadodhwamsa/MarakaVyadhi 2. Environmentalhealth 3. Primaryhealthcare 4. NationalHealthProgrammes

	toknow	

6 H Distribution of Practical Exam

S.No	Heads	Marks
1	Yoga- Demonstration of 4 Asanas and 1 Pranyama or Shatkarma procedure. Any four asanas from following list for demonstration- Trikonasana, Ardha Katichakrasana, Gomukhasana, Bhadrasana, Pawanmuktasana, Sarvangasana, Bhujangasana and Shalabhasana. Each asana will carry 4 marks $4 \times 4 = 16$ Procedure-1 mark, Final posture Holding time-1, Breathing pattern-1 mark and On site viva-1 mark. Anyone Pranayama among Nadishuddhi, Suryabhedana, Seetali, Setkari, Bhramari or anyoneshatkarma among Neti and Kapalabhati Each pranayama or Shatkarma will carry 4 marks	20
2	Diet and Lifestyle advice casesheet A. Advise on Diet case-25 Marks- Scenario will be given and asking student to prescribe diet as per the age, prakriti, occupation, agni bala etc.,.. B. Advise on Lifestyle-15 Marks- Scenario will be given and asking student to advise lifestyle modificationssuch as Brahmamuhurta uishteth, Vyayama, Kavala-gandusha, Abhyanga, Udwartana, Pratimarshana etc.,..	40
3	Problem-based evaluation- Disinfection, Communicable diseases Environmental health, & Non-Communicable including deficiency diseases, A. Disinfection (identification, dose, suitability, dilution and contact period), Communicable diseases (giving scenarios and identifying diseases and mentioning preventive measures) and Environmental health (giving scenarios related environmental health issues and asking student to mention preventive and control measures)-15 Marks B. Non-Communicable diseases (creating scenarios and asking to identify the diseases with preventive and control methods) and deficiency diseases (creating scenarios and asking student to identify the deficiency conditions and asking the student to recommend the nutrients with nutritional profile etc.,-15 Marks	30
4	Practical Records	10
5	Viva Viva on Project work (Activity based)-10 Marks	60

VivaonIPaper-25Marks

A. DefinitionofSwastha,Swasthya,SwasthavrittaandHealth,dimensionsof health,objectiveandsubjectivecomponentsofwell-being-2Mark

B. BenefitsofUshajalapana,Kavala,Gandusha,Dantadhavana,Anjana, Abhyanga,Udvartana,Vyayama,SnanaandTambula-4Mark

C. Rartibhojana,DefinitionofNidra,Typesofnidra,Ahitanidra,def initionsofsleepdisorders,DefinitionsofBrahmacharyaandAbrah macharyaandAdanakalaandVisargakalaritus,Doshavastha ,Balavastha,Agniavasthaofdifferentritus,DefinitionofRitusandhi,Yamad amshttra-2Marks

D. Adharaneeyavegas,Dharaneeyavega,definitionofsadvrittaand Acararasayana-2Marks

E. ImportanceofAhara,classificationoffoods,Aharasevanakala,Ashtaah aravidhiviseshaayatana,Dwadasahaasanapravicaranawithslokas,listing ofnityasevanaaharadravya(Prefereblysloka),meaningofPathya,Samash ana,Adhyashana,Vishamasana.Sourcesanddeficiencydiseasesofnutrien ts,Pastuerizationofmilkanditsmethods,meaningofdifferentdietpatterns, definitionofnutrogeomics,nutraceuticals,nutrigeneticsandviridhhaaha ra.Definition,benefitsandtypesofrasayanaanddefinitionofanti- oxidantswithexamples-10Marks

F. DefinitionsofYoga,MeaningandtypesofYama,Niyama,Asana,Pranay ama,Pratyahara,Dharana,Dhyana,Samadhi(slokasmandatory),listingofs hatkarmaandindicationsofshatkarma(slokamandatory),typesofBamdha, namesofShatchakra,diferencesbetweenSushumna,PingalaandIdanadi,de finitionofMoksha,Muktatmalakshana,Mokshaupaya,,Basicprinciplesof Naturopathy,TypesofFasting,HydrotherapyandMassage-5

PaperII-25Marks

	A. Meaning and causes of Janapadodhwamsa, Definition of terms related to Epidemiology and infectious diseases, Dynamics of disease transmission, Immunizing agents and Immunization schedule. Definition of vyadhikshamatva, Causative organisms and preventive measures of Communicable diseases-5 Marks B. Composition of Air, Definition of Comfort zone, Ventilation and its types, Definition of safe and wholesome water, Sources and types of Water, Purification methods of water as per Ayurveda & Contemporary medicine, Definition of different types of waste, Definition of disaster and types of disasters-5 Marks C. Definition of occupational health, listing out occupational hazards and diseases. Estact & Factories act, Health problems of school children, definition of different terms related to disinfection, types and agents of disinfection-5 Marks D. Definition, principles and elements of Primary healthcare, population coverage, functions and staff pattern at Sub-centre, Primary health centre and Community health centre, Objectives, problems and indicators of MCH, Definition of demography, family planning, eligible couple and target couple and methods of family planning-5 Marks E. Definition of Geriatrics, Problems of aged, Definition, structure and region of WHO, Year of establishment, headquarters and main functions of international health agencies, Definition and sources of vital statistics, organizational structure of health administration, Year of establishment and main objectives of different national health programmes-5 Marks	
6	Elective Set SC	10
7	Internal Assessment	30
Total Marks		200

References Books/ Resources

S.No	Book	Resources
1	RelevantportionsofCharaka,Sushruta,Vagbhata,Sarngadhara,Bhava prakasha,Yogaratnakara,MadhavanidanaandBhelasamhita.-relevantSamhithas	Print/onlinesamhithas
2	SwasthavrittaSamucchaya	Vaidya.Rajeswaraduttashastri,ChaukhambhaViswabharathi,Varanasi,India
3	Swasthavrittavigyan	Dr.Ramaharshasingh,ChaukhambhaPublishinghouse,Varanasi,India
4	YogasutrasofPatanjali	BKSIyengar,PublishedbyHarpercollins,PublishersIndia ,Newdelhi
5	Hathayogapradipika	SwamiMuktibodananda,PublishedbyYogapublicationstrust,Gangadarshan,Munger,Bihar,India
6	Gherandasamhitha	Edited with Sweta , English commentary ofMrs.ShwetaBhat and Edited by Goswami Prahlad Giri, Published byKrishnadasAcademy,Varanasi-221001
7	Yogadeepika	BKSIyengar,PublishedbyHarpercollins,PublishersIndia ,Newdelhi
8	LightonYoga	BKSIyengar,PublishedbyHarpercollins,PublishersIndia ,Newdelhi
9	LightonPranayama-	BKSIyengar,PublishedbyHarpercollins,PublishersIndia ,Newdelhi
10	TheFoundationsofContemporaryYoga	ProfessorRHSingh,PublishedbyChaukhambhaSanskritPratishtan,Newdelhi..
11	Park'sTextbookofPreventiveandSocialMedicine	K.Park,PublishedbyM/sBANARASIDASBHANOT,LABALPUR,INDIA
12	TextbookofPreventiveandSocialMedicine	MCGupta&BKMahajan,PublishedbyJAYPEEBROTHERS,Medicalpublishers,Newdelhi
13	Dr.Reddy'scomprehensiveguidetoSwasthavritta	Dr.P.SudhakarReddy,PublishedbyChaukhambhaSanskritPratishtan,NewDelhii
14	IndianfoodcompositionTables	TLongvah,PublishedbyNationalinstituteofNutrition,Hyderabad
15	Foodandnutrition	Swaminathan,PublishedbyBanglorePrinting&PublishingCo.Ltd,Banglore
16	Swasthavrittasudha	Vd.KashinathSamagandi,PublishedbybAyurvedaSanskrit hindipustakbhandar,Jaipur.

17	S.Kashi'sTextbookofSvasthavrttta mritam	Vd.KashinathSamagandi,PublishedbyAyurvedsanskriti ndipustakbhandar,Jaipur
18	TextBookofSwasthavrittam	Dr.MangalaGouriVRao,ChaukhambhaOrientalia,Varana si,India(2022)
19	TextbookonSwasthavritta	Dr.P.SudhakarReddy,Dr.BeenaMDPublishers:Chaukham bhaOrientalia,Varanasi,IndiaYear:2022
20	Bhojanakutuhalam	Raghunathasuri,EditedbyScholarsoftheCentreforTheoreti calfoundations(CTF),InstituteofAyurvedaandIntegrative MedicineI-AIM,FRLHT,Bengaluru-560064
21	Kshemakutuhalam	CompiledbyKshemasharma,PublishedByIndianinstituteo fAyurveda&Integrativemedicine,Bengaluru-560064
22	RecenttrendsInCommunityMedici ne	SuryakanthaAH,PublishedbyJAPEEPYBROTHERS
23	TheEssentialsofNaturcure	Dr.MangalaGouri.V.Rao,PublishedbyChaukhambhaOrie ntalia,Varanasi
24	WHO	https://www.who.int
25	Foodlaws	https://www.corpseed.com/knowledge-centre/food- laws-and-regulations-in-india
26	Foodacts	: https://fssai.gov.in/cms/food-safety-and- standards-act-2006.php
27	Nationalhealthprograms	https://ncdc.mohfw.gov.in/index4.php?lang=1&level=0 &linkid=55&lid=138
28	Familywelfareprogramme	https://ncdc.mohfw.gov.in/index4.php?lang=1&level=0 &linkid=55&lid
29	Health&Familywelfare	https://www.india.gov.in/topics/health-family-welfare
30	CensusofIndia	: https://censusindia.gov.in
31	HathayogaPradeepika	Pandith.HariprasadTri[athi,PublishedbyChaukhambhaKr ishnadasAcademy,Varanasi,India
32	ACompleteHandbookofNaturecure	H.K.BAKHRU,JAICOPublishinghouse,Bombay
33	Yoga&Ayurveda	SatyendraprasadMishra,PublishedbyChaukhambhaSansk ritSamsthan,Varanasi
34	TheYogaScience	Dr.RaviRJavalgekar,PublishedbyChaukhambhaSanskri tSansthan,Varanasi,India
35	ConceptofAyurvedaforperfectHea lth&Longevity	VaidyaH.S.Kasture,PublishedbyShreebaidyanathAyurve daBhavanPrivateLTD,Nagpure,India

36	EssentialsofCommunitymedicinepracticals	DKMahabalaraju, PublishedbyJAYPEEBROTHERSMedicalpublishers, Newdelhi
37	PositivehealththroughAyurveda	Dr.LPGupta&Dr.LVGuru, PublishedbyChaukhambhasanskritPratishtana, Newdelhi
38	FoodScience	BSrilakshmi, PublishedbyNEWAGEINTERNATIONAL(P)LIMITED, PUBLISHERS, NEWDELHI
39	ApolloClinicalNutrition-Handbook	AnitaJatan, DaphneeDK, HarithaShyam, PriyankaRohatgiandKajalPandyaYephtho- PublishedbyJAYPEEBROTHERSMEDICALPUBLISHERSPVTLTD, NEWDELHI

Abbreviations

Assessment

S.No	Short form	Discription
1	T-EMI	Theoryextendedmatchingitem
2	T-EW	TheoryEssaywriting
3	T-MEQs	TheoryMEQs
4	T-CRQs	TheoryCRQs
5	T-CS	Theorycasestudy
6	T-OBT	Theoryopenbooktest
7	P-VIVA	PracticalViva
8	P-REC	PracticalRecitation
9	P-EXAM	Practicalexam
10	PRN	Presentation
11	P-PRF	PracticalPerformance
12	P-SUR	PracticalSurvey
13	P-EN	Practicalenact
14	P-RP	PracticalRoleplay
15	P-MOD	PracticalModel
16	P-POS	PracticalPoster
17	P-CASE	PracticalCasetaking
18	P-ID	Practicalidentification
19	P-PS	PracticalProblemsolving
20	QZ	Quiz
21	PUZ	Puzzles
22	CL-PR	ClassPresentation,
23	DEB	Debate
24	WP	Wordpuzzle
25	O-QZ	Onlinequiz

26	O-GAME	Onlinegame-basedassessment
27	M-MOD	MakingofModel
28	M-CHT	MakingofCharts
29	M-POS	MakingofPosters
30	C-INT	Conductinginterview
31	INT	Interactions
32	CR-RED	Criticalreadingpapers
33	CR-W	CreativityWriting
34	C-VC	Clinicalvideocases,
35	SP	Simulatedpatients
36	PM	Patientmanagementproblems
37	CHK	Checklists
38	OSCE	OSCE
39	OSPE	OSPE,
40	Mini-CEX	Mini-CEX
41	DOPS	DOPS
42	CWS	CWS
43	RS	Ratingscales
44	RK	Recordkeeping
45	COM	Compilations
46	Portfolios	Portfolios
47	Logbook	Logbook
48	TR	Trainersreport
49	SA	Self-assessment
50	PA	Peerassessment
51	360D	360-degreeevaluation
52	TT-Theory	Theory
53	PP-Practical	Practical
54	VV-Viva	Viva

Domain

S.No	Short form	Discription
1	CK	Cognitive/Knowledge
2	CC	Cognitive/Comprehension
3	CAP	Cognitive/Application
4	CAN	Cognitive/Analysis
5	CS	Cognitive/Synthesis
6	CE	Cognitive/Evaluation
7	PSY-SET	Psychomotor/Set
8	PSY-GUD	Psychomotor/Guided response
9	PSY-MEC	Psychomotor/Mechanism
10	PSY-ADT	Psychomotor Adaptation
11	PSY-ORG	Psychomotor/Origination
12	AFT-REC	Affective/ Receiving
13	AFT-RES	Affective/Responding
14	AFT-VAL	Affective/Valuing
15	AFT-SET	Affective/Organization
16	AFT-CHR	Affective/ characterization

T L method

S.No	Short form	Discription
1	L	Lecture
2	L&PPT	Lecture with Power point presentation
3	L&GD	Lecture & Group Discussion
4	L_VC	Lecture with Video clips
5	DIS	Discussions
6	BS	Brainstorming
7	IBL	Inquiry-Based Learning
8	PBL	PBL
9	CBL	CBL
10	PrBL	Project-Based Learning
11	TBL	TBL
12	TPW	Team project work
13	FC	Flipped classroom
14	BL	Blended Learning
15	EDU	Edutainment
16	ML	Mobile learning
17	ECE	ECE
18	SIM	Simulation
19	RP	Role plays
20	SDL	Self-directed learning
21	PSM	Problem solving method
22	KL	Kinesthetic Learning
23	W	Workshops
24	GBL	Game-Based Learning
25	D-M	Demo on Model

26	LS	Library Session
27	PL	Peer learning
28	RLE	Real life experience
29	REC	Recitation
30	SY	Symposium
31	TUT	Tutorial
32	PER	Presentations
33	PT	Practical
34	XRay	X ray identification
35	CD	Case diagnosis
36	LRI	Lab report interpretation
37	DA	Drug analysis
38	D	Demonstration
39	D_BED	Demonstration bedside
40	D_L	Demonstration Lab
41	DG	Demonstration Garden
42	FV	Field visit
43	PRA	Practical