SUMANDEEP VIDYAPEETH

(Declared as Deemed to be University under Section 3 of the UGC Act 1956)

Accredited NAAC 'A' Grade with 3.53 CGPA out of 4

Conferred with UGC-Category-1 status

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CURRICULUM

MASTER OF PHYSIOTHERAPY (M.P.T.)

RULES OF DEGREE OF THE MASTER OF PHYSIOTHERPAY

INDEX **Page No.**

R.M.P.T.1: - THE COURSE

The Master of Physiotherapy Course will be a regular full-time course of 2-year duration. During an academic year, a candidate enrolled in the program shall not appear in any other examination of the university enrolled in or any other university. Any break in the career, power of extension of the course and the fixation of the term will be vested with the university.

R.M. P.T. 2: - NOMENCLATURE

The course will be referred to as a Master of Physiotherapy. The degree shall be Master of Physiotherapy (Elective).

R.M. P.T.3: - OBJECTIVES OF THE COURSE

1. To prepare a post-graduate student to acquire in-depth knowledge of the structure and function of the human body, specifically human movement (including movement of fluids and air into the body) and causes of its derangement with regards to selected specialty.
2. Demonstrate the ability in the conduct of diagnostic procedures on the basis of kinesiological, physiological, environmental and psycho-socio-cultural aspects so as to reach the functional diagnosis enhancing professional autonomy.
3. Demonstrate ability to critically appraise recent physiotherapeutic and related medical literature from journals & adopt diagnostic & therapeutic procedures based on it.
4. To inculcate appropriate professional relationships in multi-disciplinary set up, patient management and co-partnership basis.
5. To prepare a student to address problems related to health education and acquaint him/ her with the concept of quality care at the institutional as well as the community levels.
6. Demonstrate the knowledge of protection of rights of the community during referral as well as first contact practice & legislation applicable to compensation for functional disability & appropriate certification.
7. To provide experience in clinical training and undergraduate teaching partly.
8. To incorporate concept of management in Physiotherapy.

Program Outcome:

At the end of the program, a Post graduate student shall:

- Be a competent and reflective physiotherapy practitioner who can function safely and effectively while adhering to legal, ethical, and professional standards of practice in a multitude of physiotherapy settings for patients and clients across the lifespan and along the continuum of care from wellness and prevention to rehabilitation of dysfunction.
- Utilize critical inquiry and evidence based practice to make clinical decisions essential for autonomous practice.
- Function as an active member of professional and community organizations. The graduate will be a service-oriented advocate dedicated to the promotion and improvement of community health.
- Demonstrate lifelong commitment to learning and professional development.

R.M. P.T 4: - ELIGIBILITY FOR ADMISSION

Candidates admitted into the Master of Physiotherapy course should have passed the B.P.T. degree examination of this university or B.P.T./ B. Physio. or B.Sc. (PT) degree examination of any other recognized university accepted by the authority of this university as equivalent thereto, and has completed six months compulsory rotatory internship in a teaching institute or other institutions recognized by this university and the National body of Physiotherapists.

It is desirable that applicants should have worked as a qualified physiotherapist for at least one year in a Hospital / Institution prior to admission to the post-graduate course.

The Candidate admitted in Master of Physiotherapy shall register as a member of Gujarat State Council for Physiotherapy (GSCPT) or shall be a member of Gujarat State Council for Physiotherapy (GSCPT) at the time of admission.

R.M. P.T 5: -SELECTION OF STUDENTS FOR MPT

Selection criteria for admission as per the norms adopted for post graduate selection in Sumandeep Vidyapeeth (SV).

In case of foreign nationals, the most recent guidelines of the National body of Physiotherapists. / University may be followed.

R.M. P.T 6: - INTAKE OF STUDENTS

The Postgraduate guide and Postgraduate student ratio shall be as per GSCPT which is 1:3.

The course will commence on the 1st of august every year.

The intake of students to the course shall be once in a year.

No Post-graduate seat left unfilled in an academic year shall be carried forward to the next or subsequent academic years.

R.M.P.T 7: - MEDIUM OF INSTRUCTION

English shall be the medium of instruction for the subjects of study & for the examination of the MPT course.

R.M.P.T 8: - COURSE OF THE STUDIES

The course of the study, subjects and teaching schedule for 02 years of MPT course is shown in table below:

Table: 1-24 months

SUBJECTS (PAPERS)		TEACHING HOURS		
		Theory	**Clincals/ practical**	**Total**
PAPER 1	Review of Basic sciences			
	i. Work physiology and Electro Physiology	100	75	175
	ii. Bio-mechanics & Bio-engineering	100	75	175
	iii. Research methodology and Bio-statistics	100	--	100
	iv. Education Technology	50	--	50
	v. Ethics, Management and planning	50	--	50
PAPER 2	Physical and functional diagnosis	200	200	400
PAPER 3	Advanced Physio therapeutics	280	520	800
PAPER 4	**Electives:**			
	1.Physiotherapy in Neurological and Psychosomatic disorders	100	200	300
	OR			
	2.Physiotherapy in Musculoskeletal Disorders and Sports	100	200	300
	OR			
	3.Physiotherapy in Sports	100	200	300
	OR			
	4.Physiotherapy in	100	200	300

	Cardio-respiratory disorders and intensive care **OR** 5.Physiotherapy in Community Health **OR** 6. Physiotherapy in Geriatrics **OR** 7. Physiotherapy in Pediatrics **OR** 8.Physiotherapy in Women's health	100 100 100 100	200 200 200 200	300 300 300 300
1st year	Clinical training		750	750
1st year	Seminars, Journal Clubs, Case – Presentations, Teaching skills, Field Works etc.		150	150
2nd year	Clinical Training	-	600	600
2nd year	Seminars	-	150	150
	Total			1850 +1850

Evidence Based Practice which was stated to have 100 hours to be omitted and incorporated under Clinical training hours. With this addition the clinical training hours will be 750 hours for first year MPT and 600 hours for second year MPT.

R.M.P.T. 9: **METHOD OF TRAINING**

The training of post-graduate for MPT degree shall be on a full-time pattern with graded responsibilities in the management and treatment of patients entrusted to his/ her care. Training should include involvement in laboratory, experimental work and research studies. The participation of all the students in all facets of educational process is essential. Every candidate should take part in seminars, group discussions, clinical rounds, case demonstrations, clinics, journal review, meetings and CME. Every candidate should be required to participate in the teaching and training programs of under-graduate students.

R.M.P.T 10: -MONITORING PROCESS OF STUDIES (Internal monitoring)

It is essential to monitor the learning progress of each candidate through continuous appraisal and regular assessment. It not only helps teachers to evaluate students, but also students to evaluate themselves. The monitoring will be done by the staff of the department based on participation of students in various teaching/ learning activities. It may be structured and assessment be done using checklists that assess various aspects.

Model checklists are included in the log book / work diary of the students.

Work diary/ Log book:

Every candidate shall maintain a work diary and record his/ her participation in the training programs conducted by the department such as journal reviews, seminars, etc. Special mention may be made of the presentations by the candidate as well as details of clinical or laboratory procedures, if any, conducted by the candidate. The work diary shall be scrutinized and certified by the Head of the Department and Head of the Institution and presented in the University Examination

Periodic tests:

The college may conduct two tests, one of them be three months before College / University examination at the end of each year. The test may include written theory papers, practical, viva voce and clinical in the pattern of university examination records and marks obtained in such tests will be maintained by the Head of the Department and sent to the University, if / when called for.

R.M.P.T 11: -ATTENDANCE

No candidate shall be permitted to appear for the examination unless he/ she puts 80% of the training during each academic year of the post graduate course and produces the necessary certificate of study (log book / work diary), attendance and progress from head of the institution.

Every candidate shall attend symposia, seminars, conferences, journal review meetings – grand rounds, case presentations, clinics and lectures during each year as prescribed by the department and not absent himself / herself from work without valid reasons.

No candidate is permitted to run a clinic while studying postgraduate course.

Any student who fails to complete the course in the manner stated above shall not be permitted to appear for the University Examination.

R.M.P.T 12: COMMENCEMENT OF EXAMINATION:

The examination for MPT course shall be held at the end of 2 academic years (4 academic terms)

1. University shall conduct two examinations (Regular and Supplementary) in a year at an interval of not more than six months and not less than four months between the two examinations. Not more than two examinations shall be conducted in an academic year.
2. There shall be Internal Examination held by College at the end of 1st academic year. It shall be necessary for a candidate to achieve minimum 40 % in the examination conducted by college at the end of first academic year to appear for University examination.

R.M.P.T 13: SCHEME OF EXAMINATION

The degree of Master in Physiotherapy will be taken by papers, practical and viva voce only.

Written examination (Theory) – Total marks 400

A written examination consisting of 4 papers, each of three hours duration and each paper carrying 100 marks at the end of two academic years (04 terms).

The paper **IV** will be an Elective subject and a separate paper for each elective subject chosen by the candidate should be given. Recent advances in Physiotherapy may be asked in any or all the 4 papers. The Theory examination shall be held sufficiently earlier than clinical/practical examination so that the answer books are assessed before the commencement of the clinical/practical examinations.

Particulars of Theory question paper and distribution of marks are shown on table - Vide Notification Ref: SV/ADM/13-14/ 5062 dated 17/11/2014

The following amendment in scheme of examination is as under: (Board of Studies letter no. COP/5229/1/2018 dated 13-01-2018; and Vide Notification of Board of Management resolutions Ref: No. SV/8539/2017-18, dated 02/04/18)

Paper V – Evidence Based Practice is omitted for Postgraduate students

Sr. No.	Subject	Marks
Paper I	Review of Basic sciences	100
Paper II	Physical and functional diagnosis	100
Paper III	Advanced Physio therapeutics	100
Paper IV	Elective Subject (Separate for each elective)	100

Clinical examination:

It should be aimed at examining clinical skills and competency of the candidate for undertaking independent work as a specialist.

Viva-voce:

Viva-voce examination shall aim at assessing depth of knowledge, logical reasoning, confidence and oral communication skills with special emphasis on dissertation work. The marks of viva-voce examination shall be included in the clinical examination to calculate the percentage and declaration of results.

Micro teaching & Log Book:

Student shall prepare a topic of his / her choice, not exceedingly more than 10 minutes. Micro teaching shall aim at assessing the topic chosen (which shall be concise so as to be introduced and summarized within the time frame allotted), clear concepts, communication skill and use of appropriate audio-visual aids.

Log book shall be assessed by the examiners.

Number of Candidates per day: The maximum number of candidates for practical /clinical and viva voce examination shall be as under: Maximum of 10 per day per pair of examiners.

Examiners:
All examiners shall be recognized post graduate teachers.
The selection of examiners/paper setter/dissertation evaluation shall be in accordance with policy of Sumandeep Vidyapeeth.

Criteria for declaring as pass in university examination:
Award of classes:

First class with distinction - 75% and above in aggregate provided the candidate pass the examination in first attempt.
First class - 60% and above in aggregate provided the candidate pass in first attempt
Pass -50% of marks in aggregate for theory and 50% of marks in aggregate for clinical and Viva-voce.

If a candidate is not able to achieve 50% aggregate in theory four papers (combined) and 50% aggregate in practical's (practical 1&2), he /she shall not be considered as passed in the said examination and shall reappear in all four theory papers and the practicals within the stipulated time as prescribed by the University.

R.M.P.T 14: PATTERN OF MODEL QUESTION PAPER Vide Notification Ref.: SV/ADM/13-14/ 5062 dated 17/11/2014

Theory – 100 mark each paper (No Choice)
1. Long Essay (2 questions) – 2 x 20 = 40 marks
2. Short Essay (6 questions) – 6 x 10 = 60 marks

Practical / Clinical – 150 Marks each practical
Note: All cases for clinical examination should be on patients & not on models.

PRACTICAL 1- Physical & Functional Diagnosis
A. Non elective case (1) - 1 x 100= 100 marks
   Assessment, Physical & Functional Diagnosis and Management
B. Micro-teaching and assessment of log books – 50 marks

PRACTICAL 2
A. Elective Long case (1) – 1x 100 = 100 marks
B. Dissertation Viva – Voce – 50 marks

Supplementary examination:
In Supplementary examination, practical examinations shall be conducted as follow:
1. Non-Elective case (1) - 1 x 100 + 50 Viva voce = 150 marks
2. Elective Long case (1) – 1x 100 + 50 Viva voce = 150 marks

Supplementary examination shall not include Micro teaching, Dissertation viva-voce and assessment of log book.

The criterion for thesis evaluation will be – acceptable/non-acceptable. No marks will be awarded.
Oral defense is mandatory, which may be closed (external/internal examiner) or open (in addition to the examiners other faculty and students may be invited)

R.M. PT 15: -DISSERTATION

Every candidate pursuing MPT degree course is required to carry out work on a selected research project in their elective subject under the guidance of a recognized post graduate teacher. The results of such a work shall be submitted in the form of dissertation.
The dissertation is aimed to train a graduate student in research methods & techniques. It includes identification of a problem, formulation of a hypothesis, search & review of literature getting acquainted with recent advances, designing of a research study, collection of data, critical analysis, and comparison of results & drawing conclusions.
Every candidate shall submit to the registrar (academic) of the university in the prescribed Proforma, a synopsis containing particulars of proposed dissertation work within 6 months from the date of commencement of course on or before proper channel. Obtaining ethical clearance from Institutional Ethical Committee of SV is mandatory for submission of synopsis.
Such synopsis will be reviewed& the university will register the dissertation topic. No change in the dissertation topic or guide shall be made without prior approval of the competent authority.

The dissertation should be written under the following heading
1. Introduction.
2. Aims or objectives of study.
3. Review of literature.
4. Material & methods.
5. Results.
6. Discussion.
7. Conclusion.
8. References.
9. Annexure.

The written text of dissertation shall not be less than 50 pages & shall not exceed 100 pages excluding references, tables, questionnaires & another annexure. It should be neatly typed in double line spacing on one side of paper (A4 size, 8.27” x 11.69”) and hard bound properly. Spiral binding should be avoided. Declaration by the candidate, certificate by the guide & Head of the institution and ethical clearance are mandatory for submission.
M.P.T Final year students shall be required to submit the five copies of dissertations (both hard & soft copy) within the stipulated time (Three months prior to the Final University Examination) to the examination section of university through the proper channel. Five hard bound copies of dissertation work will be distributed as follows:
1. One copy will be given to University library
2. One copy will be given to Departmental library
3. One copy will be given to Guide
4. One copy will be given to External examiner

5. One copy will retain with student

The examiners appointed by the university shall value the dissertation. Approval of dissertation work is an essential precondition for a candidate to appear in the university examination. The dissertation shall be valued by the evaluator (examiners) apart from the guide out of which one is external outside the university / state. Any one-evaluator acceptance other than the guide will be considered as a precondition for eligibility to take up the examination.

In case of non-acceptance of dissertation by external the university shall send the dissertation for re-assessment. If the result is still non- acceptance (despite of the changes made in the dissertation) the student shall be declared as not eligible to appear for university examination.

The student shall appear for supplementary examination provided he/she satisfies the above condition.

R.M. P.T 16:- GUIDE

Criteria for recognition of MPT guide –

1. MPT with five years of teaching experience working on a full-time position at a recognized institution. The age of guide shall not exceed 65 years. The guide student ratio should be 1:3.

2. Relaxation for the criteria one, notwithstanding above, in view of acute shortage of teachers, the person having three years post MPT teaching experience working on a fulltime basis may be considered as P.G teacher, till further notice from the University.

3. MPT guide shall essentially guide the students of her / his specialty / elective, however he / she shall guide other than his Physiotherapy specialty / elective in case of non-availability of the Guide.

Change of Guide - In the event of registered guide leaving the college for any reason or in the event of death of guide, guide may be changed with prior permission from the University.

Provision of change of 'ELECTIVES'.

The student shall be permitted the change of specialty / elective only:

- **Within first three months of the beginning of the academic term.**
- **With the permission of the competent authority of the University.**

R.M.P.T 17: READMISSION AFTER BREAK OF STUDY

Candidates having a break of study of 5 years and above from the date of admission and more than two spells of admission of break will not be considered for re-admission.

a. The five years period of break of study shall be calculated from the date of first discontinuance of the course by the candidate.
b. A candidate having a break of study shall be re-admitted after satisfactory fulfillment of the regulations of the University at the commencement of an academic year only and shall undergo the full duration of the course with no exemption in the period of

study and will be permitted to appear for the examinations as prescribed in the regulations.

R.M.P.T.18: MIGRATION / TRANSFER OF CANDIDATE

Request of transfer during the course of study will not be entertained under any Circumstances.

R.M. P.T.19. COURSE CONTENT

Paper-I: REVIEW OF BASIC SCIENCES

(Work Physiology, Electro physiology, Bio - mechanics and Bio engineering, research, Bio-statistics, Education technology, Ethics, Management and planning)

Objectives:

At the end of course the candidate will have to

A acquire the updated knowledge of applied physiology as related to work, physical exercise, exercise tolerance and general fitness and be able to interpret the physiological effects of the vital parameter of simple laboratory tests such as Stress Test.

B acquire the updated knowledge of electro physiology so as to be able to interpret the various electro diagnostic tests with appropriate clinical reasoning.

C acquire the updated knowledge of the patho mechanics of the human movement, be able to prescribe, check out and train in the application of orthosis/ prosthesis and mobility aids

E acquire an ability to plan and execute and independent research project / dissertation on any selected sub specialty

F acquire ability to assume teaching and leadership positions in PT educational programme.

G be able to impart knowledge and train the students in the subjects at the undergraduate level

H acquire on ability to presence the ergonomics alteration at the workplace and industry

I acquire the updated knowledge of requirement of ideal nutrition for general fitness and health promotions.

Course Outcomes:

At the end of the course the student shall have acquired the updated knowledge of applied physiology, electro physiology, patho-mechanics of the human movement, ergonomics alteration at the workplace and Industry and ideal nutrition for general fitness and health promotions. Be able to prescribe, and train in the application of orthosis / prosthesis and mobility aids, plan and execute independent dissertation and acquire ability to assume teaching and leadership positions in PT educational programme.

REVIEW BASIC SCIENCES (MPY101T)

1. WORK PHYSIOLOGY

1.1 Physiological and physical work

1.2 Ergonomic aspects of work, energy transfer, oxygen intake and oxygen debt, cardio - pulmonary and thermo regulatory changes during muscular work.

1.3 Body composition, nutrition and caloric balance. Obesity and weight control.

1.4 Individual and environmental factors influencing muscle work and environmental control.
1.5 Fatigue assessment and scientific organization of work-rest regimes to control fatigue.

2. ELECTRO PHYSIOLOGY

2.1 Characteristics and components of Electro therapeutic stimulation systems and characteristic and components of Electro physiological assessment devices.
2.2 Electrical excitability of muscle and nerve and composition of peripheral nerves
2.3 A muscle plasticity to response to electrical stimulation
2.4 Instrumentation for Neuromuscular electrical stimulation (NMES)
2.5 Neurobiology of afferent pain transmission and central nervous system mechanisms of pain modulation
2.6 Electrical stimulation and circulation
2.7 Clinical electro physiological testing

3. BIO MECHANICS and BIO ENGINEERING

3.1 Material properties of bones and soft tissues
3.2 Internal and external forces during posture and activities
3.3 Biomechanics of respiration, circulation, hand function and gait.
3.4 Methods of kinetics and kinematics investigation, Anthropometrics measurements.
3.5 Neural control of loco-motor functions.
3.6 Analysis of functional hazards related to environment / Industry and clinical reasoning for the appropriate Ergonomic advice
3.7 Applied mechanics in the application of Prosthesis, Orthosis and Mobility aids – materials, designs and biomechanical compatibility.

4. RESEARCH METHODOLOGY & BIO STATISTICS

4.1 Meaning of research, objectives, motivation and types of research
4.2 Research process and criteria of good research
4.3 Problems encountered by researches in India & defining the research problem
4.4 Research design & sampling design
4.5 Measurement & scaling techniques. Method of data collection
4.6 Processing and analysis of data. Sampling fundaments.
4.7 Analysis of variance & c/o-variance
4.8 Role of computer in research and ethical concepts.

The following amendments were made for includingIntellectual Property Rights in MPT syllabus as under: (Board of Studies letter no. COP/SV/7718-A/4/2020 dated 16/04/2020; and Vide Notification of Board of Management resolutions Ref: No. SVDU/NOTFN/0359/2020-21, dated 29/07/2021)

5. Intellectual Property Rights

5.1 Introduction - Concept of intellectual Property, Historical view of intellectual Property system in India and international Scenario, Evolution of intellectual Property Laws in India, Legal basis of intellectual Property Protection, Need for Protecting intellectual Property, Theories on concept of property - Major IP Laws in India.

5.2 Types of IPR: Patents, Copyright, Trademark, Industrial Designs, Trade Secrets.

5.3 Patents: Concept of Patent, Criteria of Patentability, Inventions NOT patentable, Process of Obtaining a Patent, Duration of Patents, Rights of Patentee, Limitation of rights, Infringement and Enforcement.

5.4 Copyrights: Meaning of Copyright, Copyright Vs. Moral rights, Copyright eligibility, Term of Copyright, Registration of Copyright, Infringement and Remedies.

5.5 Trade Secrets: Meaning of Trade Secrets, need to protect Trade secrets, Criteria of Protection, Procedure for registration, Infringement.

5.6 Commercialization of IPR: Traditional IP and Evolving IP, Assignment, Licensing, Cross License, patent pool, Negotiations, Defensive Publications, Technical Disclosures, Patent Pooling, Patent Trolling, Brand Management, Brand and Pricing Strategies.

EDUCATION TECHNOLOGY

Objective:

At the end of the course, the candidate will acquire the knowledge of

A. Development of educational aims, the major educational theories and concepts of modern & contemporary philosophies.
B Concepts and principles of curriculum development, instruction, learning and evaluation
C Principles of counseling and guidance and the responsibility of the school for providing suitable environment of learning
D Locate and use library and other resources in planning

Syllabus

1. Educational aims, Agencies of education, Major philosophies of education, Modern & contemporary philosophies of education, Role of educational philosophy and Current issues and trends in education
2. Theories of teaching, Relationship between teaching and learning, Psychology of education and Dynamics of behavior, motivational process, of learning perception, individual differences, intelligence and personality
3. Curriculum committee, curriculum development for Physiotherapy, Types of curriculum, Formation of philosophy, objectives, course objectives, Placing, Corse placement, time allotment, Selection and organization of learning experience, plans of courses, Rotational plan – individual rotational plan, correlation of theory and

practice, Hospital and community areas for clinical instruction, Clinical assignments and Current trends is curriculum planning.

4. Strategies of teaching, planning of teaching, Organization, Writing lesson plans, A-V aids, Teaching methods – Socialized teaching methods
5. Nature of measurement of education, meaning, process, personal, standardized, non-standardized tests, Steps in constructing a test, measurement of cognitive domain, assessment techniques of affective, psychomotor domains, administering scanning and reporting, Standardized tools, important tests of intelligence, aptitude, instrument, personality, achievement and sestets scale, Program evaluation and Cumulative evaluation.
6. Philosophy, principles and concepts of guidance and counseling services of students and faculty.
7. Faculty development and development of personnel for PT services.

ETHICS, MANAGEMENT AND PLANNING

Objectives:

At the end of the course, the candidate will acquire the knowledge of

A. Ethical codes of Physiotherapy practice as well as moral and legal aspects of Indian Association of Physiotherapy, W.C.P.T., with the brief knowledge of role of W.H.O.
B. Acquire the managerial & management skills in planning, implementation, administration in clinical practice (service/self-employment), academic activities including the skill of documentation & use of information technology in professional practice.

Syllabus:

1. Concept of morality, ethics and legality
2. Professional Ethics towards client- Respect & dignity, -Confidentiality, Responsibility
3. Communication skills, informed consent, Client interest & satisfaction
4. Interdisciplinary relation – Co-partnership, mutual respect, Confidence & communication
5. Laws – Constitution of India & rights of a citizen, responsibilities of the therapist and status in health care – Persons with disability act – Workman's compensation act – ESI – Councils for regulation of professional practice – self regulatory role of professional association – consumer protection act
6. Role of professional I Socio-Cultural & Socio-economical context
7. Constitution & functions of I.A.P.
8. Role of W.C.P.T. and its various branches / special interest groups and Role of W.H.O.
9. Management – Theories and their application to Physiotherapy practice, service quality at various levels of the health delivery system, teaching institution and self-employment and principles and concepts.
10. Administration & marketing – Personal policies – Communication and Contact – Administration principles based on Goal & Functions at large hospital / Domiciliary set up / private clinical / academic institution.
    10.1Methods of maintaining records – Budget planning
    10.2Leadership and team work.

Paper-II: PHYSICAL & FUNCTIONAL DIAGNOSIS (MPY102T, MPY102P)

Objectives:

At the end of the course the candidate will have to

A Acquire expertise in the knowledge, skill and interpretation in the advanced technological diagnostic tests pertaining to movement dysfunction, also principles of the pathological investigation and radio imaging techniques related to neuro-musculo-skeletal and Cardio-pulmonary disorders with interpretation.
B. Acquire updated knowledge of development of nervous system with emphasis on sensory motor behavior and acquire knowledge, skills and be able to interpret Psycho-physiological and Neuro-psychological tests.
C. Acquire expertise in knowledge, skills and interpretation of various Electro diagnostic tests

D. Acquire knowledge, skills of various approaches of manual therapy for peripheral joints/ spine and be able to integrate the manual therapies to rehabilitate the mechanical, neuro, muscular problems.
E. Acquire updated and in-depth knowledge of physiology of aging of different systems, and develop expertise to manage physical, mental and social problems of the geriatrics population physiotherapeutic ally.
F. Acquire a skill in disability evaluation and be able to **CERTIFY** the same.
G. Be able to impart knowledge and train the students in the subjects at the undergraduate level

Course Outcomes:

At the end of the course the student shall have acquired expertise in the knowledge, skill and interpretation in the advanced technological diagnostic tests, Psycho-physiological and Neuro-psychological tests, and Electro diagnostic tests. To acquire knowledge and skill of manual-therapy, managing geriatrics population, and disability evaluation

SYLLABUS

1. Clinical examination in general and detection of movement dysfunction
2. Principles of pathological investigations and imaging techniques related to neuromuscular, skeletal and cardio pulmonary disorders with interpretation.
3. Developmental screening, development diagnosis, neurodevelopment assessment and motor learning – Voluntary control assessment
4. Anthropometric measurements
5. Physical fitness assessment by
    - 5.1 Range of motion.
    - 5.2 Muscle strength, endurance and skills
    - 5.3 Body composition
    - 5.4 Cardiac efficiency tests and spirometry
    - 5.5 Fitness tests for sports
6. Psycho-physiological and Neuro-psychological tests
7. Electro-diagnosis, clinical and kinesiological electromyography and evoked potential studies. Biophysical measurements, Physiotherapy modalities, techniques and approaches. Electrodiagnosis, conventional methods, electromyography, sensory and motor nerve conduction velocity studies, spinal and somato-sensory evoked potentials.
8. Massage, Mobilization and manipulations.
9. Aids and appliances, adaptive functional devices to improve neurological dysfunction
10. Inhibition and facilitation techniques
11. Exercise ECG testing and monitoring
12. Pulmonary function tests.
13. Cardio – vascular function disorders & principles of management, cardio-respiratory function disorders and assessments.
14. Physical disability evaluation and disability diagnosis. Gait analysis and diagnosis.

RECOMMENDED BOOKS – REVIEW OF BASICS AND PHYSICAL&FUNCTIONAL DIAGNOSIS

1. Scientific basis of human movement – Gowitzke, Williams & Wilkins, Baltimore 1999 3rd edition.
2. Clinical biomechanics of spine – White A, A and Punjabi – J.BLippoincot, Philadelphia 1978.
3. Kinesiology – Brunnstrom Singe, F.A Davis- Philadelphia – 1966
4. Textbook of work physiology – Guyton, Prim Books Banglore – 1991 8th edition.
5. Handbook of physiology in Aging – Masoro, C.R.C Press 1981.
6. Research for physiotherapists – Hisks C.., Churchill Living stone, Edingburgh 1995 Ed. S
7. Introduction to research in Human Sciences – Polgar S., Churchill Living stone, London, 1988.
8. Elements of Research in Physical Therapy – Currier D.P. Williams & Wilkins, Baltimore, 1990 Ed. 3.
9. Handbook of Research Method – Sproull, Scarecrow Press, 1998.
10. Physical Therapy Research – Domholdt. W.B Saunders, Philadelphia 1993.
11. Katherine F. Shepard, Gail M. Jensen, Handbook of teaching for physical therapists
12. Public power & Administration – Wilenski, Hale &Iremonger, 1986.
13. Physical Therapy Administration & Management – Hickik Robert J.
14. Management Principles for physiotherapists – Nosse Lorry J.
15. Human Neuro-anatomy Carpenter M.B. Williams & Wilkins, Baltimore, 1983.
16. Physical Therapy Assessment in Early Infancy – Wilhelm Churchill Living stone, New York.1993.
17. Physical Therapy for Children – Campbell Suzann K.W.B Saunders, Philadelphia, 1994.
18. Physical Management of Multiple Handicapped – Fraser, William & Wilkins, Baltimore.
19. Elements of paediatricPhysiotherapy – Eckerley p, Churchill Living stone, Edinburgh, 1993.
20. Physiotherapy in paediatrics – Shepherd R.Heinmann, London, 1980 2nd edition.
21. The growth chart – WHO, Geneva 1986.
22. Orthotics in neurological rehabilitation – Alsen , Demos Publication, New York 1992.

COURSE CONTENTS

PAPER III: ADVANCED PHYSIOTHERAPEUTICS (MPY103T)

Objectives:

At the end of the course the candidate will

A have acquired the updated knowledge of exercise physiology, electro physiology and pharmaco-therapeutic agents used in combination with various electro-therapeutic modes, with appropriate clinical decision & reasoning in the management of pain / tissue healing / wound care and skin conditions.

B have acquired the updated knowledge of allied therapies viz. Yoga, acupuncture, magneto therapy, naturopathy and be able to integrate it with Physiotherapy.
C have acquired updated, in depth knowledge and skills of Physiotherapy for all the medical and surgical conditions including the intensive care areas related to the same.
D be able to impart knowledge and train the students in the subjects at the undergraduate level
E Acquire in depth understanding of concept of community physiotherapy, capability of leading the team of community-based rehabilitation

Course Outcomes:

At the end of the course the student shall have acquired the updated knowledge of exercise physiology, electro physiology, pharmaco-therapeutic agents, allied therapies, all the medical and surgical conditions including the intensive care areas, community Physiotherapy, and the capability of leading the team of community-based rehabilitation

Syllabus:

1. Physiotherapy in pain management such as electromagnetic radiation, ultrasound, laser, electro acupuncture, Combination therapy etc.
2. Maternal and child care in general Physiotherapy
3. Applied neuro anatomy and neuro Physiotherapy
4. Theories of motor learning
5. Therapeutic biofeedback & psychosomatic training.
6. Functional training - respiratory exercises, training for feeding, bladder and bowel training, coughing and compression, artificial respiration, inhalation therapy & intensive care unit procedures.
7. Physiotherapy in common conditions of skin
8. Physiotherapy in common vascular diseases
9. Physiotherapy in deficiency diseases
10. Physiotherapy in respiratory disorders
11. Physiotherapy management of ischemic heart diseases
12. Cardiopulmonary medications and their effect on activity performance
13. Exercise planning and prescription, MET value of various exercises and activity, Effect of aerobic, anaerobic as well as Isometric and Isokinetic exercises on cardiac function & Ergonomic aspects of exercise on oxygen, energy consumption.
14. Physiotherapy in psychiatry
15. Management of pain in neuro and musculo skeletal disorders
16. Physiotherapy management of postoperative patients in cardiopulmonary disorders & other surgeries.
17. Monitoring systems and defibrillators. Artificial respirators
18. Physiotherapy in post-operative management of metabolic, hormonal, neoplastic and infective conditions of bones and joints and soft tissue repairs.
19. Physiotherapy management following head injuries, in intensive care and neuro surgical procedures
20. Physiotherapy following obstetric and gynecological disorders.

RECOMMENDED BOOKS

1. Manual of nerve conduction velocity techniques – De Lisa, Raven press, New York, 1982.
2. Electro –diagnosis in diseases of nerve and muscle – Kimura j, F.A Davis, Philadelphia.
3. Mobilization of the extremity joints – Kalternbore, Harper and Row, Philadelphia, 1980.
4. Chest Physiotherapy in Intensive Care Unit – Makezie, Williams & Wilkins, Baltimore.
5. Cardiopulmonary Symptoms in Physiotherapy – Cohen M, Churchill Livingstone, London – 1988.
6. Physical Rehabilitation – assessment and Treatment – O'Sullivan, F.A. Davis, Philadelphia 1994.
7. Neuro-rehabilitation – Faber, W.B. Saunders, Philadelphia 1992.
8. Orthopaedic Physical therapy – Donatteli, London, Churchill Livingstone, 1994.
9. Yoga therapy Kuvalayananda Swami and Vinekar, Popular prakashan, Bombay, 1992
10. Gait Anayisis – Perry J., Black Thorfare, New Jersy, 1992.
11. Biofeedback – A practitioner's guide – Kerth D, Guiford press.
12. The neural basis of motor control – Black I, Churchill Livingstone, London -1887
13. Physical therapy Management of Parkinson's disease – TumbellGerode Churchill Livingstone, London – 1994.
14. Abnormal postural reflex activity caused by Brain lesions Bobath b. Aspen publications, Rockville, 1897.
15. Disorders of voluntary muscle – Eagal, Churchill Livingstone, Edingburgh, 1988.
16. A clinician's view of neuro muscle disorder – Brook M.H. Williams and Wilkins, Baltimore, 1986.
17. Proprioception, neuro muscular facilitation techniques – Knot m. andVoss, Harper and Row, New York 1972 2nd edition.
18. Stroke rehabilitation – sailder, Campan and Hall, London 1994.
19. Motor relearning programme for stroke – Carr, Aspen publication, Rock ville, 1997.
20. Paraplegia and tetraplegia – Brombley, Churchill Livingstone, Edingbourgh 1991.
21. Child with spina bifida – Anderson E.M. and Spain B Methun, London 1977.
22. A manual of neonatal intensive care – Robert N.R.C Edward Arnold, London 1986.
23. Measurement in Physical therapy – Churchill Livingstone, London 1988.
24. Soft tissue pain and disability – Cailliet Rene, Jaypee Brothers, New Delhi 1992.
25. Myofascial Pain and Dysfunction – Travell, Williams & Wilkins, Baltimore 1983.
26. Physical Therapy of the low back – Twomoy, Churchill Livingstone, London 1995.
27. Sports Injuries of the Shoulder – Souza Thomas A, Churchill Livingstone, London 1994.
28. Vertebral Manipulation – Maitland G.D. Boston, Butterworth &Co.Boston, 1997.
29. Peripheral Manipulation – Maitland G.D. Boston, Butterworth &Co.boston, 19997.
30. Sports and physical therapy – Bernhardt Donna, Churchill Livingstone, London 1995.
31. Hand rehabilitation – Christine, Churchill Livingstone, London 1995.
32. Cardiopulmonary Symptoms in Physiotherapy practice-Cohen m. Churchill Livingstone, London 1988.

33. Clinical application of ventilatory supports – Kinby, Churchill Livingstone, New York 1988.
34. Cardiopulmonary Physiotherapy – Irwin C.V., Mosby, St. Louis 1990.
35. Pulmonary rehabilitation: Guidelines to success – Hoidkins, Butterworth. Boston 1984.
36. Cardiac Rehabilitation – Amundsen L.R. Churchill Livingstone, London 1988.
37. Obstetrics and Gynecological Physical Therapy – Wilder Elnine, Churchill Livingstone, New York 1988.
38. Physiotherapy in Obstetrics and gynecology – Polden& Mantle, Jaypee Brothers, New Delhi 1994.
39. Physical Therapy of the cancer Patient – McGaryexcharles. Churchill Livingstone, New York 1989.
40. Industrial Therapy – Key G.L. Mosby – St. Lous 1987

PAPER IV: ELECTIVE SUBJECT

Course Outcome:
At the end of the course the student shall have acquired the updated knowledge in the elective area, recent trends in the respective field and managing the patients with evidence-based physiotherapy.

1. PHYSIOTHERAPY IN MUSCULO-SKELETAL DISORDERS ANDSPORTS OBJECTIVES: (MPY105T, MPY105P)

This course shall enable the candidate to establish first contact Physiotherapy for the management of Musculo-skeletal conditions and pain, expertise in the skills of manual medicine, advance electro-diagnostic / therapeutic skills, and ability to function as a consultant in the team of health professionals concerned with sports sciences, hand rehabilitation, women's health as well as geriatric health & industrial set up. The sub specialties are

a. Advances in Manual medicine and pain management
b. Rehabilitation of the hand
c. Sports sciences
d. Industrial health & Ergonomics
e. Women's health and Geriatric health
f. Applied Bio mechanics & Bioengineering

Syllabus:

1. Theory

1.1 Applied anatomy with emphasis on Biomechanics, Kinesiology, work physiology and locomotor function.
1.2 Clinical assessment and rationale of Laboratory investigations along with differential diagnosis
1.3 Clinical symptomatology, pathophysiology and Patho-mechanics of musculo skeletal conditions
1.4 Functional assessment (Hand function, Gait, Posture, A.D.L., Occupational work)
1.5 Kinetic and kinematics analysis
1.6 Analysis and classification of sports and sports injuries

1.7 Assessment of locomotor impairments, disabilities and disability evaluation
1.8 Physiotherapy management of locomotor disorder, principles of medical and surgical aspects.
1.9 Orthopedic implants- designs, materials, indications, post-operative assessment and training.
1.10 External aids, appliances, adaptive self-help devices, prescription, biomechanical compatibility, checkout and training.
1.11 Manual therapies: soft tissue manipulations and mobilization, neural mobilization, acupressure.
1.12 Joint manipulation – peripheral joints and vertebral joints
1.13 Neurological complications of locomotor disorders, conservative electro diagnosis, Electromyography and evoked potential studies.
1.14 Community based rehabilitation in musculo skeletal disorders.
1.15 Analysis & classification of sports injuries. Injuries related to specific sports.
1.16 Management of sport injuries, sports fitness and sports psychology and retraining.

The following amendment is made as value addition as under: (Board of Studies letter no. COP/SV/8441/12/2021, dated 6/12/2021; and Vide Notification of Board of Management resolutions Ref: No. SVDU/NOTFN/3070/2021-22, dated 30/07/2022)

1.17 Physiotherapy in Covid19- Introduction, Physical assessment including Functional capacity, Role of physiotherapy in ICU and Post-Covid19 Rehabilitation.

2. Practical: (MPY105P)

Demonstration and performance of assessment and management of 1.1 to 1.16.

References

1. Scientific Basis of Human Movement - Gowitzke, Williams & Wilkins, Baltimore, 1988, 3rd Edition.
2. Kinesiology of the Human Body under normal and pathological conditions by Steindler.
3. Biomechanical Basis of Human Movement - ; Joe Hamill and Knutsen Publishers - Williams and Wilkins.
4. Clinical Biomechanics of Spine - White A.A. and Panjabi - J.B. Lippincott, Philadelphia.
5. Brunnstrom's Clinical Kinesiology - Laura K. Myth et al., Publishers - F.A. Davis.
6. Gait Analysis - Perry J. Black Thorofare, Newjersy 1992.
7. Kinesiology of Human Body Under Normal and Pathological conditions Arthur Steindler.
8. Elements of paediatricPhysiotherapy – Eckerley p, Churchill Living stone, Edinburgh, 1993.
9. Orthopaedic Physical Therapy - Donattelli, London, Churchill Livingstone, 1994.
10. Physical Rehabilitation – assessment and Treatment – O'Sullivan, F.A. Davis, Philadelphia 1994.
11. Soft tissue pain and disability – Cailliet Rene, Jaypee Brothers, New Delhi 1992.

12. Myofascial Pain and Dysfunction – Travell, Williams & Wilkins, Baltimore 1983.
13. Physical Therapy of the low back – Twomoy, Churchill Livingstone, London 1995.
14. Vertebral Manipulation - Mait Land, G.D. Boston, Butter Worth & Co. Boston 1997.
15. Peripheral Manipulation - Maitland G.D. Boston, Butter worth & Co. Boston 1997.
16. Hand Rehabitation - Christine - Churchill, Livingstone, London 1995.
17. Mechanical Diagnosis and Therapy - Robin Mckenzie.
18. Aspects of Manipulative Therapy - (Glasgow, Twomey) Churchill Livingstone.
19. Saunder's Manual of Physical Therapy (Mosby).
20. Common Vertebral Problems - Grieve (Churchill Livingstone).
21. Sports and physical therapy – Bernhardt Donna, Churchill Livingstone, London 1995.
22. Industrial Therapy – Key G.L. Mosby – St. Lous 1987.

2. PHYSIOTHERAPY IN NEUROLOGICAL AND PSYCHOSOMATIC DISORDERS (MPY104T, MPT104P)

Objectives:

The course shall enable the candidate to expertise in early intervention acquisition and application of Neuro motor and sensory integration skills on adults and pediatric neurological conditions as a first contact practitioner. Such candidate shall also attain an ability to acquire a position as consultant in the team of Health care professionals involved in Electro diagnosis, disability evaluation, as well work in the management of patients at the intensive care area & / or in the rehabilitation neurologically affected adults and children / neonates. The sub-specialties are

a. Adult neurological and psychosomatic conditions and applied neuro physiology
b. Developmental and pediatric neuro pathological conditions
c. Applied bio mechanics and bioengineering
d. Geriatric
e. Electro diagnosis
f. Intensive Care

SYLLABUS(MPY104T)

1. **Theory**

1.1 Review of Neuro - anatomy and Physiology of Nervous System
1.2 Normal development of the nervous system
1.3 The neurology of aging
1.4 Neural plasticity and neural repair
1.5 Clinical symptomatology and pathophysiology of neurological disorders
1.6 Electrodiagnosis, conventional methods – Strength Duration curves, Accommodation, Skin temperature, resistance and blood flow. Electromyography especially with reference to patho-physiology and patho-mechanics. Quantitative EMG.
1.7 Evaluation of A.N.S. dysfunction with reference to psycho-physiological testing, Biofeedback training
1.8 Neuro-psychological functions. Perception testing and training

1.9 Motor control assessment, reflexes and automatic reactions – voluntary control, feedback mechanisms

1.10 Advance neuro-therapeutical skills and different treatment approaches for management and Motor learning and motor control training techniques

1.11 Advance physiotherapeutic management for neurological disorders Introduction, epidemiology, etiology, patho -physiology, clinical presentation, investigations, and medical, surgical and Physiotherapy management for the following area:

1.12 ICU management for neurologically ill patients

The following amendment is made as value addition as under: (Board of Studies letter no. COP/SV/8441/12/2021, dated 6/12/2021; and Vide Notification of Board of Management resolutions Ref: No. SVDU/NOTFN/3070/2021-22, dated 30/07/2022)

1.13 Physiotherapy in Covid19- Introduction, Physical assessment including Functional capacity, Role of physiotherapy in ICU and Post-Covid19 Rehabilitation.

2. Practical: (MPT104P)

Demonstration and performance of assessment and management of 1.2, 1.6 to 1.12.

References

1. Principles of Neural Aging, Ed by SergiouDani, Elsevier, 1st Ed. 2007
2. Neuromusculoskeletal Examination and Assessment: A handbook for Physiotherpists. Petty Nicola J. Churchill Livingstone. 3rd Ed. 2008.
3. Bickerstaffs Neurological Examination in Clinical Practice, Spillane John, Blackwell Science, 6th Ed. 1996.
4. Electrodiagnosis in Diseases of Nerve and Muscle: Principles and Practice, Kimura J, Oxford University Press, 3rd Ed. 2001.
5. Clinical Electophysiology, Mackler L, Williams, 1st Ed. 1989.
6. Adams & Victor's Principles of neurology, Allan H Ropper& Robert H Brown, McGraw-Hill, 8th Ed. 2005.
7. Movement Disorders 1 and 2, Ed. By Marsden, C.D, Butterworth Heinemann, 2nd Ed. 1999.
8. Motor Control Translating Research into Clinical Practice, Cook A, Lippincott, 3rd Ed. 2007.
9. The Clinical Science of Neurologic Rehabilitation, Bruce H Dobkin, oxford university press, 2nd Ed.
10. Textbook of Neural Repair Rehabilitation Volume II,Ed. By Michael E. Selzer,Stephanie Clarke, Cambridge University Press, 1st Ed. 2006.
11. Neurological rehabilitation: Optimizing Motor Performance. Carr& Janet, Butterworth Heinemann, 1st Ed. 1998.
12. Neurological Rehabilitation, Umphred A Darcy, Mosby, 5th Ed. 2007.
13. Brunnstom's Clinical Kinesiology. Smith K, Laura. Jaypee Brothers, 5th Ed. 1998.
14. Cognitive Perceptual Rehabilitation Optimizing Function, Glen Gillen, Mosby, 1st Ed. 2009.

15. Physical therapy of Cerebral Palsy, Miller Freeman, Springer Verlag, 1st Ed. 2007.
16. Treatment of Cerebral Palsy and Motor Delay. Levitt S. Blackwell Pub. 4th Ed. 2004.
17. Adult Hemiplegia Evaluation and Treatment, Bobath& Bertha. Butterworth Heinemann, 3rd Ed. 2002.
18. Handbook of head and Spine Trauma. Ed. By Greenberg, Jonathan, Marceldekker, Inc. 1st Ed. 1985.
19. Rehabilitation for Traumatic Brain Injury. Campbel M, Churchill, 1st Ed. 2000.
20. Tetraplegia and Paraplegia – A Guide for Physiotherapy, Bromley Ida, Elsevier, 6th Ed. 2006.
21. Rehabilitation of Movement, Brooke J, WB Saunders, 1st Ed. 1998.
22. Neurological Physiotherapy, Churchill Livingstone, 2nd Ed. 2004.
23. Handbook of headache management: A practical guide to diagnosis and treatment of head, neck and facial pain. SaperJoel.R, Lippincott Williams & Wilkins 2nd Ed.1999.
24. Proprioceptive Neuromuscular Facilitation Patterns and Techniques. Knott & Margaret, hoeber Medical Division. 2nd Ed. 1999.
25. Vestibular Rehabilitation, Herdman, Susan J, Jaypee Brothers, 3rd Ed. 2008.
26. Physical therapist in Psychiatry, Kiloch,L.G, Black Well Science, 1ST Ed.1988
27. Current therapy in Physiatry Physical Medicine and Rehabilitation, Ruskin, ASA P, W.B. Saunders Company, 1ST Ed.1984.
28. Orthopaedics and Prosthetics in Rehabilitation, Michelle Lusar DI, Elsevier, 2nd Ed. 2007
29. Orthotics in Rehabilitation SplinitingThe Hand and Body. Mckee, Pat. Jaypee Brothers, 1st Ed. 1998.
30. Spinal deformity, Stagnara, P. Butterworths, 1ST Ed. 1988
31. Cash text book of neurology for physiotherapists, Ed. By Downie& Patricia, A. Jaypee brothers, 4th Ed.1993.
32. Muscle Testing Techniques of Manual Examination. Hislop & Helen, J. W.B.Saunders Company 7th Ed. 2002.
33. Daniels and Worthbingbams Muscle Testing Techniques of Manual Examination. . Hislop & Helen, J. W.B.Saunders Company 7th Ed. 2002.
34. Orthopaedic Neurology a diagnosis guide to Neurological Levels. Hoppenfeld, Stanley. Lippincott Williams & Wilkins. 1st Ed. 1997.
35. Occupational therapy with elders, Connon&Byersue, Mosby, 2nd Ed. 2004.
36. Research in Occupational Therapy, Gary Kielhofner, E.A.Davis Company, 1st Ed. 2006.
37. Essentials of dermatology, Venereology and Leprosy. Chattopadhyay SP, Jaypee brothers medical publishers (P) LTD, 1ST Ed.2003

3. PHYSIOTHERAPY IN SPORTS (MPY106T, MPY106P)

Objectives:

This course shall enable to establish first contact Physiotherapy for management of sports injury, emergency care, athletic first aid, prevention of sports injury. It will help to function as a consultant in the team of health professionals concern with sports science, women's health and common medical problems related to sports persons.

The sub-specialties are:

a. Industrial health & geriatrics.
b. Sports injury.
c. Sports psychology.
d. Women's health

Syllabus: (MPY106T)

1. Theory

1.1 Applied Anatomy, Physiology, Pathology, and Pharmacology & Radiology.
1.2 Training Schedules.
1.3 Sex differences in Exercises.
1.4 Principles of kinematics & kinetics, biomechanical analysis of various sports activity.
1.5 Ageing and Exercise.
1.6 Principles of strengthening exercises, mobilization and application of neuro muscular facilitation techniques in sports.
1.7 Prevention of Athletic Injury.
1.8 Common injuries of the upper limb and lower limb.
1.9 Emergency Care and athletic first aid: - Cardiopulmonary resuscitation, Shock Management internal and external bleeding, Splinting, Stretcher use.
1.10 Injuries in Children Adolescent & female.
1.11 Exercise Therapy in post-surgical management of sports Injuries.
1.12 Injuries due to hot and cold climate.
1.13 Acute overuse injuries of upper limb, lower limb, chest abdomen and their managements, Common medical problems associated with sports person.
1.14 Analysis and Classification of sports and sports injuries. Injuries related to the specific sports.
1.15 Effect of exercise on different systems, obesity & weight control, ageing of exercise.
1.16 Sports psychology.
1.17 Exercise training of prescription, high altitude training, special aids for performance enhancement, doping in sports.
1.18 On-field management of athletic Injury.
1.19 Principles of musculo-skeletal health and performance related fitness used in sports & Industrial Health.
1.20 Female Athletes specific problems.

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1.21 Physiotherapy in Covid19- Introduction, Physical assessment including Functional capacity, Role of physiotherapy in ICU and Post-Covid19 Rehabilitation.

2. Practical: (MPY106P)

Demonstration and performance of assessment and management of 1.1, 1.4, 1.6 to 1.20.

References

1. Kinesiology: The mechanics and Pathomechanics of Human Movement by C.CarolA.Oatis - Lippincott

2. Cash Text Book for Orthopedics and rheumatology for physiotherapist by John Elizabeth Cash & Patricia A Downie – Lippincott
3. Exercise Physiology by Mc Ardle, Katch&Katch (Lippincott Williams and Wilkins,2000)
4. Therapeutic Exercise: Treatment Planning for Progression by Francis E. Huber,Christly. Wells (W.B. Saunders Company, 2006)
5. Therapeutic Exercise: Foundations and Techniques by Carolyn Kisner and Lynn Allen Colby (W.B. Saunders Company, 2007)
6. Therapeutic Exercise, Moving Towards Function by Carrie M. Hall and Lori Thein Brody (Lippincott Williams & Wilkins, 2004)
7. Physicals agents in rehabilitation: from research to practical by MichellHCameron, 2nd edition (Saunders and Elsevier, 2003)
8. Clinical Orthopaedic Rehabilitation by S Brent Brotzman
9. The Athlete's Shoulder by Wilk (CHL,2/e,2009)
10. Leon Chaitow Muscle energy techniques by Fritz (CHL,3/e,2006)
11. Emergency care in Athletic training by Gorse (FA.Davis company,2010)
12. Clinical Sports Nutrition by Burke (McGraw Hill,4/e,2010)
13. Clinical Sports Medicine by Karim khan (McGraw Hill,3/e,2008)
14. Lange Current Diagnosis & Treatment: Sports Medicine by Mcmohan (McGraw Hill,2007)
15. Bull's Handbook of Sports Injuries by Roberts (McGraw Hill,2/e,2004)
16. Muscles: Testing and function with posture and pain by Florence Kendall (Lippincott Williams & Wilkins,5/e,2005)
17. ACSM'S Guidelines for exercise testing and prescription by American college of sports medicine (Lippincott Williams & Wilkins,7/e,2005)
18. ACSM'S Resources for clinical exercise physiology: Musculoskeletal, Neuromuscular, Neoplastic, Immunologic and Hematologic conditions by American college of sports medicine (Lippincott Williams & Wilkins,2/e,2009)
19. Sports and exercise nutrition by William Mcardle(Lippincott Williams & Wilkins,3/e,2008)
20. Athletic and Sports issue in Musculoskeletal Rehabilitation by David J Magee (Saunders,2010)
21. Sports injuries: Diagnosis and Management by Christopher M.Norris (Butterworth – Heinemann,3/e,2004)
22. Athletic Footwear and Orthosis in sports medicine by Matthew B.Werd (Springer,2010)
23. Sport Stretch by Michael J.Alter (Human Kinetics,2/e,1997)
24. Conditioning for strength and human performance by Jeff Chandler (Lippincott Williams & Wilkins,2007)
25. An illustrated guide to Taping techniques: Principles and practice by Thomas john heureston (Mosby,2/e,2009)
26. Advanced Fitness assessment and exercise prescription by Vivian H.Heyward (Human Kinetics,5/e,2006)
27. Aerobic exercise in special populations by Carlos ayanperez (Nova science publications,2010)

28. Essentials of strength and conditioning by National Strength and Conditioning Association (Human Kinetics,2/e,2000)
29. Exercise technique manual for resistance training by National Strength and Conditioning Association (Human Kinetics,2/e,2008)
30. Physical Rehabilitation of the injured athlete by James R.Andrew (Saunders,3/e,2004)
31. Biomechanics of musculoskeletal injury by William whiting (Human Kinetics,2/e,2008)
32. ACSM'S Advanced exercise physiology, American college of sports medicine (Lippincott Williams & Wilkins,2005)
33. The Shoulder in sports: Management, Rehabilitation and Prevention by Andrea Fusco (Churchill Livingston,2007)
34. Mind Gym: An athlete's Guide to inner Excellency by Gary Mack (McGraw Hill,2002)
35. Foundations of sports and exercise psychology by Robert Weinberg (Human Kinetics,5/e,2010)

4. PHYSIOTHERAPY IN CARDIORESPIRATORY AND INTENSIVE CARE (MPY107T, MPY107P)

Objectives:

The course shall enable the candidate to expertise in the knowledge and skill of operating advanced instrumentation at the Intensive Care area as well as modern investigative procedures such as stress testing in the presence of a physician. Such candidate shall also attain an ability to function as an essential team member of Intensive care units, as well as team of experts in the Cardio-respiratory rehabilitation general fitness and health promotion at the hospital set ups Industrial / Geriatric set ups, Health clubs, Sports fitness / training and women's health.

The sub specialties are

a. Adult & Pediatric emergency
b. Cardiac rehabilitation and management
c. Pulmonary rehabilitation
d. Geriatric and Industrial health
e. Women's health
f. Sports sciences and Health preparation

Syllabus: (MPY107T)

1. Theory

1.1 Review of the anatomy and physiology of cardiopulmonary system. Applied anatomy and physiology of cardiopulmonary system.
1.2 Intra uterine development of cardiopulmonary system and difference between adult and paediatric cardiopulmonary system.
1.3 Assessment of cardiopulmonary system and differential diagnosis.
1.4 Evaluation of pulmonary dysfunctions
1.5 Investigations in cardiology and its clinical implications
1.6 Clinical exercise testing and assessment of physical and functional capacity
1.7 Physiotherapy in pulmonary and cardiology conditions

1.8 Strength and endurance training – planning and prescription of aerobic and anaerobic training.
1.9 Basic care and emergencies in cardio-respiratory Physiotherapy
1.10 Advance chest physical therapy adjuncts
1.11 Introduction of medical and surgical cardiopulmonary conditions. Epidemiology, Symptomatolgy and patho-physiology of cardiopulmonary disorders. Risk stratification, prevention and health promotion in hypertension, obesity and diabetes.
1.12 Physiotherapy management for medical and surgical cardiopulmonary conditions.
1.13 Evaluations of peripheral vascular disorders and Physiotherapy management of peripheral vascular disorders.
1.14 Intensive care unit(ICU) Management and Common neonatal problems – management in the NICU and neonatal respiratory care.
1.15 Respiratory management in neurological disorders – CVA, GBS, MND, Muscular Dystrophy, Traumatic brain injuries(TBI), Spinal cord injuries(SCI)
1.16 Principles and prescription of pulmonary and cardiac rehabilitation.
1.17 C.B.R. in Cardio-vascular and respiratory conditions

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1.18 Physiotherapy in Covid19- Introduction, Physical assessment including Functional capacity, Role of physiotherapy in ICU and Post-Covid19 Rehabilitation.

2. Practical: (MPY107P)

Demonstration and performance of assessment and management of 1.3 to 1.17.

References

1. Chest physical therapy & pulmonary rehabilitation, 2nd edition by Donna Frownfelter, Year book medical publishers
2. Nunn's applied respiratory physiology, 6th edition by Lumb& Nunn, Elseveir
3. American college of sports medicine (ACSM'S) Advanced exercise physiology
4. Mechanical ventilation – physiological & clinical application, 4th edition by Susan Pilbeam& Cairo, Mosby
5. Pleural diseases, 5th edition by Light, Lipponcott, Williams & Wilkins
6. Chest Physiotherapy in Intensive Care Unit (ICU), 2nd edition by Mackenzie, Lipponcott, Williams & Wilkins
7. Clinical practice in respiratory care by Fink & Hunt, Lipponcott, Williams & Wilkins
8. Paediatric respiratory care by Ammani Prasad & Hussey, Champman& Hall
9. Physiology of sports & exercises, 3rd edition by Wilmore &Costill, Human Kinetics
10. Emergency Physiotherapy by Harden & Pryor, Churchill Livingstone
11. Physiological Assessment of Human Fitness, 2nd edition by Maud & Foster, Human Kinetics

12. ACSM's Resource Manual, 4th edition – Guidelines for exercise testing & prescription, Nobelium Book
13. Essentials of cardiopulmonary Physiotherapy, 1st edition by Hillegass A. Ellen, W.B. Saunders, Jaypee Publishers
14. Tidy's Physiotherapy, 13th edition by Porter & Stuart, Elsevier, Jaypee Publishers
15. Therapeutic exercise Foundations & techniques, 5th edition by Kisner& Carolyn, Jaypee Publishers
16. Text book of medical physiology, 11th edition by Guyton & Arthur C, W.B.Saunders, Jaypee Publishers
17. Physiotherapy for respiratory & cardiac problems-adults &paediatrics, 4th edition by Pryor &Ammani Prasad, Elsevier, JaypeePublisers
18. Cash textbook of cardiovascular-respiratory Physiotherapy, 1st edition by Smith & Mandy, ElseveirPublishers
19. Cash textbook of chest, heart and vascular disorders for physiotherapists, 4th edition by Downi& Patricia, Jaypee Publishers
20. Heart sounds made easy, 1st edition by Brown E.M, Churchill Livingstone, Chirag Book Distributors
21. ECG made easy, 3rd edition, Jaypee Publishers
22. Cardiovascular and pulmonary Physiotherapy an evidence-based approach, 1st edition by Deturk&WilliaM.E, McGraw Hill, Chirag Book Distributors
23. Cardiopulmonary physical therapy 1 – guide to practice, 4th edition by Scot Irwin &Tecklin, Mosby, Ahuja Book Com. (Pvt) Ltd.
24. Eagan's Fundamentals of respiratory care, 9th edition by Wilkins &stoller, Elseveir
25. Physical Rehabilitation, 5th edition by Susan O'Sullivan, Jaypee Publishers
26. Practical Medicine, 16th edition by P.J.Metha, Jaypee Publishers
27. Cardio vascular & pulmonary physical therapy – evidence & practice, 4th edition by Donna Frownfelter& Elizabeth Dean, Mosby Publishers
28. ACLS & BLS – Provider Manual by American Heart Association
29. Thoracic Drianage by Noel Fisherman, Year Book Medical Publishers
30. Physiotherapy in Respiratory Care – an evidence-based approach to respiratory and cardiac management, 3rd edition by Alexandra Hough, nelsons &thornes
31. Cardiac Rehabilitation – implications for the nurse and other health professionals by Paul Fardy, Mosby
32. Clinical Assessment in respiratory care, 5th edition by Wilkins, Mosby
33. ACSM's Guidelines for exercise testing & prescription, 8th edition
34. ACSM's Health related fitness assessment, 1st edition
35. Emergency Physiotherapy, 1st edition by Harden B, Nobelium Book
36. Textbook of Pharmacology for Physiotherapy, 1st edition by Udaykumar&Padmaraja, Jaybee Publishers
37. Pulmonary physiology, 6th edition by Levitzki, McGraw Hill
38. Exercise physiology, 4th edition by McArdle, Katch&Katch, Lipponcott, Williams & Wilkins

5. PHYSIOTHERAPY IN COMMUNITY HEALTH (MPY108T, MPY108P)

Objectives:

The course shall enable the candidate to expertise in the community health and function in the general set up as consultant. Such candidate shall attain ability as a consultant and mandatory member of the team of health professionals, involved in the following sub-specialties

a. Sports sciences and health promotion
b. Movement and Psycho-somatic conditions
c. Cardio-pulmonary rehabilitation
d. Mother and child care
e. Industrial health
f. Geriatrics

Syllabus: (MPY108T)

1. Theory

1.1 Health and Illness; Levels of Healthcare & Fitness.
1.2 Basic Concepts of rehabilitation and foundations of rehabilitation.
1.3 Methodology of CBR with reference to National Health Delivery system.
1.4 Role of National Institutes, District Rehabilitation Centre and Primary Health Centre (with appropriate exposure).
1.5 Persons with disability Act – 1995 and related Government infrastructure.
1.6 Role of Non-Government organizations in CBR.
1.7Scope of community Physiotherapy.
1.8Disability detection and early intervention. Disability evaluation, compensation and legislation.
1.9Physical fitness, stress management through yoga and psychosomatic approaches.
1.10Physiotherapy in maternal and child health care.
1.11Evaluation and theories of aging; Assessment of the elderly; Exercise prescription for the elderly; Psychosocial and safety issues in elderly
1.12Ergonomics, Principles, Issues related to hand tools, posture, material handling and lifting
1.13Prevention of work-related Injuries and redesigning workspace, Designing auditory and visual displays for workers; Occupational stress; Environmental Pollution – nose, vibration etc.
1.14 Women's, Health: Women in India, Social issue having impact on physical Function, Legal rights and benefits, women's reproductive health and health care prescription in pre and post-natal stage.
1.15 Recent Advances in Community Physiotherapy.

The following amendment is made as value addition as under: (Board of Studies letter no. COP/SV/8441/12/2021, dated 6/12/2021; and Vide Notification of Board of Management resolutions Ref: No. SVDU/NOTFN/3070/2021-22, dated 30/07/2022)

1.16 Physiotherapy in Covid19- Introduction, Physical assessment including Functional capacity, Role of physiotherapy in ICU and Post-Covid19 Rehabilitation.

2. Practical: (MPY108P)

Demonstration and performance of assessment and management of 1.8, 1.9, 1.10, 1.11, 1.13.

References

1. Textbook of community medicine and community health-by Bhaskar Rao
2. Industrial therapy—Glender Key
3. Community based rehabilitation for person with disability- S.Pruthuvish
4. Community based rehabilitation for person with disability- Malcoam peat
5. Disability 2000- RCI
6. Legal rights of disabled in India- GautamBanergee
7. Disabled village children by David Werner
8. Physical rehabilitation- Sussan O Sullivan
9. ICF- WHO 2001 publications
10. Preventive and social medicine- K.Park
11. Mural K F –Ergonomics: Man in his working environment
12. Exercise Physiology-by Mc'Ardle
13. Musculoskeletal Disorders in work place: Principle & Practice-by Nordin Andersons Pope
14. Indian Social Problem Vol 2 –by G R Madan
15. Chorin C& M Desai, C Gonsalves, 1999, Women & the Law, Vol. I & II Socio - legal Information Centre Mumbai
16. Geriatrics Physiotherapy – By Andrew Guccione
17. Training in the Community for the people with disability –by HallenderPadmini Mendes
18. Occupational Therapy and Physical disfunction: Principles, Skills & Practices – Turner, Foster & Johnson - Churchill Livingstone
19. Willard and Spackman's occupational therapy - Neistadt&Crepeau – Lippincott
20. Ministry of social justice and empowerment.

6. PHYSIOTHERAPY IN GERIATRICS (MPY109T, MPY109P)

Objectives:

The course shall enable the candidate to expertise in the identification and management of various problems associated with aging.

Syllabus: (MPY109T)

1. Theory

1.1 Theories of aging - physiological social and cognitive or psychological theories.
1.2 Physiological and anatomical changes during aging
1.3 Geriatric pharmacology- Age related changes in drug sensitivity and pharmacodynamics, common drugs used in elderly, complications and side effects of common drugs in aged body.
1.4 Management of effect of aging on various systems like Musculo-skeletal, cardio vascular, endocrine etc.
1.5 Nutrition in the aged
1.6 Life style disease.
1.7 Healthy aging.
1.8 Environmental modification for the aged population including ergonomics.
1.9 Geriatric psychiatry
1.10 Hospital and nursing home care

1.11 Falls-Demography, psychosocial issues associated with falls, etiology and pathophysiology of falls, Intrinsic and extrinsic fall risk factors, evaluation methods, prevention strategies.

1.12 Role of Physiotherapy in treatment of common conditions

1.13 Comprehensive geriatric assessment-Geriatric screening, physical functional psychological social and cognitive assessment, disability evaluation, quality of life etcusing subjective methods.

The following amendment is made as value addition as under: (Board of Studies letter no. COP/SV/8441/12/2021, dated 6/12/2021; and Vide Notification of Board of Management resolutions Ref: No. SVDU/NOTFN/3070/2021-22, dated 30/07/2022)

1.14 Physiotherapy in Covid19- Introduction, Physical assessment including Functional capacity, Role of physiotherapy in ICU and Post-Covid19 Rehabilitation.

2. Practical: (MPY109P)

Demonstration and performance of assessment and management of 1.4, 1.8,1.11 to 1.13.

References

1. Geriatric physical therapy-3rdedition. Andrew A Guccione. Mosby
2. Geriatric rehabilitation: A clinical approach -3rdedition. Carole B Lewis & Jennifer Bottomley. Prentice Hall publishers.
3. Geriatric rehabilitation manual-2ndedition.Thimothy L Kauffman. Churchill Livingstone.
4. Essentials of geriatric physical therapy. Jennifer M Bottomley. Appleton and Lange
5. Optimizing exercise and physical activity in older people. Meg Morris, Adrian Schoo. Butterworth Heinmann.
6. Falls in older people: Risk factors and strategies for prevention. Stephen R Lord, C Sherrington. Cambridge publishers.
7. Functional performance in older adults-3rdedition. Bette R bonder, Vanina Dal Bello-Has. F A Davis company.
8. Physiotherapy practice in residential aged care by Jennifer C Nitz, Susan R Hourigan.
9. The little black book of geriatrics-3rdedition.Gershman, karan
10. Medical care of older persons in residential aged care facilities-4th edition by Royal Australian College of practitioners.
11. Exercise therapy prevention and treatment of disease. Edited by John Gormley, Juliette Hussey. Blackwell publishers
12. Complete guide to Joseph.H.Pilates techniques of physical conditioning-2ndedition . Allan Menezes.Hunter House publishers
13. Neurological rehabilitation-5thed. DarciAUmphred. Elsevier
14. Physical rehabilitation-5th ed. Susan b O'Sullivan, Thomas J Schmitz. Jaypee Brothers.
15. Vestibular rehabilitation-3rd ed. Susan j Herdman. F A Davis company.
16. Physiotherapy for respiratory and cardiac problems-2nd ed. Jennifer A Pryor, Barbara A Webber. Churchill Livingstone.
17. Physical therapy management of parkinsonsdisease .TumbellGerode. Churchill Livingstone.

18. Paraplegia and tetraplegia. Brombley. Churchill livingstone.
19. Orthopedic physical therapy. Donatteli. Churchil Livingstone.
20. Cardiopulmonary physical therapy by Irwin S V. Mosby.
21. oint structure and function:A comprehensive analysis-4th ed. Pamela K Levangie, Cynthia C Norkin . F A Davis.
22. Gait disorders:Evaluation and management .Jeffry m Hausdoff. Taylor and Francis group publications.
23. Pharmacology in rehabilitation-4th ed. Charles D Ciccione. Mosby.

7. PHYSIOTHERAPY IN PEDIATRICS (MPY110T, MPY110P)

Objectives:

The course shall enable the candidate to expertise in the early invention and the management of neonates and high-risk babies, neuro-developmental, musculo-skeletal & cardio respiratory conditions in the pediatric population the intensive care, hospital or community set up, school and sports clubs.

The sub specialties are

a. Pediatric Musculoskeletal conditions
b. Pediatric neurological and psycho-somatic conditions
c. Neonatal care and early intervention
d. Mother and child care
e. Cardio pulmonary conditions in pediatrics including intensive care
f. Sports in children

Syllabus: (MPY110T)

1. Theory

1.1 Genetic basis of pediatric disorders. Embryology & genetic counseling
1.2 Growth and development of a child and its disorders
1.3 Neurodevelopment assessment, developmental diagnosis. Developmental screening
1.4 Cardio-respiratory assessment of neonate and infant and related pediatric disorder.
1.5 Assessment of progressive loco motor disorders – Neuropathic and Myopathic
1.6 Principles of laboratory investigations for differential diagnosis.
1.7 Early intervention- high risk babies, Neonatal care and management
1.8 Maturational, Pathophysiological and recovery process in the CNS.
1.9 Pediatric surgeries and its post-operative management.
1.10 Sports and fitness in pediatrics and Analysis of fitness and exercise prescription for special pediatric populations
1.11 Recent Advances and Evidence Based Practice in Pediatric Physiotherapy.

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1.12 Physiotherapy in Covid19- Introduction, Physical assessment including Functional capacity, Role of physiotherapy in ICU and Post-Covid19 Rehabilitation.

2. Practical: (MPY110P)

Demonstration and performance of assessment and management of 1.2 to 1.10.

References

1. Clinical Pediatric Physical Therapy, Katherine T. Ratliffe, 2010, 2nd edition, Mosby.
2. Physical Therapy for Children, Suzann K. Campbell, Robert J. Palisano, Darl W. Vander Linden 2005, 3rd edition, Elsevier.
3. Handbook of Pediatric Physical Therapy, Toby Long, Kathy Toscano, 2001, 2nd edition, Lippincott Williams & Wilkins.
4. Pediatric Physical Therapy, Jan Stephen Tecklin, 2007, 4th Edition, Lippincott Williams & Wilkins.
5. Elements of PaediatricPhysiotherapy, Pamela M. Eckersley, 1993, Churchill Livingstone.
6. Teaching Motor Skills to Children with Cerebral Palsy and Similar Movement Disorders: A Guide for Parents and Professionals, Sieglinde Martin, 2006, Woodbine House.
7. Physiotherapy for Children, Teresa Pountney, 2007, Butterworth Heinemann Elsevier.
8. Treatment of Cerebral Palsy and Motor Delay, Sophie Levitt, 2010, 5th Edition, Wiley-Blackwell.
9. The Clinical Practice of Pediatric Physical Therapy: From the NICU to Independent Living, Mark Drnach, 2007, Lippincott Williams & Wilkins.
10. Therapeutic Exercise in Developmental Disabilities**,** Barbara H. Connolly, Patricia Montgomery, 2004, 3rd edition, Slack Incorporated.
11. How to Help a Clumsy Child, Lisa A. Kurtz, 2003, Jessica Kingsley Publishers
12. Clinical Pediatric Neurology, Ronald B. David, John B. Bodensteiner, David E. Mandelbaum, Barbara J. Olson. 2009, 3rd edition. Demos Medical Publishing.
13. Play Therapy Treatment Planning and Interventions, Kevin John O'Connor, Sue Ammen, 1997, Academic Press
14. Treatment of Pediatric Neurologic Disorders, Harvey S. Singer, Eric H. Kossoff, Adam L. Hartman, Thomas O. Crawford, 2005, Taylor & Francis Group.
15. Pediatric Orthopedics in Practice, Fritz Hefti, 2007, Springer.
16. Physical Therapy of Cerebral Palsy, Freeman Miller, 2007, Springer
17. Pediatric Rehabilitation, Principles and Practice, Michael A. Alexander, Dennis J. Matthews, 2010, 4th edition, Demos Medical Publishing.
18. Physiotherapy Home programmes for children with motor delay, Sarah Crombie, 1997, Winslow Press Ltd.
19. Paeditric exercise physiology, Neil Armstrong, 2007, Churchill Livingstone Elsevier.
20. Meeting the Physical Therapy Needs of Children, Susan K.Effgen, 2005, F.A.Davis Company.
21. Physiotherapy in Pediatrics, Roberta B. Shepherd, 1995, 3rd edition, Butterworth Heinemann.
22. Physiotherapy and the growing child, Yvonne R Borns, Julie MacDonald, 1996, W.B.Saunders Company Ltd.
23. Pediatric Rehabilitation, Gabriella E. Molnar, 1999, 3rd edition, Hanly&Belfus.
24. Pediatric Physical Examination, Karen G.DunderStadt, 2006, Mosby Elsevier.
25. Decision making in pediatric neurologic physical therapy, Suzann K. Campbell, 1999, Churchill Livingstone.

26. Physiotherapy and Occupational Therapy for People with Cerebral Palsy, Karen J. Dodd, Christine Imms, Nicholas F. Taylor, 2010, Mac Keith Press.

8. PHYSIOTHERAPY IN WOMEN'S HEALTH (MPY111T, MPY111P)

Objectives:

This course shall enable to candidates to have in depth knowledge to evaluate and treat female clients, promoting and enhancing health through the lifespan

Syllabus: (MPY111T)

1. Theory

1.1 Adolescence and musculoskeletal system, diet and exercise for the adolescent
1.2 Role of PT in obstetrics care
1.3 Diagnosis and treatment of musculoskeletal pain and dysfunction in the childbearing year
1.4 Maternal disorders and diseases
1.5 Physical therapy care during labour- normal, late and complicated pregnancy, maternal position, pain mechanism and relief
1.6 Postpartum care- anatomical and physiological changes pot- partum, postnatal exercise program, post caesarean exercise program
1.7 Physical therapy care in high risk pregnancy
1.8 Neonate handling assessment and management
1.9 The climacteric
1.10 Role of physiotherapy in Gynecologic care
1.11 Cancer rehabilitation
1.12 Lymphedema management
1.13 Anatomical, physiological, psychological, cardiovascular and other systemic changes, postmenopausal osteoporosis, falls, fracture in elderly women
1.14 Exercise testing and prescription in female athletes and women
1.15 Physiotherapy following gynecological surgery
1.16 Fitness test9ing and exercise prescription in gynecological conditions (infertility, PCOD, Obesity)
1.17 Advances in women's Health

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1.18 Physiotherapy in Covid19- Introduction, Physical assessment including Functional capacity, Role of physiotherapy in ICU and Post-Covid19 Rehabilitation.

2. Practical: (MPY111P)

Demonstration and performance of assessment and management of 1.3, 1.5 to 1.11, 1.14 to 1.16.

9. EVIDENCE BASED PHYSIOTHERAPY

Objectives:

1. Systematically reviewing the evidence: Stages of systematic reviews, Meta-analysis and The Cochrane collaboration.
2. Effectively communicating evidence, Evidence based communication in the face of uncertainty; Evidence based communication opportunities in everyday practice.

Course work

1.Topic related assignments in evidence-based Physiotherapy.
2.Topic related seminars in evidence-based Physiotherapy.
3.Topic related UG teaching in evidence-based Physiotherapy
4.Evidence based practice in clinic
5.Evidence based case presentation
6.Evidence based poster / paper presentation in state / national level conference
7.Publication of paper in national / international indexed journal

LIST OF JOURNALS

1. Physical Therapy (APTA)
2. Physiotherapy (CSP)
3. Physiotherapy (Canada)
4. Australian Journal of Physiotherapy
5. New Zealand Journal of Physiotherapy
6. Hong Kong Physiotherapy Journal
7. Journal of the Japanese Physical Therapy Association
8. Journal of Physical Therapy Science
9. Physical Therapy Reviews
10. Physiotherapy - Theory & Practice
11. Physiotherapy - Journal of Indian Association of Physiotherapy
12. Indian Journal of Physiotherapy and Occupational Therapy
13. Physiotherapy Research International
14. Journal of Physical Therapy Education
15. Clinical Kinesiology
16. Journal of Bio-mechanics
17. Journal of Aquatic Physical Therapy
18. Journal of Manual & Manipulative Therapy
19. Journal of Orthopedic Sports Physiotherapy (JOSPT)
20. Physical Therapy in Sport
21. Isokinetics and Exercise Science
22. Journal of Neurologic Physical Therapy
23. Cardio Pulmonary Physical Therapy Journal
24. Journal of Geriatric Physical Therapy
25. Physical & Occupational Therapy in Geriatrics
26. Journal of Women's Health Physical Therapy
27. Paediatric Physical Therapy
28. Journal of Rehabilitation – Research & Development
29. Archives of Physical Medicine & Rehabilitation