Ordinances, Criteria for Admission, Examination Scheme, Syllabus

MASTERS IN PHYSIOTHERAPY TWO YEAR POST GRADUATE COURSE

TANTIA UNVERSITY, SGNR

AIMS OF THE PROGRAMME

- To improve the quality of education of the therapist in order to enhance their previously existing knowledge & skill for a more qualitative treatment methodology.
- To make them specialists in particular streams. They should be adept in their methodology in the specific field of their specialization. So as they do not have any difficulty in assessing, diagnosing & treating various disorders of the specific field.
- To impact knowledge that will be helpful for carring out other associated jobs requirements of various natures. i.e. to have a systemic concept on a demonstration / Teaching methods, Medicolegal binding & statistical data- management.
- 4. To develop the ability to understand, reason analysis & draft a systematic response for any nature of work.

ORDINANCE

These regulations and syllabus are for M.P.T. – Post Graduate Degree in following specializations:-

- 1. Masters in Physiotherapy (Musculo Skeletal Disorders)
- 2. Masters in Physiotherapy (Neurological Disorders)
- 3. Masters in Physiotherapy (Sports Rehabilitation)

ELIGIBILITY

The candidate should be a graduate in Physiotherapy form any Recognized Board University in India of Abroad (according to UGC rules / Association of Indian Universities) and the Candidate must have minimum 50% in aggregate.

DURATION

The period of certified study for the M.P.T. course shall be two academic years in each specialization.

MEDIUM OF INSTRUCTIONS

Medium of instruction will be English.

ATTENDANCE

The students admitted to this course shall attend regular classes. In order to be eligible for appearing in the final examination at the end of an academic session, a candidate should have minimum of 75% attendance in each of the subjects (Theory & Practical Separately) in an academic year. Failing to have this he/she will not be allowed to appear in the annual examination. However, the head the head of the Institution can relax up to 5% of

attendance, a further relaxation of 5% can be done by the Vice – Chancellor on the recommendation of the head of the Institution.

- 1. Internal Marks 40% Minimum
- 2. Each Student should present atleast 5 seminar in one academic year
- 3. Essential participation in Journal Club

- Case Presentation

SCHEME OF EXAMINATION

- There shall be an Examination at the end of final academic year.
- Each subject shall carry 100 marks out of which 30 marks will be of internal assessment and 70 marks for the annual examination.
- The marks of the internal assessment will be given bu the teacher incharge / HOD on the basis of the performance of the candidate throughout the year & any other, assessment like seminars.
- Eligibility for appearing in final examination: Candidates are supposed to take part and conduct seminars and group discussions regularly. Candidates should conduct a minimum of 5 seminars in one academic year each.
- First year examination will be Institutional based
- In order to pass in a subject a candidate has to secure 40 % marks in theory & practicals separately, Aggregate of the year 50%.
- The successful candidates shall be classified marks obtained in the final examinations.
- For a course of 2 year duration, maximum of 2 year is allowed from the commencement of the course.

Example: For MPT it will be 2 X 2 = 4 years. (Maximum duration for completion of M.P.T. course)

 Practicals – The practical exams will be held preferably before/after immediate theory exams. Where a training/ field study is included in the syllabus (Which is to be evaluated at Institute / University level). The same should be completed before the close of the final year. All Institutes / Departments running the program will follow this strictly.

In order to be declared as "Pass", a candidate shall be have to obtain a minimum 40%, of internal marks. If a candidate does not obtain the minimum marks in internal assessment, he8she will not be considered eligible for appearing in the respective Subject examinations. It will be the sole responsibility of the Institute / Department to ensure this prior to Annual Examination and inform the University of the details of the Candidates.

Minimum qualifying marks for Pass in final year.

Each Paper 40%. Aggregate 50%.

- Divisions
 - a) First division 60% & above in aggregate.
 - b) Second division 50% and above but less than 60%
 - c) Distinction is to be mentioned if a candidate obtains a total of 75% or more in aggregate in single attempt (without the award of grace marks to pass in any paper).
- Candidates are allowed two attempt in the Back Paper. Candidates who have already passed the papers. But wishing to improve their performance are also allowed to appear.
- Where a candidate secures marks less than those obtained in the first attempt (application in case of improvement, not failure candidates) the best of the two marks will be considered for the purpose of the final results. Theory of Practical shall be considered as a paper
- Where a student fails in a project (if included in course of study) or fails to submit in the specified time, he/she shall be allowed to resubmit the same in the next year (when the related examination falls due next) on payment of the required back paper fee.
- **Supplementary Exam :** Any candidate who fails in two or less than two courses can appear in the supplementary examination conducted by the University within

six months of declaration of result. Practical for this purpose will be considered as a separate paper.

Any candidate failing in more than two papers would be considered as a failed shall have to reappear in the next Annual Examination as Ex. – Student.

EXAMINATION PATTEREN

- All the theory papers in each year will carry 100 marks out of which 30 marks will be for Internal assessment and 70 marks for final examination.
- The practical examination will be of 100 marks. The practical & viva voce in each subject will carry 30 marks as internal & 70 marks in final examination.
- The final examination will be of 70 marks. There will be 5 descriptive questions of 15 marks each, out of which a candidate shall be required to attempt any 3 (3X15=45 marks) & 8 short questions out of which, a student will have to attempt 5 questions each carrying 5 marks (5X5=25 marks).
- Equal distribution of marks/ questions for each unit of a single subject.
- The duration of final examination shall be 3 hrs.

DISSERTATION (PROJECT WORK)

Dissertation shall be of 200 marks there will be no sessional in this subject. The dissertations shall be of 5000 words (Minimum). Consisting of result of his own study / work bases upon his/her Clinical Duties under the Guidance of a Teacher/Guide.

The degree of Master of Physiotherapy will be awarded to the candidate only after he / she has completed the following:-

- 1. The Registrar shall publish the result of the examination, as soon as possible after the examination has been held.
- 2. He/ she passed all the academic examination successfully (included dissertation).

SYLLABUS

This syllabus & ordinance shall come in to force immediately of the session - 2002-2003 onwards.

NOTE: Masters in Physiotherapy noted - MPT

COURSE STRUCTURE OF M.P.T.

PART / YEAR / I- M.P.T. (COMMON TO ALL DISCIPLINES)

S.No.	Subjects	Code	Theory/Practical		Total	Total
						Study / Hour
			M.M.	M.M.		Total No. of
			Annual	Sessionals		weeks X Hours
1.	Review of Human Sciences	MP-101	70	30	100	30 X 3 = 90
	(Anatomy, Physiology, Pathology,					
	pharmacology & Biochemistry)					
2.	Review of Basic Therapeutics	MP -102	70	30	100	30 X 3 = 90
	(Exercise Therapy, Electro					
	Therapy, Biomechanics, & Bio.					
	Engg.)					
3.	Advanced Therapeutics &	MP -103	70	30	100	30 X 3 = 90
	Diagnosis (Manual Therapy, MET,					
	Myofascial Release, LASER, EMG,					
	Micro Current, Radiology &					
	Diagnostic Studies, Lab					
	(Pathology)					
4.	Practicals	MP -104	70	30	100	
5.	Clinicals					30 X 24 = 720
			Total=		400	990

PART / YEAR /II- M.P.T. (M.P.T. NEUROLOGY)

S.No.	Subjects	Code	Theory/Practical		Total	Total
						Study / Hour
			M.M.	M.M.		Total No. of
			Annual	Sessional		weeks X Hours
				S		
1.	Physical Therapy in Neurological	MPN-201	70	30	100	30 X 4 = 120
	Disorders					
2.	Neurological Rehabilitation	MPN -202	70	30	100	30 X4 = 120
3.	Physical Therapy in Paediatric	MPN -203	70	30	100	30 X 4 = 120
	Neurology					
				20	400	20.74
4.	Skill enhancing studies (Research	MPN -204	70	30	100	30 X 4 = 120
	& methodology Ethics,					
	Educational Technology & Medicolegal aspects)					
	Medicolegal aspects)					
5.	Practical	MPN-205	70	30	100	
			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		100	
6.	Dissertation (Based on project	MPN-206			200	
	work)				200	
7.	Clinicals					30 X 24 = 720
				Total=	700	1200

REVIEW OF HUMAN SCIENCES

M.P.T. – 1st year Code – M.P. - 101 Max. Marks = 100

Course objective

- 1. Applied anatomy for supportive specialization.
- 2. Normal functional anatomy for Analysis between normal & abnormal.
- 3. Subject support: Medical professional supportive purpose / action reaction of the medical related to different specialization.
- 4. Pathology : Basic condition knowledge, their pathological changes & their relevant conditions to support the specialization.
- 5. Biochemistry : For nutritional & diet chart of different conditions.

Unit I : Human Anatomy

Outline of general anatomy

Introduction to upper limb & lower limb

- a) Bones & Joints
- b) Muscles
- c) Nerves, roots, plexus
- d) Pectoral, Axilla, Scapula , Arm, Forearm, Cubital fossa, Hand
- e) Vascular structure.
- f) Thigh, Gluteal region, popliteal fossa.
- g) Leg, foot

Introduction of thoracic bones & Joints.

Introduction of vertebral column

- a) Cervical, thoracic, lumbar, sacral spine.
- b) Anatomy of spinal cord.

Introduction of head & neck

a) Neck : Side of neck

Back of neck

Triangle of neck

b) Temporomandibular joint

Introduction to brain :-

- a) Meningies, CSF
- b) Blood supply of brain & Spinal cord
- c) Outline of ventricles
- d) Outline of brain stem.
- e) Anatomy of spinal cord
- f) Ascending & Descending treat of spinal cords

Unit II: Human Physiology

Cardiovascular system

- a) Structure & Properties of heart
- b) Cardiac Cycle
- c) The regulation of heart's performance
- d) Cardiac output
- e) The arterial blood pressure
- f) The Physiology of vascular system.
- g) Lymphatic circulation.

Respiratory system

- a) Functional anatomy
- b) Ventilation & control of ventilation
- c) Alveolar air
- d) Regulation of the breathing
- e) Pulmonary function test.

Muscular system:

- a) Types of muscles & the properties
- b) Physiology and Muscular contraction
- c) Neuromuscular
- d) Neuromuscular spindles

Nervous system

- a) Elementary Neuroanatomy
- b) Neurons & Neuroglla
- c) Properties of nerve fibres, synapse
- d) Spinal cord
- e) Cerebral cortex
- f) Pyramidal & extrapyramidal system
- g) The cerebellum
- h) Automatic nervous system
- i) Cerebrospinal fluid
- j) Cranial nerves.

Unit III : Pharmacology

- a) Discussion in detail of the following groups of drug. Their effects, uses, side effects and dosage.
 - 1. Drugs used in pain
 - 2. Local anesthetics
 - 3. Steroids
 - 4. Muscle relaxants
 - 5. Drug acting upon central nervous systems & autonomic nervous system.

Unit IV : Pathology

- 1. General Pathology (Cell Injury, Inflammation, repair, immune system)
- 2. Musculoskeletal system
 - a) Bones :

-Heredity & metabolic diseases

(Osteoporosis, rickets, Osteomalacia, Osteitis fibrosa systica, renal

Osteodystrophy)

-Infections:

(osteomyelitis, tuberculosis)

- b) Joints:
 - -Degenerative joint diseases
 - -Bursitis
- c) Skeletal muscles

(Muscle atrophy, myositis, muscular dystrophy, myasthenia gravis)

- 3. Nervous system
 - a) Infection (meningitis, encephalitis)
 - b) Vascular dieases(ischeamic encephalopathy, cerebral infarction, intracranial hemorrhage)
 - c) Degenerative disease

(Alzheimer diseases Huntington's disease, Parkinsonism, Motor neuron disease)

- d) Demyelinating disease(Multiple sclerosis)
- e) The peripheral nervous system

(peripheral neuropathy acute idiopathic polyneuropathy, diabetic neropathy)

Unit V : Biochemistry : Diet its nutritional and calorific value of various foods balance diet, energy requirements of various individuals.

REVIEW OF BASIC THERAPEUTICS

M.P.T. – 1st Year Code – M.P. – 102 Max. Marks = 100

Unit I : Exercise Therapy

Review of the following techniques.

- Assessment techniques like MMT & Goniometry.
- Stretching and mobilization.
- Re- education and strengthening
- Balance and co-ordination exercises.
- Gait analysis and training (both normal & pathological gait)
- Relaxation & soft tissue manipulation (Massage).
- Posture.
- PNF
- Traction
- Hydrotherapy

Unit II : Electrotherapy.

- Gen. Review of low, medium & currents and their modifications like di-dynamic and Russian currents.
- Ultrasound.
- UVT and IRR
- Cryotherapy
- Other thermal modalities.
- I.F.T., LASER, MWD, SWD, TENS, EMG, BIOFEED BACK, MUSCLE STIMULATOR

Unit III : Biomechanics

- Evaluation and assessment of joint motion.
- Evaluation and assessment of locomotion.
- Evaluation and assessment of posture.

Unit IV : Bio-Engineering

- Various types of orthosis & its uses(limbs & spines).
- Various types of prosthesis, patients preparation and application.

ADVANCED THERAPEUTICS AND DIAGNOSIS

M.P.T – 1ST Year Code – M.P. – 103 Max. Marks = 100

Unit I : Manual Therapy: Introduction, History, Basic Classification, Assessment for manipulation, discussion in brief about the concepts of mobilization like Cyriax, Maitland & Mullighan and Butler in mobilization of joints nerves, Methodology in general with examples of few joints / nerves (Manipulation studies & work according to their specialization).

Unit II : Muscle Energy technique and positional stretch: The basic concept and application of these techniques.

Unit III : Myofascial Release: Concept & brief discussion of its application techniques.
Unit IV : LASER : Production, types, effects, applications, indications & contraindications.
Unit V : Nerve conduction studies and EMG : Normal & abnormal action potentials, its recording protocols, analysis & apparatus.

Unit VI : Microcurrents : Concepts, Indications, Contraindications & Application. **Unit VII: Biofeed back :** Principle, effects, uses and contraindications.

FOLLOWING ARE ONLY FOR PRACTICAL KNOWLEDGE; NOT FOR THEORY EXAM)

Unit VIII : Radiology & Diagnostic studies: Reading and analysis of

1. X – Ray. 2. C.T. Scan 3. M.R.I. Scan

Their clinical relation with various muscular skeletal disorders and nervous disorders **Unit IX :** Lab (Pathology) Investigations : Methodology of routine examination of blood, urine only.

Analysis of various laboratory Examination reports and their clinical Co- relation with various muscular skeletal disorders and nervous disorders

PRACTICAL IN THERAPEUTICS

M.P.T. – 1st Year Code – M.P. – 104 Max. Marks = 100

Course Objectives:

Knowledge of basic Therapeutics & 90 hrs. practical studies of advanced therapeutics applied to different conditions / relieving of mechanical factors & assessment & Treatment purpose.

Unit I

Exercise Therapy : Assessment of joint, muscle & nerves.

- a) All types of strengthening techniques
- b) All types of mobilization techniques
- c) Soft tissues stretching & mobilization
- d) Gait analysis & training
- e) Postural assessment & re-education
- f) Special technique of exercise therapy
- g) Traction
- h) Hydrotherapy

Unit II

Electro Therapy

- a) All types of low & medium frequency currents
 - Faradic
 - Galvanic
 - High voltage current
 - Di dynamic
 - Russian
 - Interferential Therapy
 - TENS]
 - Microcurrents

- b) All type of high frequency currents & modalities.
 - Short wave diathermy
 - Microwave diathermy
 - Ultrasound

Unit III Miscellaneous

- a) Cryotherapy
- b) Biofeedback
- c) UVR
- d) IRR
- e) LASER
- f) Other heat modalities.

Unit IV : Advanced Manual Therapy

- a) Demonstration of any one of following manual therapy (according to their specialization field):
 - Cyriax
 - Maitland
 - Mullighan
 - Butler
 - Nerve mobilization
- b) Outline of practical knowledge of Muscle energy techniques & positional stretch & Myofascial release.

<u>M.P.T. (ORTHO) – II</u>

ORHTOPAEDICS (PHYSICAL THERAPY)

M.P.T. – 2nd Year

Code – M.P.O. – 201

Max. Marks = 100

Detailed assessment & management in view of advanced and traditional methods considering both surgical and physical therapy aspects.

Unit I: General Othopaedics

- 1) Methods of diagnosis.
- 2) Infections in bones and joints.
- 3) Rheumatic disordrs.
- 4) Generalized affections of bone and joints (metabolic & endocrinal).
- 5) Developmental disorders. (cartilagenous dysplasias, bony dysplasias & chromosomal abnormalities etc)
- 6) Congenital disorders.
- 7) Degenerative disorders.
- 8) Tumors of bones.
- 9) Osteonecrosis and osteochondritis.
- 10) Neurological and muscular disorders & peripheral nerve injuries.

Unit II : Regional Orthopaedics and Rehabilitation.

Bony & soft tissue disorders of :-

- 1) Shoulder and arm
- 3) Wrist

- 2) Elbow and forearm
- Hip and thigh

5) Knee and leg

6) Ankle and foot

Unit III Traumatology

- a) Incidence, aetiology, Clinical features, complications, assessment, investigations and Physiotherapy management of the following:-
 - 1. Fractures and dislocations of upper limb.
 - 2. Fractures and dislocations of lower limb.
 - 3. Fractures and dislocations of pelvis.
 - 4. Stress fractures.
- b) Management & Rehabilitation of :-
 - 1. Fractures and dislocation of upper limb.
 - 2. Fractures and dislocations of lower limb.
 - 3. Fractures and dislocations of pelvis.
 - 4. Stress fractures.

Unit IV : Some Common Orthopaedic surgeries : Methodology

of different types of some Common surgeries and its rehabilitation. Menisectomy, laminectomy, patellectomy, total knee replacement, total hip replacement, triple arthrodesis, hip arthrodesis and arthroplasty, bone grafting, internal and external fixations, tendon transfers, nerve suturing and grafting etc.

Unit V : Amputation

- 1. Type, Levels and procedure.
- 2. Pre and post operative rehabilitation.
- 3. Prosthesis and stump care.

Unit VI : Vascular and Neural Injuries and Disorders

- 1. Thoracic outlet / inlet syndrome.
- 2. Volkman's ischaemic contractures
- 3. Compartment syndrome
- 4. Neuropathies
- 5. Peripharal nerve injuries.

- **Unit VII** : **Miscellaneous:** Leprosy, cerebral palsy, poliomyelitis, principles of geriatric rehabilitation and some common conditions of geriatric patients.
- **Unit VIII** : **Bioengineering** : Orthoses and splints : Their types, applications, care & uses.

Related to assessments, investigations and physiotherapy anagement of all the above conditions.

M.P.T. (Ortho) - II

VERETBRAL DISORDERS AND REHABILITATION

M.P.T. – 2nd year

Code – M.P.O. – 202

Max. Marks = 100

Classification, pathophysiology, causes, clinical features, complication examinations, management, physiotherapy treatment.

Advance techniques like Mait land, Cyriax, PNF etc. apply according to necessary cases.

Unit I : Review of anatomy and biomechanics of vertebral column.

Unit II : Congenital disorders of vertebral column & vertebral joints, soft tissues.

Unit III : Inflammatory disorders of vertebrae joints, soft tissues.

Unit IV : Diseases of the vertebral joints, segmentel instability.

Unit V : Disorders of structural changes, changes of alignment of bone, joint of vertebral column.

Unit VI : Low Back pain, pain in vertebral column & programme stiffness disorders.

Regional :- Cervical Lumbar Thoracic Sacral, etc

- 1. Soft tissue injuries, tightness, structural changes
- 2. Bone injuries (fractures & dislocation of spine)
- 3. Pelvic injuries.

Unit VIII :

Spinal cord injuries

- 1. Types, classifications.
- 2. Pathology.
- 3. Level
- 4. Examination.
- 5. Management & rehabilitation.
- 6. Orthopaedic surgeries.
- 7. Bio engineering appliances & support devices.
- 8. Pre & Post operative rehabilitation.

PRACTICALS

Related to assessments, investigations and physiotherapy management of all the above conditions.

MPT (ORTHO) II

SKILL ENHANCING STUDIES

M.P.T. – 2nd year Code – M.P.O. – 204 Max. Marks = 100 INTERNAL 30 EXTERNAL 70

Course Objective

- 1. BIOSTATICS & COMPUTERS FOR COLLECTING DATA & PROGRAMME FOR PROJECT WORK & FOR PLANNING EFFECTIVE TREATMENT.
- 2. ETHICS & MEDICOLLEGAL ASPECTS FOR CLINICAL PURPOSES.
- 3. EDUCATIONAL TECHNOLOGY FOR TEACHING & LEARNING PURPOSES.

Unit I: Research Methodology

Introduction

Methods of collection, classification, tabulation & presentation of data.

Central tendency -

Mean, Median, Mode & standard deviation

Correlation & Regression:-

Karl Pearson's relation method Rank co-relation method Regression & coefficients Sampling & hypothesis & testing Data collection Types of sampling

Random sampling

T – Test, Z – test, Chi square test

Unit II : Physiotherapy Ethics

- 1. Morals and ethics
- 2. Ethical issue in physical therapy
- 3. Rules and regulation of association / council.

Unit III : Physical Therapy & Law : Mediolegal aspect of physical therapy, liability, negligence and practice workmen compensation Maintaining the medical Register.

Unit IV : Physiotherapy Education Technology

- I. Aims, philosophy and trends and isssues:
 - a) Educational aims.
 - b) Agencies of education.
 - c) Formal and informal education.
 - d) Major philosophies of education.

(naturalism, idealism, profemation, realism.)

e) Modern and contemporary philosophies of educations.

Physiotherapy of education in india (past, present and future) current issues and trends in educations.

II. Concepts of teaching and learning

- I. Theories of teaching
- II. Relationship between teaching and learning.
- III. Psychology of education.

IV. Dynamics of behavior, motivational process of learning perception, individual, differences, intelligence personality.

III. Curriculum

- a. Curriculum committee.
- b. Development of a curriculum for physiotherapy.
- c. Types of curriculum.
- d. Placing, courses placement, time allotment.
- e. Correlation of theory and practice.
- f. Hospital and community areas for clinical instructions.
- g. Clinical assignments.

IV. Principles and methods of teaching

- a. Strategies of teaching
- b. Planning of teaching.
- c. Organisation, writing lesson plan.
- d. A.V. aids
- e. Teaching methods socialized teaching methods.
- V. Measurement and evaluation
 - a. Nature of measurement of Educations, meaning process personnel, standardized, non standardized.
 - b. Standardized tools, important tests of intelligence, aptitude, instrument, personality, achievements and status scale.
 - c. Programme evaluation
 - d. Cummulative evaluation
- VI. Guidance and counseling
 - a. Phiolosphy, principles and concepts, guidance and counseling services.
 - Faculty development and development of personnel for physiotherapy services

Unit VI : Computer (Non University Examination)

- 1. Introduction of software & hardware.
- 2. M.S. Office, Dos.
- 3. Application computer in medical sciences.

M.P.T. (ORTHO) - II

PRACTICAL

M.P.T. – 2nd year Code – M.P.O. – 205 Max. Marks = 100 INTERNAL 30

EXTERNAL 70

Practical Examination

- Total Hours of Practical Examination will be 6 hours.
- Practical examination will be divided into two parts:
 - 1) Two Large Cases 30 marks each (30 X 2 = 60)
 - 2) One small Case 10 marks (10 X 1 = 10 marks)

Large cases for example:

PIVD, Spondylolisthesis, Back pain, cervical radiculopathy etc.

Small cases for example:

Ligament injuries, tendinitis, bursitis, etc.

- Following procedures will be included in the practical examination.
 - 1.
- a) Physical
- b) Clinical
- c) Pathological
- d) Other legislations.
- 2. Differential diagnosis & its reason.
- 3. Treatment Physiotherapy Management & advanced technique application.
- 4. Home programme.
- Fracture cases : Intensive case Emergency care, positioning. Reduction, plaster application, care in period of immobilization & post immobilization rehabilitation.

M.P.T. (ORTHO) – II Subject No.3- Hand Rehabilitation M.P.T. 2nd Year Code- M.P.O.- 203

(a) Theory

- a. Anatomy, physiology, Applied Anatomy, Applied Physiology, Biomechanics and Pathomechanics, related to various disorders and injuries of hand.
- b. Epidemiology, course, predisposing factors, pathophysiology, pathology, types, classification, clinical features, sign, evaluation different diagnosis, investigation (radiology, electro physiology (diagnosis), laboratory (blood, urine and other relevant clinical tests) different diagnosis, diagnosis and medical rehabilitation to following various injuries and disorders of hand.
- c. Physiotherapy assessment, clinical co-relation, decision making and physiotherapy treatment, protocol, evidence based practice and effect of various approaches, techniques and ICU and IMC & complications.

Hand Rehabilitation

- 1. Functions of Hand as motor and sensory organ with advanced bio and pathomechanics of hand.
- 2. Hand injuries-classification.
- 3. Principles of rehabilitation of hand injuries including functional and vocational training.
- 4. Tendon Injuries.
- 5. Nerve injuries.
- 6. Crush Injuries.
- 7. Burn in hand.
- 8. Spastic hand.
- 9. Rheumatoid Hand.
- 10. Hand in Hansen's disease.
- 11. Reflex sympathetic dystrophy
- 12. Phantom hand pain
- 13. Prosthetic hand.
- 14. Orthosis for hand and their uses.

(b) Practical

Special Work Shop

- 1. Segmental stability in lumbar stabilization.
- 2. Preparation and application of various prosthetic and orthotic aids in various disorders.
- 3. Plaster and other methods of immobilization.
- 4. Workshops on Maitland, Cyriax, Mulligan to various regional applications.
- 5. Workshops on surgical procedures fixation, arthroplasty, decompressive surgeries etc.

-50 Hrs

- 120 Hrs

	Subjects	Code	Theory/Practical			Total
S.No			M.M Annual	M.M Sessionals	Total	Study/Hour
1	orthopaedics in physical teherapy	MP-201	80	20	100	30x4=120
2	Vertebral Disorders and Rehabilitation	MP-202	80	20	100	30x4=120
3	Hand Rehabilitation	MP-203	80	20	100	30x4=120
4	Skill Enhancing Studies (Research and Methodology Ethics, Educational Technology & Medicolegal aspects	MP-204	80	20	100	30x4=120
5	Practical	MP-205	80	20	100	
6	Dissertatiob (Based on Project Work)	MP-206			200	
7	Clinical					30x24=720
		ART/YEAR/II-MPT			Total=700	1200

PART/YEAR/II-MPT(MUSCULOSKELETAL DISORDERS)