

MAHARASHTRA UNIVERSITY OF HEALTH SCIENCES, NASHIK

Physiotherapy Syllabus

IV - B.P.Th.

(This syllabus is applicable from 2010-2011 i.e. from the batch who gets admitted to the First B.P.Th course in the year 2007-08)

Subjects **Transcript hours –1438**

- 1) Physiotherapy in Musculoskeletal Sciences ----- 200hrs
- 2) Physiotherapy in Neuro-Sciences (including Adult/Pediatric/
Psycho-somatic & Psychiatric/Mental health) ----- 210hrs
- 3) Physiotherapy in Cardio-vascular & Respiratory Sciences
(Including General Medical & Surgical Conditions) ----- 200hrs
- 4) Physiotherapy in Community Health Sciences
(including Women's Health/Geriatrics/Industrial Health (Ergonomics)
& Health Promotion-----210hrs
- 5) Principles of Bio-engineering ----- Theory 15hrs + Practical-15hrs -----30hrs
- 6) Professional issues/Administration/Management/Marketing -----40hrs
- 7) Seminar ----- 2hrs/ 2 Weeks -----40hrs
(Including case presentation – 15hrs + Literature review – 15 hrs)
- 8) Supervised clinical practice + Project -----508 hrs
Each Clinical assignment shall be of 74 hours at Indoor & 74 hours at the Out door section (including 20 hours of Project) respectively in Each of the subjects mentioned at 1,2 & 3 above. Clinical assignments, Clinical assignment in Community P.T. shall be of 150 hours (Total 7 assignments)
A) During each clinical assignment, the student shall functionally diagnose plan & practice Clinical skills on patients in consultation with the experienced senior staff.
B) Project During each of the 7 assignments, the candidate, shall conduct retrospective case studies on Minimum 5 samples. He/she shall maintain a separate File/journal for each subject & keep all the records of the clinical assignment & ward exam/Seminar etc. in the respective file. However the records of the Project work carried out during the 7 assignments shall be maintained in the file titled as "PROJECT FILE" The candidate shall get the clinical & project work duly verified with the signature from the section In charge at the end each respective assignment.

PHYSIOTHERAPY IN MUSCULOSKELETAL SCIENCES

(Total 200 hrs)

Theory – 60 hrs + Clinical 140 hrs

Objectives : This course is formulated on the “ Problem based” method. At the end of the course, the candidate will –

- 1) Be able to identify, discuss & analyze, the Musculo Skeletal Dysfunction in terms of Biomechanical, Kinesiology & Biophysical bases & correlate the same with the provisional diagnosis, routine radiological & Electrophysiological investigations & arrive at appropriate Functional diagnosis with clinical reasoning.
- 2) Be able to plan & Prescribe as well as acquire the skill of executing short & long term Physiotherapy treatment by selecting appropriate modes of Mobilisation /manipulations, Electro Therapy, Therapeutic exercise & appropriate ergonomic advise for the relief of pain, restoration/Maintenance of function, &/ or rehabilitation for maximum functional independence in A.D.L. at home & work place:

Syllabus

Following topics are applicable to all the Musculo – skeletal conditions included in the various clinical subjects of Medical Sciences taught in IIIrd B.P.Th.

1. Evaluation, interpretation of investigations & functional diagnosis (ICF) with appropriate clinical reasoning for planning & implementation of management techniques.
2. Planning, Prescription & Implementation of short term & long term goals with clinical reasoning.
3. Documentation.
4. Application of appropriate electro therapeutic modes for relief of acute & chronic pain & swelling; wound healing, re-education etc with clinical reasoning.
5. Application of simple therapeutic modes for muscle strength / joint mobility.
6. Application of Advanced therapeutic modes of mobility like Mobilisation Techniques (Techniques covered in IIIrd B.P.Th.) (to be applied only on extremities), Friction Massage, Myofacial Release, Muscle Energy Techniques & Neuro Dynamic Techniques on patients. (non-thrust mobilization methods only).
7. Application of various taping methods for support & relief of pain.

8. Posture Correction & Gait Training.
9. Prescription of appropriate orthotic & prosthetic devices & fabrication of simple temporary splints.
10. Application of appropriate Therapeutic exercise using therapeutic gymnastic tool as and when necessary, for the relief of pain, structural stability, strength/endurance: & Functional restoration including gait training/ maintenance of functions & / or for the preventive measures.
11. Appropriate Home Program & Ergonomic advise for preventive measures & Functional efficiency at home & work place, Advice to Parents & Care Givers.

Physiotherapy management for the following conditions:

1. Manifestations of trauma & diseases of the bones & soft tissues of the musculo skeletal tissue.
2. Fractures of the spine, extremities – classification/ management & complications.
3. Metabolic & hormonal disorders of the bone tissue – Osteoporosis.
4. Peripheral nerve injuries, management/ complications – V.I.C.
5. Deformities of the spine, extremities – congenital malformation – Spina Bifida, meningocele / meningomyelocele, CTEV (Foot Deformities) CDH
6. Re- constructive surgeries in Polio & cerebral palsy.
7. Inflammatory/ Infectious disease of the bone & joints T.B. / Osteomyelities.
8. Tumours of the bone.
9. Degenerative / Rheumatoid arthritis.
10. Soft tissue injuries/common soft tissue injuries encountered during sports/ Over – use.
11. Amputation – classification – prosthetic management.
12. Hand injury – management.

CLINICAL

Evaluation & treatment planning: its presentation & documentation of Minimum two cases each in – 1) # upper Limb (Including hand injury), 2) # lower limb, 3) Soft tissue lesion (any), 4) # spine with/without Neurological condition 5) degenerative arthritis of skeletal joint 6) muskulo – skeletal condition of Hand & foot.

TEXT BOOKS

- 1) Cash's Textbook of Orthopedics & Rheumatology for Physio Therapists- Jaypee
- 2) Manual mobilization of extremity joints – by Freddy Kaltenborn, Maitland
- 3) Therapeutic exercise – by Kolby & Kisner
- 4) Therapeutic exercise – by O' Sullivan
- 5) Taping Techniques – by Rose Mac Donald

REFERENCE BOOK

- 1) Orthopedic Physical therapy – by Donatelli
- 2) Manual Therapy – by Maitland
- 3) Neural tissue mobilization – Butler

Scheme of Examination (Practical Examination) Total 80 Marks

1. Long Case : based on the History 10 marks, Evaluation 10 marks, Treatment Plan on Patient 20 marks (Total : 40 marks)
2. Short Case : Simulated (20 Marks)
3. Five spots : spots based on, X – ray(limb, spine), Orthosis, Prosthesis, Metal implants etc 3 minutes each spot and 3 marks per spot (3x5 = 15 Marks)
4. Journal (5 Marks)

PHYSIOTHERAPY IN NEUROSCIENCES

(TOTAL 210 hrs)

(ADULT / PAEDIATRIC / PSYCHO – SOMATIC & PSYCHIATRIC CONDITIONS)

Theory – 70 hrs + *Clinical – 140 hrs (including – Pediatric – Theory – 10hrs+
*Clinical 20 hrs)

Objectives: At the end of the course, the candidate will –

- 1) Acquire the knowledge of normal neurodevelopment, with specific reference to locomotion
- 2) be able to assess, identify & analyze neuro-motor & psychosomatic dysfunction in terms of alteration in the muscle tone, power, coordination, involuntary movements sensations/perception etc, E.M.G. / N.C. Studies & arrive at functional diagnosis with clinical reasoning.
- 3) Acquire the skill of application of P.N.F. technique on patients.
- 4) Be able to plan, prescribe & execute short term & long term treatment, with special reference to relief of Neuropathic & psycho-somatic pain, mat exercises, functional re-education, gait training, postural & functional training for A.D.L., ergonomic advise, & parents education in neuro- pediatric care.
- 5) Be able to prescribe appropriate Orthosis / splints & will be able to fabricate temporary protective & functional splints.

Syllabus:

Following topics are applicable to all the Neurological conditions (Adult & Pediatric) included in the various clinical subjects of Medical Sciences taught in Illrd B.P.Th course.

- 1) Understanding principles of theories of motor control & motor learning.
- 2) Assessment of development, Tone, Co-ordination, Psycho-somatic & Locomotor function.
- 3) Functional Diagnosis of neuromuscular dysfunction & assessment of Neuropathic pain.
- 4) Understanding sensory system & organization of sensory strategies for efficient motor output.
- 5) Skill of sensory-motor learning & neuro-mumcular skeletal training.
- 6) Understanding principles of Application of neuro therapeutic skills like PNF, NDT, Carr & Shepherd. Brunnstorm & Rood's
- 7) Planning short term & Long term goals for all the topics

- 8) Treatment Programme includes
- a) Application of appropriate Electro-therapeutic modes for relief of pain & functional re-education with clinical reasoning.
 - b) Application of skills as P.N.F., Co-ordination & balancing exercise by using techniques based on neuro physiological principles.
 - c) Tools used for neuro rehabilitation like vestibular balls, tilt board etc.
 - d) Application of transfer & functional re-education exercise, postural exercise & gait training.
 - e) Bladder training.
 - f) Developing a philosophy for caring.
 - g) Prescription for appropriate orthotic devices & fabrication of temporary splints.
 - h) lifting techniques, wheel chair modifications, adaptive devices
 - i) Ergonomic advice for prevention / rehabilitation & parents / care givers education about handling of a patient.

Physiotherapy management for the following conditions:

- 1) Hemiplegia, disorders of cerebral circulation & space occupying lesions such as cortical, thalamic & Brain-stem lesions
- 2) Cranial nerves-emphasis on & 7th & 8th nerves.
- 3) C.P.
- 4) Subdural haematoma & birth injuries, hydrocephalus
- 5) Disease of meninges,
- 6) Neuro-syphilis, Tabes dorsalis, H.I.V. infection
- 7) Viral infection of nervous system-encephalitis Herpes, poliomyelitis, viral meningitis.
- 8) Demyelinating diseases of the nervous System-Multiple sclerosis
- 9) Lesions of Extra-pyramidal system & Basal ganglia, Parkinsonism, spasmodic torticollis, Athetosis, Chorea, Dystonia.
- 10) Congenital & Degenerative disorders, M.N.D. Hereditary Ataxia, Peroneal muscle atrophy S.M.A.
- 11) Disorders of spinal cord-paraplegia, syringomyelia, Transverse myelitis spinal Dysraphism.
- 12) Deficiency disorders-Sub-acute combined degeneration of spinal cord.
- 13) Disorders of peripheral nerves, tumors traumatic, infective & metabolic lesions of nerves.

14) Disorders of voluntary muscles-Dystrophies & Neuro—muscular junction disorders.

15) Disorders of Autonomic nervous system

16) Psycho-somatic Pain & Paralysis.

CLINICAL

Evaluation & Treatment planning, it's presentation & documentation of minimum two case each in 1) U.M.N. lesion, 2) L.M.N. lesion, 3) Pediatric neuro case

TEXT BOOKS

- 1) Cash's Text book for physio Therapist in Neurological disorders-Jaypee bros.
- 2) Proprioceptive Neuro muscular Faciliation – by Herman Kabat
- 3) Practical Physical Therapy – Margaret Hollis
- 4) Therapeutic exercise – by O'Sullivan
- 5) "Right in the middle" – by Patricia Davis
- 6) Stroke rehabilitation – by Margaret Johnson

REFERENCE BOOK

1. Therapeutic exercise – by Basmajjian – 5th edn.
2. Physical Rehabilitation – by Krusen
3. Brain's disorders of Nervous system

Scheme of Examination (Practical Examination) Total 80 Marks

1. Long case : Based on the History 10 marks, Evaluation 10 marks, Treatment plan on Patients 20 marks Total (40 marks)
2. Short case : simulated case (20 marks)
3. Five spots : Spots based on EMG/NC Studies / Orthosis & nuro assessment scale etc 3 minute & 3 marks each (3x5 = 15 marks)
4. Journal (5 marks)

PHYSIOTHERAPY IN CARDIO-VASCULAR & RESPIRATORY SCIENCES

(INCLUDING GENERAL MEDICAL & SURGICAL CONDITIONS) (Total-200 hrs)

(Theory – 60 hrs & Clinical 140 hrs)

Objectives: At the end of at the course, the candidate will:

- 1) Identify, discuss & analyze cardio-vascular & pulmonary dysfunction, based on patho-physiological principles, & arrive at the appropriate functional diagnosis.
- 2) Acquire knowledge of rationale of basic investigative approaches in the medical system & surgical intervention regimes related to cardio-vascular & pulmonary impairment.
- 3) Acquire the skill of evaluation & interpretation of functional capacity, using simple exercise tolerance tests, such as 6 minutes walk test, symptom limited test.
- 4) Be able to select strategies for cure care & prevention; adopt restorative & rehabilitative measures for maximum possible functional independence of a patient at home, work place & in community.
- 5) Be able to execute the effective Physio Therapeutic measures (with appropriate clinical reasoning) with special emphases to Breathing retraining, nebulization humidification, bronchial hygiene, General Mobilisation & Exercise conditioning.
- 6) Acquire Knowledge of the overview of patients care at the Intensive care area, artificial ventilation suctioning, positioning for bronchial hygiene & continuous monitoring of the patient at the Intensive care area.
- 7) Acquire the skill of basic Cardio-pulmonary resuscitation.
- 8) Be able to execute the effective physiotherapeutic measures with appropriate clinical reasoning to improve general surgical and medical condition.

Syllabus:

The following topics are applicable to all the adult & pediatric conditions related to Cardio-respiratory conditions & Peripheral vascular diseases included in the Clinical subjects of Illrd B.P.Th. program.

- 1) Assessment of Respiratory & haemo-dynamics, by means of assessment of breath sounds, interpretation of dysfunction by, spirometry / Exercise tolerance test / assessment of thoracic mobility & breathing pattern.
- 2) Interpretation of radiological & Biochemical investigations & co-relate the same with clinical findings.

- 3) Functional diagnosis of cardio-respiratory dysfunction & associated Movement dysfunction.
- 4) Planning short / long terms goals with clinical reasoning – documentation of the conditions given.
- 5) Application of appropriate skills for breathing re-training & bronchial Hygiene, as preventive (used specifically in preoperative care), restorative & rehabilitative measures.
- 6) Prescription of appropriate therapeutic exercise program for conditioning.
- 7) Prescription of home program & ergonomic advice/parents education in case of Pediatric cases with reference to energy cost.
- 8) Importance of life style modification in prevention of IHD.
- 9) Use, application of electro therapeutic modalities for relief of pain, swelling and wound healing.
- 10) Cardio respiratory changes associated with ageing and fitness Programme.
- 11) Familiarization with concept of quality of life.

Physiotherapy management for the following conditions:

- 1) Cardiac disorders (Congenital, Acquired, Rheumatic, Rhythm Disturbances IHD, Post Cardio-thoracic surgeries)
- 2) Pulmonary disorders (Obstructive, Restrictive, Occupational & Pediatric, pulmonary infective.) Precautions with HIV.
- 3) Peripheral Vascular Diseases.
- 4) Diabetes (Wound, Ulcer, Glycemic control with exercise)
- 5) Obesity
- 6) Amputation
- 7) Burns
- 8) General Surgery (Mastectomy & Abdominal surgery)
- 9) Intensive care unit suctioning, measures to improve Bronchial Hygiene, Positioning for Bronchial Hygiene, Continuous monitoring of the patient, general mobilization.

CLINICAL

- 1) Skill to palpate all pulses, rhythm, rate, volume & Heart rate / pulse rate discrepancy.
- 2) Skill to assess B.P. at various sites, & its Physiological variation, & to assess Ankle Brachial Index.
- 3) Skill of exercise testing a) 6/12 min walk, b) symptom limited.

4) Interpretation of

- a) Treadmill & Ergo-cycle test findings.
- b) ECG, I.H.D. & Blocks,
- c) Biochemical analysis-serum enzymes, C.P.K. Levels, L.D.H., S.G.O.T., S.G.P.T., TropominT, Lipid profile, electrolyte balance.
- d) Chest x-ray
- e) P.F.T. obstructive/restrictive/reversibility
- f) A.B.G.
- g) R.P.E. Borge's scale
- h) Quality of life questionnaires

5) Evaluation & treatment planning, presentation & documentation of ONE Case

Each in :

- a) Medical Respiratory condition
- b) Pediatric respiratory condition
- c) Thoracic Surgical condition
- d) Cardiac Medical condition
- e) Cardiac Surgical condition
- f) Peripheral vascular disorders
- g) Abdominal surgical condition
- h) Mastectomy / Amputation

TEXT BOOKS

- 1) Cash's Textbook for Physiotherapists in Chest, Heart & Vascular diseases
- 2) Cash's text book in General Medicine & Surgical conditions for Physiotherapists
- 3) Chest Physical therapy & pulmonary rehabilitation by Donna Frownfilter
- 4) Brompton's hospital guide

REFERENCE BOOK

Physiotherapy in Cardio – Vascular rehabilitation – Webber
Exercise & the Heart – Wenger
ECG – by P.J. Mehta
Cardiopulmonary Physical Therapy by Irwin Scott

Scheme of Examination (Practical Examination) Total 80 marks

1. Long case – based on the History 10 marks, Evaluation 10 marks, Treatment Plan on patient 20 marks (Total 40 Marks)
2. Short case – simulated (20 Marks)
3. Five spots – Spots based on ABG/X-ray/ ECG/PFT/RPE/Bruces, protocol etc 3 minutes each spot (3x5 = 15 Marks)
4. Journal (5 Marks)

PHYSIOTHERAPY IN COMMUNITY HEALTH SCIENCES

(210 hrs)

HEALTH PROMOTION & CBR -----	didactic – 20 hrs-----	clinical ----	25hrs
WOMEN'S HEALTH -----	didactic – 20 hrs-----	clinical ----	25hrs
GERIATRICS HEALTH-----	didactic – 20 hrs-----	clinical ----	25hrs
INDUSTRIAL HEALTH {ERGONOMICS} ----	didactic -10 hrs -----	clinical ----	25hrs
PROJECT -----			40 hrs

Objectives:

At the end of the course the candidate will:

A. Be able to describe:

- i. The general concepts about health, disease and physical fitness.
- ii. Physiology of aging process and its influence on physical fitness.
- iii. National policies for the rehabilitation of disabled – role of PT.
- iv. The strategies to access prevalence and incidence of various conditions responsible for increasing morbidity in the specific community – role of PT in improving morbidity, expected clinical and functional recovery, reasons for non-compliance in specific community environment solution for the same.
- v. The evaluation of disability and planning for prevention and rehabilitation.
- vi. CBR in urban and rural set up.

B. Be able to identify with clinical reasoning the prevailing contextual {e.g. environmental and psycho-social cultural} factors, causing high risk responsible for various dysfunctions and morbidity related to sedentary life style and specific community like women, children, aged as well as industrial workers and describe planning strategies of interventional policies to combat such problems.

C. Be able to conduct as small project {cross sectional study / survey} to access to the prevalence of specific physical health problem and / or morbidity in specific community – which may be based at the institutional level or in field.

SYLLABUS:

- 1] - W.H.O definition of health and disease.
- 2] - Health delivery system – 3 tier.
- 3] - Physical fitness definition and evaluation.
 - i. Effect of growth.
 - ii. Physical fitness in women-pregnancy, menopause.
 - iii. Physiology of aging – neuromuskuloskeletal, CVS, metabolic and degenerative.
 - iv. Physiological effects of aerobic exercise – clinical reasoning for advocating aerobic exercise as preventive measure in obesity & its related conditions / in cardio-respiratory conditions / Aging/de-conditioning effect after prolonged bed rest / Diabetes.
- 4] – Women’s Health – Women in India, Social issue having impact on physical Function, Legal rights and benefits.
Anatomical & Physiological variations associated with pregnancy & menopause. Antenatal, post natal care, advice on labor positions, pain relief, - Urogenital dysfunction, prolapse, incontinence and therapeutic interventions.
- 5] – Geriatrics – Senior citizens in India, NGOS, Legal rights, benefits. Institutionalized & Community dwelling elders. Physiology of ageing. Ms & neuro / Cardio respiratory, metabolic, scheme of evaluation & role of PT in Geriatrics.
 - i)Definition of International classification of functioning.
 - ii)Disability- evaluation, types, prevention.
 - iii)Rehabilitation- definition, types { institutional, reach out and CBR}
 - iv)Team work of medical practitioner, PT/OT, AST, P&O, Clinical psychologist, and vocational counselors and social workers.
CBR – Role of PT.
National policies for rehabilitation of disabled – Role of PT.
 - v)CBR strategies in
 - A. Urban are e.g. i. UHC, community centre, clubs, mahila mandals, Social centers. li. Schools, industries, sports centers.
 - B. Rural area- by using PHC / rural hospital, district hospital / in infrastructure.

6] – Industrial health:

I. Ability Management –

Job analysis:- Job description, Job demand Analysis, Task Analysis, Ergonomics Evaluation, Injury Prevention, Employee Fitness Programme.

Disability Management:- Acute care, Concept of Functional Capacity Assessment, Work Conditioning, Work Hardening.

II. Environmental stress in the industrial area – accidents due to

A. Physical agents e.g. heat/cold, light, noise, vibration, UV radiation, ionizing radiation.

B. Chemical agents- inhalation, local action and ingestion.

C. Mechanical hazards-overuse/fatigue injuries due to ergonomic alternation and ergonomic evaluation of work place.

Mechanical stresses per hierarchy-

i. Sedentary table work-executive's clerk.

ii. Inappropriate seating arrangement-vehicle drivers.

iii. Constant standing- watchman, defense forces, surgeons.

iv. Over execution in laborers-stress management.

D. Psychological hazards e.g. monotonicity and dissatisfaction in job, anxiety of work completion with quality, Role of PT. in industrial set up and stress management relaxation modes.

Clinical posting / Visits to UHC, PHC.

Project- Survey in any one community in one of the above posting.

Text Books

- 1) Physiotherapy in Gynaecological & Obstetrical conditions – by Poldon – Jaypee
- 2) Astrand P A Rodahe K-Text book of Work Physiology
- 3) Therapeutic Exercise – By Kisner
- 4) Text book of Community Medicine & Community Health – by Bhaskar Rao
- 5) Geriatrics Physiotherapy – By Andrew Guccione
- 6) Industrial Therapy – by Glenda Key

Reference Books

- 1) Mural K F –Ergonomics: Man in his working environment
- 2) Exercise Physiology-by Mc'Ardle
- 3) Musculoskeletal Disorders in work place: Principle & Practice-by Nordin
Andersons Pope
- 4) Indian Social Problem Vol 2 –by G R Madan
- 5) Disability 2000-RCI
- 6) Legal Rights of disabled in India-by Gautam Bannerjee
- 7) ICF –WHO Health Organisation 2001 publication
- 8) Preventive & Social Medicine –by Park
- 9) Training in the Community for the people with disability –by Hallender Padmini
Mendes
- 10) Disabled Village Children-by David Werner
- 11) Chorin C& M Desai, C Gonsalves, 1999, Women & the Law, Vol. I & II Socio -
legal Information Centre Mumbai

SCHEME OF EXAMINATION (PRACTICAL EXAMINATION) TOTAL 80 MARKS

- 1) Long Case –Women's Health /Geriatric/Industrial Health /Health Promotion (Marks 40)
- 2) Short Case –simulated based on community health problem (Marks 20)
- 3) Project Presentation and Viva (Marks 15)
- 4) Journal (Marks 5)

PRINCIPLES OF BIOENGINEERING--[30 hrs]

[Didactic 20 hrs + Practical /Laboratory-10 hrs]

Objectives at the end of the course , the candidate shall

- 1] acquire knowledge about biomechanical principles, of application of variety of aids & appliances used for ambulation, protection & prevention
- 2] acquire in brief knowledge about various material used for splints/Orthosis & prostheses--selection criteria
- 3] acquire the skill of fabrication of simple splints made out of low cost material

Syllabus

- 1] Classification of Aids & appliances-
- 2] Biomechanical principles in designing of appliances & assessment
Procedures for static & dynamic alignment of the following—Aids & appliances /Splints /Orthosis -for spine-upper & lower limb Prosthesis- for Lower limbs , Upper limbs,
- 3] Project-Temporary splints –to fabricate ONE splint each - [to use P.O.P, aluminum strips /sheets /wires rubber bands, rexin, Orfit etc] –
 - i]-cock up [dorsal/volar,
 - ii]-outrigger,
 - iii]-Opponence splint
 - iv]-Anterior and posterior guard splints for gait training,
 - v]- Foot drop splint
 - vi]-Facial splint
 - vii] Mallet Finger Splint,
 - ix]-C bar for 1st web space of hand

SCHEME OF EXAMINATION-[COLLEGE EXAMINATION]**

** THEORY-20 MCQs =20 MARKS + PROJECT-30 MARKS =50 MARKS

PROFESSIONAL ISSUES / ADMINISTRATION / MANAGEMENT & MARKETING [40hrs]

SECTION-I-PROFESSIONAL ISSUES [INCLUDING ETHICS] -----20 HRS

Objectives:

This course is aimed to enable the candidate to acquire the knowledge of ethical code of professional practice, as well as its moral & legal aspects; & role of W.H.O. & W.C.P.T.

Contents:

- 1] Concepts of morality, Ethics & Legality-rules of professional conduct & their Medico- legal & moral implications-The need of Council Act for Physio therapy
- 2] Constitution & Functions of the Indian association of Physical therapy-
- 3] Functioning of the World Confederation of Physical therapy[W.C.P.T.] & its various branches-Special Interest groups [brief]
- 4] Role of W.H.O. & WCPT

SECTION-II-ADMINISTRATION / MANAGEMENT & MARKETING

Objectives –At the end of the course the student will acquire the knowledge of the basics in Managerial & Management skills, & use of Information technology in professional Practice contents-

- 1] Management studies related to –local health care organization management & structure,-planning delivery with quality assurance & funding of service delivery -information technology -Time management -career development in Physiotherapy
- 2] Administration-principles-based on the Goal & functions -at large hospital set up / domiciliary services/ private clinic /academic
- 3] Methods of maintaining records-
- 4] Budget-planning -
- 5] Performance analysis--physical structure / reporting system [man power / status /functions / quantity & quality of services/turn over-cost benefit-revenue contribution

SCHEME OF EXAMINATION-[COLLEGE EXAMINATION] TIME-2 HRS**

THEORY -SECTION I-25 MARKS + SECTION-II-25 MARKS =50 MARKS

SCHEME OF EXAMINATION (Theory)

All the following subjects shall follow the same patterns of examination

- 1] Physiotherapy in Musculoskeletal Sciences
- 2] Physiotherapy in Neurosciences
- 3] Physiotherapy in Cardio-Vascular & Respiratory Sciences
- 4] Physiotherapy in Community Health Sciences

THEORY-80 MRKS;	I.A.-20 MARKS;	TOTAL100MARKS
CLINICAL-80 MARKS;	I.A -20 MARKS	TOTAL-100MARKS

1]-THEORY-Pattern of Paper setting-----80 marks

Section-A- -M.C.Q Q-1].-[20 X 1] Single best answer -----20 marks

Section-B--S.AQ. - Q-2]-To answer any FIVE out of Six—[5 x 3] -----15 marks

- Q-3]-To answer any THREE out of Four-[3 x5] -----15 marks

Section -C- L.AQ-. Q-4] -----15 marks

Q-5] -----15marks

OR

Q-6] -----15 marks

#- In the subject “Physiotherapy in Cardio-Vascular & Respiratory Sciences”-

L.A.Q - Q-4 in THEORY paper should be based on “P.T. in Cardiovascular OR Pulmonary condition”

2] CLINICAL – Pattern given after each subject

INTERNAL ASSESSMENT

THEORY ----- 20 marks

CLINICAL -----20 marks

THEORY

All the following subjects shall follow the same patterns of examination

- 1] Physiotherapy in Musculoskeletal Sciences
- 2] Physiotherapy in Neurosciences
- 3] Physiotherapy in Cardio-Vascular & Respiratory Sciences
- 4] Physiotherapy in Community Health Sciences

One terminal & one preliminary examination of 80 marks each

[Section A (20 marks), Section B (30 marks), Section C (30 marks)]

Based on pattern of University Examination

160 marks to be converted into 20 & send to University

CLINICAL/ PRACTICAL – Internal Assessment

One terminal & one preliminary examination of 80 marks each

Based on pattern of University Examination

160 marks to be converted into 20 & send to University

Journal marks are in the *treatment plan* section of long case

1] Physiotherapy in Musculoskeletal Sciences

2] Physiotherapy in Neurosciences

3] Physiotherapy in Cardio-Vascular & Respiratory Sciences

1. Long case – based on the History 10 marks, Evaluation 10 marks,

Treatment Plan on patient 25 marks

(Total 45

Marks)

2. Short case – simulated

(20 Marks)

3. Spots –

(3x5 = 15 Marks)

4] Physiotherapy in Community Health Sciences

1) Long Case –Women’s Health /Geriatric/Industrial Health /Health Promotion (Marks 40)

2) Short Case –simulated based on community health problem (Marks 20)

3) Project Presentation / Viva / Short case (Marks 20)

Internal assessment marks should be calculated out of 20 marks in theory and 20 marks in clinical/ practical

SCHEME OF EXAMINATION – IVth B.P.TH

Subject	Theory	IA	Total	Clinical	IA	Total	College
Physiotherapy in Musculoskeletal Sciences	80	20	100	80	20	100	-----
Physiotherapy in Neurosciences	80	20	100	80	20	100	
Physiotherapy in Cardio-vascular & Respiratory Sciences	80	20	100	80	20	100	-----
Physiotherapy in Community Health Sciences	80	20	100	80	20	100	
	Grade				Grade		College exam
Principals of Bioengineering							
Professional Issues							
Section A							
Administration & Management							
Section B							

#GRADE A+:75% % & above, A:66<75% B+;:55-<66%, B:50%, C:<50% {FFF}

INTERNSHIP -----(26 WEEKS)

1014 hrs

Placement	Indoor	Outdoor	Total Hrs.
1]- Musculo-Skeletal [Surgical/Medical] --- 6 weeks			
Traumatology / Rheumatology & cold cases -----	78hrs	78hrs	} 234
Burns & Plastic Surgery -----	39hrs	39hrs	
2]-Neuro-Sciences-[Surgical/Medical/Psycho-somatic]			
----- 6 weeks			
a] – Adult -----	39hrs	78hrs	} 234
b] – Paediatric-----	39hrs	39hrs	
C]- psychiatry/psycho-somatic-----		39hrs	
3]-Cardio-Respiratory-[Surgical/Medical]---6 weeks			
a)-Surgical/Medical-----	39hrs	39hrs	} 234
b)-Intensive Care(Surgical/Medical/Trauma)-----	39hrs	39hrs	
c)-Obstetrics & Gynecology-----	39hrs	39hrs	
# Residency- recommended-----	39hrs		} 273
4]-Community/physiotherapy & Rehab----6 weeks	78hrs	78hrs	
5]-Project------(20 Cases)-----2 weeks	39hrs	78hrs	

[Includes Project on evidence based investigation measures or Clinical trials/
Prospective case studies having sample size of minimum 20 Subjects.]

EVALUTION OF THE INTERNSHIP

1] ATTITUDE- The student shall put up not less than 90% attendance during EACH assignment. Student's performance shall be graded by the respective clinic section In-charge at the end of each assignment. The candidates shall Repeat the particular assignment if the performance is found unsatisfactory [Grade-C or D]

2] PROJECT- submitted by the candidate will be dully verified & a viva shall be conducted on the same at the end of the Internship& a grade shall be granted. Internship Completion certificate shall be issued to the candidate ONLY after the satisfactory performance in project Viva as well as in the "Attitude" during EACH clinical assignment.