DEBRA THANA SAHID KSHUDIRAM SMRITI MAHAVIDYALAYA

Re-accredited by NAAC with grade 'A' (2nd cycle) Debra, Paschim Medinipur, West Bengal, India, 721124



Course: Advanced Certificate in Physiotherapy (ACPT)

Duration: 1 Year

Eligibility: Higher Secondary

Total No. of Seats: 30

About the Course

Physiotherapy is one of the Allied healthcare courses of Medical Sciences. Advanced Certificate in Physiotherapy is a one-year course that includes clinical posting in different clinical establishments. As an Allied Health care course, the syllabus is designed to assist the students in gaining proper foundation knowledge and practical skills to serve the required functions of a Physiotherapist.

Course Particulars: -

1. Name of the Course: Advance Certificate Course in Physiotherapy (ACPT)

2. Course Code: ACP

3. Course Duration: 1 year (including clinical training in Hospitals and other

tie-up clinics)

4. Entry qualification: Passed 12th class Exam. Under (10+2) system of

Education with Science stream.

5. Total no. of seats: 30 (Thirty)

6. Course Fees: Course Fees Rs. 4500/ per semester,

Internship Fees Rs. 500/

Subjects:

1. Biological Science- 60 Hrs.

Anatomy - 40 Hrs. (T-30 Hrs.+P-10 Hrs.) Physiology - 15 Hrs. (T-15 Hrs.+P-5 Hrs.)

2. Physiotherapeutic Subjects- 40 Hrs.

Electrotherapy - 20 Hrs. (T-15 Hrs.+P-5 Hrs.) Exercise therapy - 20 Hrs. (T-15 Hrs.+P-5 Hrs.)

3. Physiotherapeutic management on disease condition-65 Hrs.

Orthopedic condition & their management - 20 Hrs.

Neurological condition and their management - 20 Hrs.

Practical Class - 25 Hrs.

4. First Aid & Nursing Procedure - 5 Hrs.

SYLLABUS FOR THE ADVANCE CERTIFICATE COURSE IN PHYSIOTHERAPY (ACPT)

Anatomy

Week no.	Theory	Practical	Duration (hours)
	Anatomy: Introduction 1. Anatomy/Physiology a) Definition & subdivisions of anatomy. b) Anatomical & fundamental position. c) Anatomical regions, sections & planes. d) Descriptive Anatomical terms.	Demonstration & Practical exposure	5
	 2. Osteology a) Basic terminologies b) About the skeleton c) Brief descriptions of Bone and cartilage (structure, types, functions, etc.) d) Identification, structural details of bones of the skull, Thorax, Vertebral column, Upper and lower extremities 	Demonstration & Practical exposure	10
	 3. Human joints a) Definition & classifications of joints b) The terms related to the movements of joints c) Description of joints of the upper & lower extremities with their ligaments 	Demonstration & Practical exposure	10
	 4. Nervous System a) Knowledge of the Central Nervous System & its pathology. b) Description of Spinal nerves c) Nerve plexus of the body with their distributions (cervical plexus, brachial plexus, limbo-sacral plexus) 	Demonstration & Practical exposure	8
	5. Myology a) Classifications & structure of Muscles	Demonstration & Practical exposure	7

b) Description of all major muscles with their origin, insertion, nerve supplies, blood supplies & actions.	
c) Muscles acting on joints of upper & lower extremities	
6. Radiological Anatomy - Demonstration of some normal and abnormal x-ray plates	
7. Applied Anatomy - Common clinical conditions of Axial and appendicular skeleton, various joint pathology.	

Physiology:

Week no.	Theory	Practical	Duration (hours)
	Nervous system a) About the Nervous tissue, Neuron (structure & function), Neuroglia (Definition) b) About the Nerve fiber - motor & sensory c) Divisions of the Nervous system	Demonstration & Practical exposure	
	d) Central Nervous System classification, structure & functions of the Brain and spinal cord (in brief) e) Peripheral Nervous system Nerves (names & functions) and spinal Nerves (introduction) f) Sensory System-pain	Nerve muscle physiology, measurement of B. P., Pulse and idea of reflexes and their examination	10
	2. Muscle Contraction		5
	3. Vital Sign		5

Physiotherapy Subjects:

Week no.	Theory	Practical	Duration (hours)
	Electrotherapy 1. Introduction	Demonstration and practical exposure.	
	a) Definition of Physiotherapy, Terms of Physiotherapy i.e., Electrotherapy, Exercise- therapy, Massage-therapy, Ergonomics, Rehabilitation. definition of electrotherapy, Safety precautions in Electrotherapy. Physical modalities, which are used in Physiotherapy.	Identification of different Tools, equipment.	20

2. Thermotherapy. Superficial Heating Agents a) Hot packs- Physiological effects, types of Hot Packs (hydrocollators, Kenny packs, hot water bag, electrical heating pads) with their techniques of application. Indications & Contraindications b) Wax bath - About the wax, Descriptions of a Wax bath Unit, Composition & method of preparation of wax bath, physiological effects, Techniques of application, Indications and contraindications. c) Infra-Red Radiation - About the Infra-red rays, Sources of Infra-red rays, technical data, Physiological effects, Techniques of application, Terminations of IRR, Indications Contraindications. Deep Heating Agents a) S.W.D- meanings of Short-wave & Diathermy, Effects of S.W.D. Technical data, Descriptions of an S.W.D. Instrument, Method of application, Positioning of Electrode pads during treatment, Dose and duration of treatment, indications, and contraindications. Electrical Stimulators a) Faradic - About the Faradic type of current, technical data. Description of a Faradic, Dose and duration of treatment, Indications & Contraindications. b) Galvanic - About the Galvanic type of current, technical data, Description of a Galvanic Stimulator, Physiological effects, Method of application (Sensory point or Determinations stimulation method, application method, etc.), application of continuous and interrupted Galvanic, Dose & duration of treatment, Indications & Contraindications.		
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a) S.W.D- meanings of Short-wave & Diathermy, Effects of S.W.D. Technical data, Descriptions of an S.W.D Instrument, Method of application, Positioning of Electrode pads during treatment, Dose and duration of treatment, indications, and contraindications. Electrical Stimulators a) Faradic - About the Faradic type of current, technical data. Description of a Faradic Stimulator & Electrodes, Physiological effects, Method of application (Motor point stimulation method, Nerve conduction, method, Unipolar & Bipolar Faradic Bath method, etc.), Application of continuous and surged Faradic, Dose and duration of treatment, Indications & Contraindications. b) Galvanic- About the Galvanic type of current, technical data, Description of a Galvanic Stimulator, Physiological effects, Method of application (Sensory point or Determinations stimulation method, application method, etc.), application of continuous and interrupted Galvanic, Dose & duration of treatment, Indications &		
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method, etc.), Placement of T.E.N.S electrodes, Application of continuous, surged & burst mode. Dose & Duration of treatment, Indications & contraindications.		
d) I.F.T- Interferential Therapy Introduction, Method of application, Indications & Contraindications.	Practical Demonstration of application on patients	
Clinical Decision Making in ElectrotherapyDifferential application of S.W.D, U.S.T, F.S, G.S, T.E.N.S, I.F.T, I.R.R, Wax	Practical Demonstration of application on patients	
B. Exercise Therapy	•	
a) Principle of Exercise therapy, Muscles for Exercise		
b) Fundamentals of Exercise		
1. Definition of Exercise		
2. Benefits of Exercise		
3. Physiological changes during Exercise.		
4. Classifications of Exerciseactive, passive, resistive, isometric, functional, stretching, strengthening, closed-chain, open-chain etc.	Practical Demonstration of application on patients	20
c) Applied Exercise Therapy		
1. Manual Muscle Testing		
2. Techniques of Stretching Exercise- Region of shoulder, elbow, wrist, trunk, hip, knee, ankle.		
3. Exercises for Muscles Strengthening – Region of shoulder, elbow, wrist, trunk, hip, knee, ankle		
4. Techniques of PNF.		
5. Techniques of Breathing exercises.		
6. Exercises for Coordination & Balance.		
7. Exercise with Instruments		
8. Exercise for increase ROM		
9. Goniometry		

