

# Course Outcomes-2<sup>nd</sup> B.P.Th

## PATHOLOGY

At the end of the course, the candidate will:

- a) Have sound knowledge of concepts of cell injury & changes produced by different tissues, organs and capacity of the body in healing process.
- b) Acquire the knowledge of general concepts of neoplasia with reference to the Etiology, gross & microscopic features, & diagnosis, in different tissues, & organs of the body.
- c) Acquire knowledge of common immunological disorders & their resultant effects on the human body.
- d) Recall the Etiology-pathogenesis, the pathological effects & the clinicopathological correlation of common infections & non-infectious diseases.
- e) Understand in brief, about the common Haematological disorders & investigations necessary to diagnose them.
- f) Correlate normal & altered morphology of different organ systems in different diseases needed for understanding disease process & their clinical significance

## MICROBIOLOGY

At the end of the course, the candidate will

a) Have sound knowledge of prevalent communicable diseases and the agents responsible for causing clinical infections, pertaining to C.N.S, C.V.S, Musculoskeletal system, Respiratory system, Genitourinary system, wound infections and of newer emerging pathogens

b) Know the importance and practices of best methods to prevent the development of infections in self and patients (universal safety precautions)

#### PHARMACOLOGY

At the end of the course, the candidate will be able to:

- a) Describe Pharmacological effects of commonly used drugs by patients referred for Physiotherapy; list their adverse reactions, precautions, contraindications, formulation & route of administration.
- b) Identify whether the pharmacological effect of the drug interferes with the Therapeutic response of Physiotherapy & vice versa
- c) Indicate the use of analgesics & anti-inflammatory agents with movement disorders with consideration of cost, efficiency, & safety for individual needs.
- d) Get the awareness of other essential & commonly used drugs by patients- The bases for their use & common as well as serious adverse reactions.

## PSYCHIATRY (INCLUDING PSYCHOLOGY)

At the end of the course, the candidate will be able to:

- a) Define the term Psychology & its importance in the Health delivery system, & will gain knowledge of Psychological maturation during human development & growth & alterations during aging process.
- b) Understand the importance of psychological status of the person in health & disease; environmental & emotional influence on the mind & personality.
- c) Have the knowledge and skills required for good interpersonal communication.
- d) Enumerate various Psychiatric disorders with special emphasis to movement / Pain & ADLs
- e) Acquire the knowledge in brief, about the pathological & etiological factors, signs / symptoms & management of various Psychiatric conditions. c. Understand the patient more empathetically.

## **KINESIOLOGY**

At the end of the course, the candidate will be able to

- a) Understand the principles of Biomechanics.
- b) Acquire the knowledge of kinetics and kinematics of Spine, Extremities, TemporoMandibular joint, Thoracic cage
- c) Acquire the knowledge of Musculo skeletal movements during normal Gait and Activities of Daily Living

## **KINESIOTHERAPY**

At the end of the course, the candidate will be able to

- a. Describe the Biophysical properties of connective tissue, & effect of mechanical loading, & factors which influence the muscle strength, & mobility of articular & periarticular soft tissues.
- b) Apply the biomechanical principles for the efficacy in the assessment methods for mobility, muscle strength
- c) Acquire the skill of subjective and objective assessment of individual & group muscle strength
- d) Acquire the skills of subjective and objective methods of muscle strengthening
- e) Describe the physiological effects, therapeutic uses, merits / demerits of various exercise modes including Hydrotherapy
- f) Demonstrate various therapeutic exercises on self, & acquire the skill of application on models with Home Programs
- g) Analyze normal Human Posture [static & dynamic].
- h) Acquire the skill of functional re-education techniques on models
- i) Acquire the skill of Balance and Coordination Exercises
- j) Acquire the skill of using various walking aids for Gait Training
- k) Acquire the skill of demonstrating breathing exercises and retraining on self and others
- 1) Acquire the skill of demonstrating Postural Drainage on models

## **ELECTROTHERAPY**

At the end of the course, the candidate will be able to:

- a) Acquire the knowledge about the physiology of pain, Pain pathways & Methods of pain modulation, selection of appropriate modality for Pain modulations.
- b) Describe the Physiological effects, Therapeutic uses, indication & contraindications of various Low/ Medium & High Frequency modes / Actinotherapy
- c) Describe the Physiological Effects & therapeutic uses of various therapeutic ions & topical pharmaco -therapeutic agents to be used for the application of iontophoresis & sono/ phonophoresis
- d) Acquire the skills of application of the Electro therapy modes on models, for the purpose of Assessment & Treatment.
- e) Acquire an ability to select the appropriate mode as per the tissue specific & area specific application.