

Course Title: Neuro Physiology Techniques-I and Clinical Practice

Study Hours:	60+160	Marks	
Paper :	1	Theory:	120
Trem :	3 rd	Practical:	30
		Time:	3Hrs

Course contents
(THEORY+PRACTICAL)

STUDY HOURS

30+60

A. REVIEW OF NEUROANATOMY

- A1 History of neuron
- A2 Surface anatomy of skull (excluding foremen)
- A3 Meninges
- A4 Surface anatomy of brain especially motor & sensory cortex as well as brain stem
- A5 Gross anatomy of cerebellum
- A6 Blood supply of the brain
- A7 Enumerate different cranial nerves & their function
- A8 Vertebral column, No. of cervical, thoracic, lumbar sacral & coccygeal bones & identify them.
- A9 No. of spinal nerves
- A10 Brachial & lumbar plexus. Main nerves arising from them & the point of stimulation in respect to NCS.
- A11 Surface anatomy of relevant muscles to be stimulated in EMG.
- A12 CSF (physiological anatomy & pathophysiology)

B. REVIEW OF NEURO-PHYSIOLOGY

20+40

- B1. Action potential and its propagation
- B2. What is synapse
- B3. Neuro muscular junction & impulse propagation across it
- B4. Important neurotransmitter's
- B5. Functions of cerebellum
- B6. Dominant & non-dominant hemisphere & their function
- B7. Spinal reflexes are

C. PHARMACOLOGY

10+20

- C1. Anti epileptic
- C2. Anti migraine
- C3. Anti platelets
- C4. Different groups of anti hypertensive drugs
- C5. Analgesics
- C6. Sedative

RECOMMENDED BOOKS:

- 1 Current Diagnosis in Neurology by Feldman
- 2 Neuro Anatomy by Snall
- 3 Pharmacology by Shamim
- 4 EEG Technology by J.C Shaw, printed by Butter Warth Group London.
- 5 Clinical Approach to Nervous System Methods and Common Disorders

REFERENCE BOOKS:

1. Principles of Neurology by Maurice Victor and Allan H. Ropper
2. Nerve Injuries; Operative Results for Major Nerve Injuries Entrapments and Tumors by Kline Hudson

Course Title: Neuro Physiology Techniques-II and Clinical Practice

Study Hours:	60+160	Marks	
Paper :	2	Theory:	120
Trem :	3 rd	Practical:	30
		Time:	3Hrs

Course contents
(THEORY+PRACTICAL)

STUDY HOURS

A.EEG IN DIFFERENT DISEASE STATES

60+160

(Brief Introduction and role of EEG in the following diseases)

- A1 Epilepsy
- A2 Meningitis
- A3 Encephalitis
- A4 Brain abscess
- A5 Intracranial tumors
- A6 Metabolic & toxic disorders
- A7 Head injury
- A8 Cerebrovascular diseases
- A9 Dementia

A10 Coma of various causes

A.PRACTICAL ON THE ABOVE DISEASES

- A1 Basic knowledge about equipment
- A2 Use of equipment under supervision
- A3 Maintenance of equipment under supervision
- A4 Disinfections of equipment
- A5 Safety and precaution
- A6 Preparation of patients
- A7 Observation and assistance
- A8 Scrubbing technique
- A9 Introduction to sterilization
- A10 Investigation
- A11 Assessment
- A12 N/G tube application & intake/out put record
- A13 Catheterization / De Catheterization

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