

## **CURRICULUM**

### **2<sup>ND</sup> SEMESTER OF DIPLOMA COURSE NEUROPHYSIOLOGY**

#### **ANATOMY**

- 1. History of neuron**
- 2. Surface anatomy of skull (excluding foremen)**
- 3. Meningies**
- 4. Surface anatomy of brain especially motor & sensory ortex as well as brain stem.**
- 5. Gross anatomy of cerebellum**
- 6. Blood supply of the brain**
- 7. Enumerate different cranial nervous & their function**
- 8. Vertebral column\_ No. of cervical thoracic, lumbar sacral & coccgel bones & identify them**
- 9. No. of spinal nerves**
- 10. Brachial & lumbar plexus. Main nerves arising from them & the point of stimulation in respect to NCS**
- 11. Surface Anatomy of relevant muscles to be stimulated in EMG.**

#### **PHYSIOLOGY**

- 1. Action potential and its propagation**
- 2. What is synapse.**
- 3. Neuro muscular junction & impulse propagation across it**
- 4. Important neurotransmitter's**
- 5. Functions of cerebellum**
- 6. Dominant & non dominant cerebral hemisphere across**
- 7. Spinal reflexes are**

#### **Pharmacology**

- 1. Anti Epileptic**
- 2. Anti Migraine**
- 3. Anti pletelets**
- 4. Different groups of Anti hypertensive drugs.**

## **CURRICULUM**

### **3<sup>RD</sup> SEMESTER OF DIPLOMA COURSE NEUROPHYSIOLOGY**

#### **PAPER: A**

##### **ELECTRONICS**

- **AC & DC Voltage** *Definition*
- **Current** *Definition*
- **Resistance** *Definition*
- **Capacitance** *Definition*
- **Impedence** *Definiion*

##### **INSTRUMENTATION**

- ***Different types of electrodes and their significance in EGG***
- ***Amplifiers and its use in EEG***
- ***Filters and iots significance in the neurophysiology studies***
- ***What stimulating procedures are used in doing EEG.***
- ***What is the significance of electrode gel.***

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#### **PAPER: B**

##### **RECORDING PRACTICE OF EEG**

- a) Measurement for the placement of electrode (10-20 international System)*
- b) Montages (bipolar, referential montages)*
- c) Sources of artifacts & methods of elimination*
- d) Saving of recording*

##### **RECORDING PRACTICE EMG/ NCS**

- a) Standard for electrode placement*
- b) Recording technique and parameter*
- c) Recording and elimination of artifacts*

##### **RECORDING PRACTICE OF EVOKE POTENTIAL**

- a) Standard electrode placement*
- b) Recognition and elimination of artifacts*