B.Sc. NEURO ELECTRO PHYSIOLOGY THIRD YEAR

PAPER II – POLYSOMNOGRAPHY, TRANSCRANIAL MAGNETIC STIMULATION, AUTONOMIC LAB, INTRAOPERATIVE MONITORING

Q.P. Code: 802522

Time: Three Hours Maximum: 100 Marks

Answer All questions

I. Elaborate on: $(3 \times 10 = 30)$

1. Describe the organisation of normal sleep.

- 2. Intraoperative monitoring of acoustic nerve and brainstem auditory pathways.
- 3. Indications of intraoperative electrophysiological monitoring.

II. Write notes on: $(8 \times 5 = 40)$

- 1. Indications of autonomic nervous system testing.
- 2. Role of transcranial magnetic stimulation in stroke rehabilitation.
- 3. Effects of anaesthetics on evoked potentials and EEG.
- 4. Stimulation Protocols in transcranial magnetic stimulation.
- 5. Patient preparation before autonomic nervous system testing.
- 6. Advantages, limitations, and complications of Electrocorticography.
- 7. Write about the techniques and uses of sympathetic skin response.
- 8. Write about obstructive sleep apnea.

III. Short Answers on: $(10 \times 3 = 30)$

- 1. Effect of aging on sleep architecture.
- 2. Write in brief about maintenance of wakefulness test.
- 3. Intra operative spinal root monitoring.
- 4. Write in brief about transcranial direct current stimulation.
- 5. Write about parasomnias.
- 6. Postural Orthostatic Tachycardia Syndrome.
- 7. Utility of transcranial magnetic stimulation in chronic pain.
- 8. HR Variability with Respiration.
- 9. Write about Insomnia.
- 10. Blood pressure variation with changes in posture.
