# **AUGUST 2019**

# **B.Sc. NEURO ELECTRO PHYSIOLOGY THIRD YEAR**

### PAPER II - POLYSOMNOGRAPHY, TRANSCRANIAL MAGNETIC STIMULATION, AUTONOMIC LAB, INTRAOPERATIVE MONITORING

# *Q.P. Code:* 802522

Maximum: 100 Marks

# **Answer All questions**

 $(3 \times 10 = 30)$ 

### I. Elaborate on:

**Time: Three Hours** 

- 1. Describe the organisation of normal sleep.
- 2. Mention the common neurological disorders in which polysomnography is used and describe how polysomnography is done?
- 3. Mention disorders where Transcranial Magnetic stimulation can be helpful. What is the principals and physiological basis of this treatment?

# II. Write notes on:

- 1. Effects of anaesthetics on evoked potentials and EEG.
- 2. Advantages, limitations and complications of Electrocorticography.
- 3. Levels of sleep structure.
- 4. Precautions to be taken during IOM.
- 5. Narcolepsy.
- 6. Intraoperative monitoring in Cerebello pontine angle tumour surgery.
- 7. Brain mapping.
- 8. Phases in the valsalva response.

### III. Short answers on:

- 1. Beat to beat variability.
- 2. Blood pressure variation with changes in posture.
- 3. Daytime somnolence.
- 4. Stages of sleep.
- 5. Circadian rhythm.
- 6. Jet lag.
- 7. Central sleep apnoea.
- 8. Sympathetic skin response.
- 9. Effect of aging on sleep architecture.
- 10. Median sleep latency test.

 $(8 \times 5 = 40)$ 

 $(10 \times 3 = 30)$