

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0423]

APRIL 2023

Sub. Code: 2522

**B.Sc. NEURO ELECTRO PHYSIOLOGY
THIRD YEAR – (Regulations 2012-2013 & 2018-2019 onwards)
PAPER II – POLYSOMNOGRAPHY, TRANSCRANIAL MAGNETIC
STIMULATION, AUTONOMIC LAB, INTRAOPERATIVE MONITORING
Q.P. Code: 802522**

Time: Three Hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Basis of Obstructive Sleep Apnea Syndrome and how Polysomnography is used for its diagnosis.
2. Mention the various Neurosurgical procedures in which Intraoperative monitoring can be used and describe the procedure for monitoring a Cerebellopontine angle tumor surgery.
3. Cardiovascular Autonomic function tests and mention neurological diseases in which there can be Autonomic dysfunction.

II. Write notes on:

(8 x 5 = 40)

1. Role of Transcranial magnetic stimulation in Stroke Rehabilitation.
2. Stages of Sleep.
3. Motor evoked potentials.
4. Head-up Tilt table testing.
5. Preparation of patients before Transcranial magnetic stimulation.
6. In intraoperative monitoring, how anaesthetics affect on evoked potentials and EEG?
7. Brain mapping.
8. Narcolepsy.

III. Short answers on:

(10 x 3 = 30)

1. Effect of Aging on Sleep Architecture.
2. Phases in the Valsalva response.
3. Motor threshold in Transcranial magnetic stimulation.
4. Techniques of measuring Central Motor Conduction time.
5. Write about Insomnia.
6. Circadian rhythm and disorders.
7. Electrocorticography.
8. Types of Sleep Studies.
9. Somnambulism.
10. Side effects of Transcranial magnetic stimulation.
