

[LF 0212]

AUGUST 2014

Sub.Code :2511

**B.Sc. NEURO ELECTROPHYSIOLOGY
SECOND YEAR
PAPER I – ELECTRO ENCEPHALO GRAPH**

Q.P. Code : 802511

Time: Three hours

Maximum : 100 Marks

Answer All questions

I. Elaborate on:

(3x10=30)

1. Mention the criteria of West syndrome and describe its clinical features along with EEG findings.
2. Write the international 10-20 system of electrode placements of standard EEG with neat diagram.
3. What are artefacts? List the types of artefacts that you see in the laboratory and explain the methods of elimination.

II. Write notes on:

(8x5=40)

1. Electroencephalography in liver or renal disease.
2. EEG in absence seizures.
3. Benign Rolandic epilepsy.
4. Amplifiers in EEG.
5. Non-convulsive status epilepticus.
6. What does the magnitude of the hyperventilation response depend on? How long must a person do hyperventilation for? Why is the post hyperventilation response important?
7. What are the three main types of response seen in photic stimulation? Which types of seizures are most commonly activated by photic stimulation?
8. Phase reversals and equipotential zone.

III. Short Answers on:

(10x3=30)

1. Hand Luder.
2. Posterior dominant rhythm.
3. Trace alternant.
4. Special electrodes
5. EEG in herpes simplex encephalitis.
6. Contraindications to hyperventilation.
7. Glossokinetic artefacts.
8. EEG in brain death.
9. Limitations of EEG in intensive care unit.
10. Multifocal spikes on EEG.

[LH 0815]

AUGUST 2015

Sub.Code :2511

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SECOND YEAR
PAPER I – ELECTRO ENCEPHALO GRAPH**

Q.P. Code : 802511

Time: Three Hours

Maximum : 100 Marks

Answer All questions

I. Elaborate on:

(3 x 10 = 30)

1. Classify electrodes, and describe advantages and disadvantages.
2. Describe clinical features of Juvenile myoclonic epilepsy along with EEG findings.
3. Describe the technique of photic stimulation, and normal and abnormal responses.

II. Write notes on:

(8 x 5 = 40)

1. EEG in prion disease.
2. Impedance testing in EEG.
3. Alpha seizure discharges in newborn.
4. Hypsarrhythmia.
5. Frontal intermittent rhythmic delta.
6. Mu rhythm.
7. High frequency filter.
8. Utility of end of chain phenomenon in localization on EEG.

III. Short Answers on:

(10 x 3 = 30)

1. Artifacts with recording EEG in Intensive Care Unit.
2. Psychogenic no epileptic seizures.
3. Disadvantages of monopolar montages.
4. Panayiotopoulos syndrome.
5. Analog EEG.
6. Pulse artifact.
7. Sleep spindles.
8. T1 and T2 electrodes.
9. EEG in children with Rett syndrome.
10. Continuous spikes and waves during sleep (CSWS).

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Q.P. Code: 802511

Time: Three Hours

Maximum : 100 Marks

Answer All questions

I. Elaborate on: **(3 x 10 = 30)**

1. Give a brief classification of epileptic seizures.
2. Describe the physiological parameters measured and equipment parameter setting for Polysomnography.
3. Enumerate the EEG artifacts and their recognition and elimination.

II. Write notes on: **(8 x 5 = 40)**

1. Centro – temporal spikes.
2. Triphasic waves.
3. Absence seizures.
4. Frontal lobe epilepsy.
5. EEG in coma.
6. Benign childhood seizures.
7. Lennox – Gastaut syndrome.
8. Infantile spasms.

III. Short answers on: **(10 x 3 = 30)**

1. Photoc Stimulation.
2. Inter – ictal EEG.
3. Slow waves and their significance.
4. Sphenoidal electrodes.
5. Absence seizures.
6. Generator of EEG.
7. Hans Berger.
8. Average reference montage.
9. Alpha wave.
10. Syncope.

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Time: Three Hours

Maximum : 100 Marks

Answer All questions

I. Elaborate on: **(3 x 10 = 30)**

1. Evolution of EEG in various age groups.
2. Describe the various montages and their usefulness in specific pathologies.
3. Depth electrodes and long term EEG recording.

Write notes on: **(8 x 5 = 40)**

1. Usefulness of EEG recording in the ICU.
2. EEG Changes in a patient with SSPE.
3. Triphasic waves.
4. EEG artefacts seen commonly.
5. Electrocorticography.
6. Various activation methods.
7. EEG in NREM Sleep.
8. EEG patterns in a patient with Absence seizures.

III. Short answers on: **(10 x 3 = 30)**

1. Vertex waves.
2. BIPLEDS.
3. Photic driving.
4. FIRDA.
5. Delta waves.
6. EEG patterns of unclear significance.
7. Non convulsive status epilepticus.
8. Burst Suppression.
9. Calibration.
10. Lambda waves in EEG.

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Time: Three Hours

Maximum : 100 Marks

Answer All questions

I. Elaborate on:

(3 x 10 = 30)

1. Recording of EEG in a comatose patient and its significance.
2. Describe the normal EEG Changes in Normal sleep.
3. Neurophysiological basis for EEG.

II. Write notes on:

(8 x 5 = 40)

1. Non convulsive status epilepticus.
2. Polysomnography.
3. Intracranial monitoring.
4. EEG Artefacts.
5. Drugs and medications affecting EEG recording.
6. EEG Patterns in a patient with CJD.
7. EEG Recording in Juvenile myoclonic epilepsy.
8. Usefulness and precautions of EEG Recording in the ICU.

III. Short answers on:

(10 x 3 = 30)

1. Breach Rhythm.
2. BIPLEDS.
3. Calibration.
4. Low voltage EEG.
5. Alpha Blocking.
6. EEG Montages useful in temporal lobe epilepsy.
7. Lambda waves in EEG.
8. Depth electrodes.
9. Long term EEG Recording.
10. Nonconvulsive seizures.

[LN 0818]

AUGUST 2018

Sub. Code: 2511

B.Sc. NEURO ELECTRO PHYSIOLOGY
SECOND YEAR
PAPER I – ELECTRO ENCEPHALO GRAPH

Q.P. Code: 802511

Time: Three Hours

Maximum : 100 Marks

Answer All questions

I. Elaborate on:

(3 x 10 = 30)

1. Factors affecting EEG recording.
2. Non-convulsive EEG Recordings.
3. 10/20 system and electrode placement and the common montages.

II. Write notes on:

(8 x 5 = 40)

1. Normal variants in EEG Recording.
2. West Syndrome.
3. Block diagram.
4. Hypoxic brain injury.
5. EEG in stroke and in post hemispherectomy patients.
6. Viral encephalitis.
7. Progressive myoclonic epilepsy.
8. Filter setting during EEG Recording.

III. Short answers on:

(10 x 3 = 30)

1. Sweat artefacts.
2. Sleep spindles.
3. Febrile seizures.
4. Mesial temporal sclerosis.
5. EEG in CJD.
6. Complex partial seizures.
7. Mitten's.
8. Syncope.
9. Gelastic seizures.
10. Swallowing artefacts.

[LP 0819]

AUGUST 2019

Sub. Code: 2511

B.Sc. NEURO ELECTRO PHYSIOLOGY
SECOND YEAR
PAPER I – ELECTRO ENCEPHALO GRAPH

Q.P. Code: 802511

Time: Three Hours

Maximum : 100 Marks

Answer All questions

I. Elaborate on:

(3 x 10 = 30)

1. Artefacts in EEG Recording.
2. Sleep EEG recordings.
3. EEG in status epilepsy.

II. Write notes on:

(8 x 5 = 40)

1. Juvenile Myoclonic epilepsy.
2. Alpha blocking.
3. Pyridoxine dependent Epilepsy.
4. EEG in children and neonates.
5. EEG in hypoxic brain injury.
6. Filter setting in EEG Recording.
7. Subacute Sclerosing Panencephalitis.
8. Montages in EEG.

III. Short answers on:

(10 x 3 = 30)

1. Global developmental delay.
2. Symptomatic seizures.
3. Hydrocephalus.
4. Burst Suppression.
5. Panayiotopoulos syndrome.
6. EEG in brain death.
7. Complex febrile seizures.
8. Syncope.
9. Breach Rhythm.
10. Autism spectrum disorders.

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Time: Three Hours

Maximum : 100 Marks

Answer All questions

I. Elaborate on:

(3 x 10 = 30)

1. Activation procedures used while recording EEG.
2. Periodic complexes in EEG.
3. EEG Monitoring in the ICU Setting.

II. Write notes on:

(8 x 5 = 40)

1. Hypsarrhythmia.
2. Viral encephalitis.
3. Progressive myoclonic epilepsy.
4. Triphasic waves – recognition and clinical correlates.
5. Absence seizures.
6. Typical absence seizures and EEG correlate.
7. Utility of phase reversal with examples.
8. Non convulsive seizures.

III. Short answers on:

(10 x 3 = 30)

1. Drip artefacts.
2. K complexes.
3. Trace alternant.
4. Hot water epilepsy.
5. EEG in dementia.
6. Transient ischemic episodes.
7. EEG in hepatic failure.
8. Autoimmune encephalopathy.
9. Hans Berger and Richard Caton.
10. Post ictal slowing.
