

**VINAYAKA MISSION'S RESEARCH FOUNDATION, SALEM
(Deemed to be University)**

**B.Sc(NEURO SCIENCE TECHNOLOGY) DEGREE EXAMINATIONS -
September 2021**

Second Year

**APPLIED TECHNOLOGY-I & APPLIED TECHNOLOGY-II BASICS OF
CLINICAL NEUROPHYSIOLOGY, BASICS OF NERVE
CONDUCTIONS, ELECTROMIOGRAPHY AND EVOKED
POTENTIALS**

Three Hours

Maximum: 75 marks

SECTION - A

I. Choose the Best Answer :

(10 x 1 = 10)

1. The morphology of the delta wave
 - a) biphasic
 - b) triphasic
 - c) tooth shaped appearance
 - d) sharp spikes
2. The frequency of notch filter
 - a) 60 HZ
 - b) 35-45 HZ
 - c) 75 HZ
 - d) 45 HZ
3. Beta activity is well appreciated in the
 - a) Anterior regions
 - b) posterior region
 - c) both a & c
 - d) lateral regions
4. Pick the EMG artifact
 - a) Tongue movements
 - b) swallowing, chewing
 - c) tremor
 - d) all the above
5. The use of sphenoidal electrodes
 - a) To record activity at the base of the brain
 - b) frontal area
 - c) frontotemporal area
 - d) both a & c
6. Which needle is used most common in clinical practice
 - a) single fibre needle
 - b) macroneedle
 - c) monopolar
 - d) concentric needle
7. Myasthenia gravis is a neurological condition which most commonly affects
 - a) proximal muscles
 - b) distal muscles
 - c) respiratory muscles
 - d) ocular muscles
8. Muscle in which H – reflex is best elicited in
 - a) Any distal muscles
 - b) any proximal muscles
 - c) soleus muscle
 - d) abductor pollicis brevis
9. Needle which is used in assessing large group of muscles
 - a) Monopolar
 - b) concentric needle
 - c) macro needle
 - d) none of the above
10. Name the IV waveform seen in BAER
 - a) Inferior colliculi
 - b) vestibulocochlear nerve
 - c) superior colliculi
 - d) lateral lemniscus

II. Write Short Answers on any FIVE of the following:

(5 x 5 = 25)

11. Electrode Paste
12. Amplifiers
13. Simple Circuits
14. Types of electrodes
15. Electrode Identification
16. Short note on Rheobase and Chronaxie
17. What are fasciculation, fibrillation and action potential

III. Write Short Essays on any TWO of the following:

(2 x 10 = 20)

18. Explain about the activation procedure used in EEG
19. Short notes on EEG montages
20. Explain video EEG
21. Explain about Auditory Evoked Potentials

IV. Write Essays on any ONE of the following:

(1 x 20 = 20)

22. Explain EEG procedure: pre procedure, procedure, post procedure
23. Explain in detail about Principles of Electromyography

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