

M.Sc.(Zoology) (C.B.C.S. Pattern) Sem-IV  
**PSCZOOT14.4/ZOO-XIV-Special Group - Animal Physiology-III**  
**(Physiology of Brain, Nerve and Muscle)**

P. Pages : 1

Time : Three Hours



**GUG/W/19/11432**

Max. Marks : 80

- Notes :
1. All questions are compulsory.
  2. All questions carry equal marks.
  3. Illustrate your answers with suitable diagram.

1. Give an account on the structure and function of Brainstem. **16**

**OR**

Write note on.

- a) Give an account on function of cerebellum.
- b) Give on account on physiology of sleep.

2. Give an account on ultrastructure of neuron. **16**

**OR**

Write note on.

- a) Functional properties of neuron.
- b) Bioelectrical properties of Neuron's – Neuronal excitability.

3. Give an account on physiology and functional properties of Neuropeptides. **16**

**OR**

Write note on.

- a) Disorder's of nervous system.
- b) Give an account on classification of sensory reception.

4. Describe in detail the ultra structure of skeletal muscle. **16**

**OR**

Write note on.

- a) Give account on chemistry and role of ATP in muscle contraction.
- b) Describe in detail ultra structure of neuromuscular junction.

5. Attempt any following. **16**

- a) Anatomical structure of cerebrum.
- b) Synapse.
- c) GABA.
- d) Tetanus.

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