D3AZL2401 **(1 Page)** **Name.....**
Reg.No.....

THIRD SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2025
(Regular/Improvement/Supplementary)
ZOOLOGY
FZOL3C07 - PHYSIOLOGY

Time: 3 Hours **Maximum Weightage: 30**

Part A: Answer any *four* questions. Each carries *two* weightage.

1. What are antioxidants? List out some antioxidant nutrients of the normal diet and their functions.
2. Explain the role of neurotransmitters in the control of gastrointestinal motility.
3. Write short notes on Wernicke's area and its functions.
4. Characterize monosynaptic reflexes with example.
5. Give an account on epilepsy.
6. Briefly discuss the structure and function of muscle spindle.
7. Describe the physiological anatomy of cardiac muscle.

(4 × 2 = 8 weightage)

Part B: Answer any *four* questions. Each carries *three* weightage.

8. Briefly discuss the digestion and absorption of lipids in the GI tract.
9. Evaluate the role of countercurrent system in the regulation of water balance in body.
10. Summarize the mechanism of pulmonary ventilation.
11. Explain how image is formed on retina.
12. Describe the principle and application of ECG.
13. Comment in detail on the composition and formation of lymph.
14. Elaborate the mechanism of temperature homeostasis.

(4 × 3 = 12 weightage)

Part C: Answer any *two* questions. Each carries *five* weightage.

15. Describe the functional anatomy of mammalian kidney with suitable diagrams.
16. Explain the pulmonary volumes and capacities in detail with their significance.
17. List out in detail the structural components of brainstem and their functions.
18. Discuss the structure of olfactory membrane with physiology of olfaction.

(2 × 5 = 10 weightage)