

SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2025

(Regular/Improvement/Supplementary)

ZOOLOGY

GZOL6B10T: PHYSIOLOGY AND ENDOCRINOLOGY

Time: 2 Hours

Maximum Marks: 60

**SECTION A: Answer the following questions. Each carries *two* marks.
(Ceiling 20 marks)**

1. What is cerebro-vascular accident?
2. What are respiratory pigments? Cite examples.
3. Define counter-current mechanism.
4. What are the physiological problems in diving mammals?
5. Write on Aphaeresis and its uses.
6. Thymus is an endocrine organ. Substantiate the statement.
7. What is the role of creatine phosphate in muscle contraction?
8. What are the functions of electric organs?
9. Differentiate between type I and type II diabetes.
10. What are the types of bioluminescence?
11. Comment on the hormones in insects.
12. Write on ruminant digestion.

**SECTION B: Answer the following questions. Each carries *five* marks.
(Ceiling 30 marks)**

13. Comment on osmotic and ionic regulation in marine animals.
14. Write on ultrastructural changes during muscle contraction.
15. Discuss about the causes and consequences of obesity.
16. Name the hormones produced by hypothalamus. Write the functions of these hormones.
17. Discuss about hormones secreted from Placenta and their physiological effects.
18. Write on oxygen-hemoglobin dissociation curve and mention the factors affecting it.
19. What is blood coagulation cascade? Explain.

SECTION C: Answer any *one* question. The question carries *ten* marks.

20. Write an essay on nerve impulse transmission.
21. Describe the mechanism of hormonal action.

(1 × 10 = 10 Marks)