

SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2026

(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 the importance of dietary fibres?
2. Comment on the structure and properties of Hb.
3. Write on hormonal regulation of urine formation.
4. What are the physiological problems in newborns?
5. Write a short note on ESR.
6. Adrenal gland is an endocrine organ. Substantiate the statement.
7. What is muscle twitch?
8. What are the haemoglobinopathies?
9. Comment on hormones in crustaceans.
10. What is the physiology of bioluminescence?
11. Give the classification of hormones.
12. Distinguish between osmoconformers and osmoregulators

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

13. Explain the neural and chemical control of respiration.
14. Illustrate the structure of vertebrate skeletal muscle.
15. Write on major nutritional disorders.
16. Discuss the mechanism of action of steroid hormones.
17. Briefly discuss positive and negative feedback regulation of hormones.
18. Write on counter-current mechanism.
19. Explain different types of heart.

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

20. What is synapse? Discuss synaptic transmission and add a note on neurotransmitters.
21. What are the hormones secreted by the hypothalamus and pituitary? Write the functions of these hormones.

(1 × 10 = 10 Marks)