

**SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2023****(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. Differentiate between type I and type II diabetes.
2. Comment on positive and negative feedback regulation of hormones.
3. Write on the physiology and significance of light production.
4. What are the releasing hormones of hypothalamus?
5. What are neurotrophins? Cite an example.
6. What are the physiological problems in diving mammals?
7. Differentiate between tachycardia and bradycardia.
8. What is ruminant digestion?
9. Comment on the structure and properties of Hb.
10. What is aphaeresis?
11. Comment on neuromuscular junctions.
12. Write on Cori cycle.

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

13. Write on nutritional disorders.
14. 'The coagulation pathway is a cascade of events that leads to hemostasis'. Explain.
15. Explain oxygen-haemoglobin dissociation curve and comment on the factors influencing it.
16. Write on mechanism of action of peptide and steroid hormones.
17. What are the neuro-endocrine organs and hormones in crustaceans and insects? Comment on the functions.
18. Explain the mechanism of muscle contraction.
19. Explain synaptic transmission

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

20. Write an essay on the endocrine glands in man and the hormones produced with their functions.
21. Write an essay on urine formation with comments on counter-current mechanism and its hormonal regulation.

**(1 × 10 = 10 Marks)**