

April 2025
B.A./B.Sc.
Fourth Semester
CORE – 9
ZOOLOGY
Course Code: ZOC 4.21
(Physiology: Life Sustaining Systems)

Total Mark: 70

Pass Mark: 28

Time: 3 hours

Answer five questions, taking one from each unit.

UNIT-I

1. Explain in what ways vitamins and minerals absorption take place in human. 7+7=14
2. Write an account on the mechanical and chemical digestion of protein with diagram. 12+2=14

UNIT-II

3. Write a note each on the following: 7×2=14
 - (a) Oxygen-haemoglobin dissociation curves
 - (b) Carbon monoxide poisoning
4. Describe in detail the histology of trachea with neat labelled diagram. 11+3=14

UNIT-III

5. Describe the different means to regulate water balance in our body. 14
6. With neat, labelled diagram describe the structure of kidney in detail. 2+12=14

UNIT-IV

7. Explain how the quaternary structure of haemoglobin is organized. Add a note on its functions. 9+5=14

8. Write a note each on the following: 7×2=14
(a) Haemopoiesis
(b) Kallikrein-Kininogen system

UNIT-V

9. With suitable labelled diagram describe the structure of human heart in detailed. 14
10. Write a note each on the following: 7×2=14
(a) Cardiac cycle
(b) Cardiac output
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