

April 2025
B.A./B.Sc.
Fourth Semester
CORE – 8
ZOOLOGY
Course Code: ZOC 4.11
(Comparative Anatomy of Vertebrates)

Total Mark: 70

Pass Mark: 28

Time: 3 hours

I. Answer five questions, taking one from each unit.

UNIT-I

1. Describe the derivatives of the integument across different groups with suitable examples. Analyse the role of the integument in vertebrates. 10+4=14
2. Compare the appendicular skeleton of Aves and mammals with diagrams 7+7=14

UNIT-II

3. Discuss the comparative anatomy of gills of vertebrates with diagrams. 11+3=14
4. Explain the anatomy of the lung and air sacs of different vertebrates. 14

UNIT-III

5. Explain the evolution of heart of vertebrates. 14
6. Describe the general plan of circulation in vertebrates with a diagram. 12+2=14

UNIT-IV

7. Explain the sympathetic and parasympathetic nervous system of vertebrates with diagrams. 7+7=14

8. Describe the structure of a typical vertebrate brain. Give a comparative account on the brain of amphibians and reptiles. 4+10=14

UNIT-V

9. Write notes on the following: 7×2=14
(a) Tactile receptor in man
(b) Audio receptor
10. Explain the gustatory receptor in man. Add a note on classification of receptors based on stimulus. 8+6=14
-