

**2021**

**ZOOLOGY — HONOURS**

**Paper : CC-8**

**(Comparative Anatomy of Vertebrates)**

**Full Marks : 50**

*The figures in the margin indicate full marks.*

*Candidates are required to give their answers in their own words  
as far as practicable.*

Answer **any ten** questions.

1. Define Hypsodont and Lophodont dentition. Write a note on diastema with its significance. 3+2
  2. Draw and describe the structure of a holobranch of a bony fish. 4+1
  3. Draw and describe the modification of aortic arches in mammals. 2+3
  4. What is mesonephros? State the differences between Wolffian and Mullerian duct. 3+2
  5. Write a brief note on autostylic jaw suspension. 5
  6. Name the V and IX cranial nerve and comment of their distribution in fishes. 2+3
  7. Give an account of the histological organization of mammalian skin with a labelled diagram. 3+2
  8. Draw and describe ultrastructure of cochlea in mammals. 5
  9. Describe the structure of typical flight feather in bird with suitable diagram. 5
  10. Comment on the fermentation process in Ruminant Stomach. 5
  11. Distinguish between (**any two**) : 2½×2
    - (a) Foramen magnum and Foramen Monro
    - (b) Hemibranch and Holobranch
    - (c) Corpus callosum and Corpus striatum.
  12. Mention the structural peculiarities of a typical reptilian heart. 2+3
  13. Distinguish between Thecodont and Acrodont dentition with suitable examples. 5
  14. Draw and describe different air sacs in *Columba sp.* 5
  15. Comment on the functional modifications of cerebellum in Vertebrates. 5
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