

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
-