

2021

ZOOLOGY — HONOURS

Paper : CC-5

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. Write briefly on the classification of Amphibia up to living orders with suitable characters and Indian examples. 5
2. State the morphological adaptations of echolocating bats. 5
3. (a) State the factors that stimulate migratory habit in birds.
(b) State the celestial cues used by birds during migration. 3+2
4. What is lift and thrust? State the important morphological adaptations in birds for flight. 2+3
5. What is parental investment? Discuss examples of parental care shown by Anurans. 2+3
6. Describe the structure of endostyle in *Branchiostoma* with a suitable diagram. What is its function? 2+1+2
7. Draw and describe the venom gland of elapid. What is proteroglyph? 4+1
8. Discuss the intrinsic and extrinsic factors involved in Neoteny. 5
9. State the characteristics of subphylum Urochordata. Discuss the significance of tadpole larva of *Ascidia*. 3+2
10. (a) Differentiate between physostomous and physoclistous swim bladder. Provide examples.
(b) What is rete mirabilis? 4+1
11. (a) Describe the accessory respiratory organ of *Clarias* sp. with suitable diagram.
(b) Distinguish between down feather and filoplume. 4+1
12. (a) Comment on the location and function of Hatschek's pit.
(b) Distinguish fish with other vertebrates. 3+2

Please Turn Over

13. Comment on modification of fore arm of different groups of vertebrates related to their adaptation. 5
14. (a) State important morphological differences between poisonous and non-poisonous snakes.
(b) State two important difference between Lepidosauria and Archosauria.
(c) What is neurotoxic venom? 2+2+1
15. (a) Differentiate between horns and antlers.
(b) What is Duvernoy's gland?
(c) What is retrogressive metamorphosis? 2+2+1
-