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 |
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| State the morphological adaptations of echolocating bats. | 5 |
| (a) State the factors that stimulate migratory habit in birds.(b) State the celestial cues used by birds during migration. | 3+2 |
| What is lift and thrust? State the important morphological adaptations in birds for flight. | 2+3 |
| What is parental investment? Discuss examples of parental care shown by Anurans. | 2+3 |
| Describe the structure of endostyle in <i>Branchiostoma</i> with a suitable diagram. What is its func | etion's 2+1+2 |
| Draw and describe the venom gland of elapid. What is proteroglyph? | 4+1 |
| Discuss the intrinsic and extrinsic factors involved in Neoteny. | 5 |
| State the characteristics of subphylum Urochordata. Discuss the significance of tadpole lar <i>Ascidia</i> . | va of 3+2 |
| (a) Differentiate between physostomous and physoclistous swim bladder. Provide examples.(b) What is rete mirabilis? | 4+1 |
| (a) Describe the accessory respiratory organ of <i>Clarias</i> sp. with suitable diagram.(b) Distinguish between down feather and filoplume. | 4+1 |
| (a) Comment on the location and function of Hatschek's pit.(b) Distinguish fish with other vertebrates. | 3+2 |
| | State the morphological adaptations of echolocating bats. (a) State the factors that stimulate migratory habit in birds. (b) State the celestial cues used by birds during migration. What is lift and thrust? State the important morphological adaptations in birds for flight. What is parental investment? Discuss examples of parental care shown by Anurans. Describe the structure of endostyle in <i>Branchiostoma</i> with a suitable diagram. What is its function and describe the venom gland of elapid. What is proteroglyph? Discuss the intrinsic and extrinsic factors involved in Neoteny. State the characteristics of subphylum Urochordata. Discuss the significance of tadpole lar <i>Ascidia</i> . (a) Differentiate between physostomous and physoclistous swim bladder. Provide examples. (b) What is rete mirabilis? (a) Describe the accessory respiratory organ of <i>Clarias</i> sp. with suitable diagram. (b) Distinguish between down feather and filoplume. (a) Comment on the location and function of Hatschek's pit. |

Please Turn Over

| 13. | Coı | nment on modification of fore arm of different groups of vertebrates related to their adap | otation |
|-----|-----|--|---------|
| 14 | (2) | State important morphological differences between poisonous and non-poisonous snakes. | |
| 17. | , , | State two important difference between Lepidosauria and Archosauria. | |
| | (0) | State two important difference between Lepidosauria and Archosauria. | |
| | (c) | What is neurotoxic venom? | 2+2+ |
| 15. | (a) | Differentiate between horns and antlers. | |
| | (b) | What is Duvernoy's gland? | |
| | (c) | What is retrogressive metamorphosis? | 2+2+ |
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(2)

V(3rd Sm.)-Zoology-H/CC-5/CBCS