

Reg. No .....

**B.Sc. DEGREE END SEMESTER EXAMINATION - OCTOBER 2024****SEMESTER 3 : ZOOLOGY****COURSE : 19U3CRZOO3 : ANIMAL DIVERSITY - CHORDATA***(For Regular 2023 Admission and Improvement/Supplementary 2022/2021/2020/2019 Admissions)*

Time : Three Hours

Max. Marks: 60

**PART A****Answer All (1 mark each)**

1. Mention any two advantages of vocalization in birds.
2. What is the common name of the fish *Amia calva*?
3. Remember any two notable groups coming under synapsids.
4. What is the common name of *Narcine*?
5. What is meninges?
6. What is an osteoderm?
7. Remember the most notable characterizations of salps.
8. Point out the indication behind the name *Amphioxus*.

**(1 x 8 = 8)****PART B****Answer any 6 (2 marks each)**

9. Explain the morphology of feeding apparatus in *Petromyzon*.
10. What is *Cephalaspis*?
11. Enlist the physical characteristics of lancelets.
12. Write the salient features of Insectivora. Give an example.
13. Outline the difference between oviparity and ovoviviparity with example.
14. Point out the different bones involved in the parapsidan skull. Mention its function.
15. Write a short note on Loris.
16. Archaeopteryx is often referred to as a "transitional fossil"..Respond to the statement.

**(2 x 6 = 12)****PART C****Answer any 4 (4 marks each)**

17. Discuss the three major groups of reptiles based on temporal openings with examples.
18. Demonstrate the structure of frog heart with diagram.
19. Draw a neat diagram of the typical vertebra and describe it.
20. Outline the classification of tetrapods providing key features and example for each class.
21. Highlight the avian characters of archeopteryx used as a critical evidence to understand the evolution of modern birds.
22. Describe the body structure and nutrition in *Petromyzon* and its larva. How the adult and larva is different in feeding structure?

**(4 x 4 = 16)**

**PART D**

**Answer any 2 (12 marks each)**

23. Present the process of evolution in chordates with the help of a phylogenetic tree. Evaluate the evolutionary significance of *Amphioxus* in the context of chordate evolution.
24. Discuss the parental care exhibited by fishes.
25. Describe the structure of heart and its working in rabbit with a neat diagram of the heart.
26. Highlight the key physical characteristics that can help to distinguish venomous snakes from non-venomous ones. Use neat sketches.

**(12 x 2 = 24)**