

**2023/FYUG/ODD/SEM/
ZOODSC-102T/033**

**FYUG Odd Semester Exam., 2023
(Held in 2024)**

ZOOLOGY

(1st Semester)

Course No. : ZOODSC-102T

(Diversity of Chordates)

Full Marks : 70
Pass Marks : 28

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

SECTION—A

Answer ten questions, selecting any two from each

Unit : 2×10=20

UNIT—I

- 1. Define systematics.**
- 2. What do you understand by binomial nomenclature?**

(2)

3. Define alpha and beta taxonomy.

UNIT—II

4. Write four distinguishing characters of chordates.
5. Write the salient features of Hemichordata with at least two examples.
6. Mention four general characteristics of Cephalochordata with example.

UNIT—III

7. How do Agnatha and Gnathostomata differ?
8. Give two examples of Cyclostomata.
9. What is osmoregulation?

UNIT—IV

10. What is neoteny?
11. Why is Sphenodon called 'living fossil'?
12. Write four differences between poisonous and non-poisonous snakes.

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(Continued)

(3)

UNIT—V

13. Mention the phylogenetic importance of Archaeopteryx.
14. Mention four general characteristics of Aves.
15. Write a short note on echolocation in Bats.

SECTION—B

Answer *five* questions, selecting *one* from each
Unit : 10×5=50

UNIT—I

16. Who is the 'Father of modern taxonomy'? Define the term 'taxonomy'. What is the role of taxonomy in biology? Mention briefly the modern trends in taxonomy. 1+2+3+4=10
17. Write short notes on the following (any *two*): 5×2=10
- (a) Salient features of binomial nomenclature and its significance
- (b) Newer trends in systematics
- (c) DNA barcoding

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(Turn Over)

(4)

UNIT—II

18. Define notochord. How many paired appendages are present in chordates? Give an outline classification of chordates with example. $2+1+7=10$

19. Why are urochordates also called tunicates? Write the distinctive characters of Urochordata in brief. Add a note on the retrogressive metamorphosis of urochordates. $1+4+5=10$

UNIT—III

20. Mention the distinguishing characters of Cyclostomata. Classify Cyclostomata up to order with characters and examples from each group. $4+6=10$

21. Write short notes on any two of the following : $5 \times 2 = 10$

(a) Difference between chondrichthyes and osteichthyes

(b) Migration in fishes

(c) Parental care in fishes

(5)

UNIT—IV

22. Mention the general characteristics of Amphibia. Classify them up to order with example. Add a brief note on the parental care of amphibians. $4+3+3=10$

23. Name two poisonous and non-poisonous snake each. What do you understand by neurotoxic venom? Describe the biting mechanism of snake with proper illustration. $2+2+(4+2)=10$

UNIT—V

24. Define the term 'migration'. Name the different types of migration observed in birds. What are the major causes for bird migration? Discuss them briefly. Add a note on the advantage of migration in birds. $1+2+4+3=10$

25. Mention the general characteristics of mammal. Classify mammal up to order with suitable examples. $5+5=10$

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