

**2023/FYUG/ODD/SEM/  
ZOODSC-101T/032**

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

**ZOOLOGY**

**( 1st Semester )**

Course No. : ZOODSC-101T

**( Diversity of Non-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 Protozoa. Write four distinctive characters of phylum Protozoa.
2. Classify Porifera up to classes with examples.

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3. Write a brief note on bilateral symmetry with illustration.

UNIT—II

4. Define Cnidaria. Write four distinctive characters of Cnidaria.
5. Distinguish between Polyp and Medusa.
6. Write a brief note on cnidoblast with illustration.

UNIT—III

7. Define Platyhelminthes. Write four distinctive features of phylum Platyhelminthes.
8. Write a brief note on pseudocoelom with illustration.
9. Classify phylum Annelida up to classes with examples.

UNIT—IV

10. Define Arthropoda. Write four distinctive features of phylum Arthropoda.
11. Write a brief note on compound eye in prawn with illustration.

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( Continued )

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12. Write briefly the structural features of *Limulus*.

UNIT—V

13. Define Mollusca. Write four distinctive features of phylum Mollusca.
14. Classify phylum Echinodermata up to classes with examples.
15. Write a brief note on aquatic respiration in Mollusca.

SECTION—B

Answer *five* questions, selecting *one* from each Unit :  $10 \times 5 = 50$

UNIT—I

16. Define locomotion. Discuss the different forms of locomotion in Protozoa with suitable illustrations. Add a note on cyclosis in *Paramecium*.  $1 + (5 + 2) + 2 = 10$
17. Define canal system. Discuss the syconoid canal system with suitable illustration. Add a note on the functions of canal system in Porifera.  $1 + (5 + 2) + 2 = 10$

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( Turn Over )

## UNIT—II

18. Define alternation of generation and metagenesis. Discuss the life cycle of *Obelia* with suitable illustration.  $2+6+2=10$
19. Define corals. Discuss the different types of coral reefs with illustration. Add a note on four distinctive features of phylum Ctenophora.  $1+(5+2)+2=10$

## UNIT—III

20. Discuss the life cycle of *Taenia solium* with suitable illustration. Add a note on the pathogenicity of *Taenia solium*.  $(6+2)+2=10$
21. Discuss the digestive system of Leech with suitable labelled diagram. Add a note on the types of metamerism.  $(6+2)+2=10$

## UNIT—IV

22. Define digestion. Discuss the digestive system of Prawn with suitable labelled diagram. Add a note on six distinctive features of class Insecta.  $1+(5+2)+2=10$

23. Discuss the characteristic features of Onychophora and mention its phylogenetic significance. Discuss briefly the respiratory system in Prawn with illustration.  $(3+2)+(3+2)=10$

## UNIT—V

24. Define torsion and detorsion in Gastropoda. Discuss the process of torsion in Gastropoda with suitable illustrations. Add a note on the significances of torsion.  $2+(4+2)+2=10$
25. Define water vascular system. Discuss the water vascular system in *Asterias* with suitable labelled diagram. Add a note on the functions of water vascular system.  $1+(5+2)+2=10$

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