

**2024/FYUG/ODD/SEM/
ZOODSC-101T/062**

FYUG Odd Semester Exam., 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*

UNIT—I

1. Answer any *two* of the following : $2 \times 2 = 4$

- (a) What are the functions of canal system in sponge?
- (b) Write the distinctive features of phylum protozoa.
- (c) Write a short note on body symmetry in metazoa.

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(Turn Over)



(2)

2. Answer any one of the following : 10

- (a) Discuss briefly about nutrition in protozoa with suitable illustrations. What are the different types of asexual reproduction in protozoa? 6+4=10
- (b) Classify phylum Porifera up to class with distinctive features and examples. Write a short note on segmentation in metazoa. 7+3=10

UNIT—II

3. Answer any two of the following : 2×2=4

- (a) What is polymorphism?
- (b) Differentiate between polyp and medusa.
- (c) What is alternation of generation in context of Cnidaria?

4. Answer any one of the following : 10

- (a) Describe the structure and life cycle of Obelia with suitable illustrations. 4+5+1=10
- (b) Discuss the general characteristics and affinities of Ctenophora. 5+5=10

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(Continued)

(3)

UNIT—III

5. Answer any two of the following : 2×2=4

- (a) Write four distinctive features of phylum Nematelminthes.
- (b) Mention the four classes of phylum Platyhelminthes with one example each.
- (c) Write a brief note on pathogenicity of *Taenia solium*.

6. Answer any one of the following : 10

- (a) Discuss the life cycle of *Ascaris lumbricoides* with suitable illustrations. Add a note on its pathogenicity. (6+2)+2=10
- (b) Write the distinctive features of classes of phylum Annelida citing examples from each class. Add a note on metamerism. (6+2)+2=10

UNIT—IV

7. Answer any two of the following : 2×2=4

- (a) Write four distinctive features of class Insecta with examples.
- (b) What are the different types of gills present in prawn according to their position and attachment?

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(c) What is haemocoel? Mention its functions. 1+1=2

8. Answer any *one* of the following : 10

(a) What is compound eye? Describe the structure of ommatidium and add a note on mechanism of image formation in prawn. 1+4+5=10

(b) Discuss the characteristic feature of onychophora and king crab. Add a note on phylogenetic significance of limulus. 4+4+2=10

UNITS—V

9. Answer any *two* of the following : 2×2=4

(a) What are the characteristic features of class Asterozoa?

(b) Write the significance of torsion in Gastropoda.

(c) What is Aristotle's lantern?

10. Answer any *one* of the following : 10

(a) With suitable illustration give a brief account on respiration in Mollusca with reference to Pila.

(b) What do you mean by Echinodermata? What are the functions of water-vascular system in Asterozoa? Add a note on affinities of echinodermata with chordates. 2+4+4=10
