

**TDC Odd Semester Exam., 2020
held in July, 2021**

ZOOLOGY
(Honours)

(1st Semester)

Course No. : ZOOH-103

(Non-chordates—I)

Full Marks : 35
Pass Marks : 12

Time : 2 hours

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

Answer **five** questions, taking **one** from each Unit

UNIT—I

1. (a) Name different classes of phylum Protozoa mentioning the salient features of any one class. 1+1=2
- (b) Why Polystomella is said to be dimorphic and the shell as polythalamus? 1+1=2

- (c) Describe briefly the alternation of generation in Polystomella. 3
2. (a) Write a note on holozoic nutrition in Protozoa. 3
- (b) Differentiate between binary fission and multiple fission in Protozoa. 2
- (c) Define sporulation in Protozoa. 2

UNIT—II

3. (a) Mention the characteristic features of class Calcarea with examples. 2
- (b) Write a brief note on skeleton of Sycon. 3
- (c) Name the cellular components of mesogloea or mesenchyme layer of the body wall of Sycon. 2
4. (a) Write with labelled diagram the canal system of Sycon. 4+1=5
- (b) Write a note on the functions of canal system of Sycon. 2

UNIT—III

5. (a) Mention the salient features of class Hydrozoa with examples. 2

(3)

- (b) Describe the structure of blastostyle in Obelia colony. 3
- (c) Why Obelia colony is both dimorphic and trimorphic? 2
6. (a) Discuss different theories of origin of polymorphism in Siphonophora. 5
- (b) What are corals? Name two coral forming Cnidarians. 2

UNIT—IV

7. (a) Classify Platyhelminthes up to classes with examples. 4
- (b) Write the scientific name of liver fluke. Why liver fluke is said to be digenetic? Name the hosts found in the life cycle of liver fluke. 1+1+1=3
8. (a) Describe with diagram the structure of Schistosoma. 4+1=5
- (b) Write a brief note on pathogenicity of Schistosoma. 2

UNIT—V

9. (a) Mention four salient features of Nematelminthes with example. 2
- (b) Describe with diagram the life history of Wuchereria. 5

(4)

10. (a) In which class and order Wuchereria belongs? 2
- (b) Describe with diagram the structure of Wuchereria. 5
