

Zoology [Minor]

[NEP]

B.Sc. First Semester End Examination-2024

(Regular & Supplementary Paper)

PAPER-MI101T

[Non-Chordates]

Full Marks: 40

Time: 02 Hrs.

The figures in the right hand margin indicate marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Group A

1. Answer any FIVE questions of the following: 5x2= 10
 - a) What is tautonymy? 2
 - b) Differentiate between flagellum and cilium. 2
 - c) Describe the life cycle of *Fasciola hepatica* through a flow chart. 2
 - d) Differentiate between Lobopodia and Filopodia. 2
 - e) Differentiate homonymy and synonymy. 2
 - f) Write the function of contractile vacuole in *Paramecium* sp. 2

(2)

- g) Differentiate between nymph and larva. What do you mean by definitive host and intermediate host?
- h) What is ommatidium? Mention the mouth Parts of cockroach. 1+1
- i) Write the evolutionary significance of phylum onychophora. Mention one arthropod character found in onychophora. 1+1

Group B

2. Answer any FOUR questions of the following: 4x5 = 20

- a) What is Pseudopodium? Mention the types of Pseudopodia studied by you. 1+4
- b) Briefly describe the process of conjugation in *Paramecium* sp. 5
- c) Define metamorphosis. Discuss give an account of metamorphosis in insects. 1+4
- d) Describe the mechanism of aerial respiration in Arthropoda. 5
- e) Discuss the phenomenon of torsion in gastropoda. What is detorsion? 4+1
- f) Briefly describe the water vascular system in *Asterias* sp. 5
- g) Briefly describe the sol-gel theory in respect to amoeboid movement. 5
- h) Write about Parasitic adaptations in helminthes. 5

(3)

Group C

3. Answer any ONE question of the following: 1x10 = 10

- a) What is spicule? Write the types of spicule studied by you. Describe with diagram, the ascon type canal system in Porifera. 1+3+6
- b) With diagram briefly discuss the life cycle of *Wuchereria bancrofti*. Add a note on the Pathogenicity and control measure of *Wuchereria bancrofti*. 6+2+2
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