

Zoology [MAJOR]

[NEP-CBCS]

B.Sc. First Semester End Examination-2023

PAPER-ZOOH-MJ101T

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) Why hemichordate has been named so?
 - b) Mention the zoological name and systematic position of following animals –
 - i) Sea Lilly
 - ii) Sea Cucumber
 - c) What is the relationship between systematic and taxonomy?
 - d) What is tagmatization?
 - e) Name the larval stages of Fasciola hepatica in a proper sequence.
 - f) What is an archenteron? Write the function of the same.
 - g) What is Kinetodesmasta? Where it is found?
 - h) What is monopectinate gill? Where it is found?

(2)

Group B

2. Answer any FOUR questions of the following: **4x5 = 20**
- a) Describe Mosquito cycle of Plasmodium vivax. What is hypnozoites? **4+1**
 - b) Differentiate between Polyp and Medusa along with diagram. Add a note on the polymorphism found in polyp. **2+3**
 - c) What is Radiata and Bilateria? Discuss the symmetry of Echinoderms & Gastropods **2+3**
 - d) Discuss the structure of water vascular system of starfish along with suitable diagram. **5**
 - e) Discuss about the affinities of Hemichordates and their current systematic position. **5**
 - f) Mention the types of metamorphosis found in Insects. What are Caterpillar, Crab and Maygot? **4+1**

Group C

3. Answer any ONE question of the following: **1x10 = 10**
- a) (i) Discuss Sol-Gel theory of Lobopodial movement along with its molecular mechanism and suitable diagram.
 - (ii) What is metachronal wave?
 - (iii) Differentiate between Cilia and Flagella. **6+2+2**
 - b) What is torsion? Write a brief note on chiasmoneury and zygoneury (torsion) nervous system in Mollusca with suitable diagram. **2+4+4**