B.Sc. 1st Semester (Honours) Examination, 2022 (CBCS)

Subject : Zoology

Course: CC-I

Time: 2 Hours

Full Marks: 40

The figures in the margin indicate full marks.

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

Answer any five from the following:

 $2 \times 5 = 10$

- (a) What is 'Schizocoelic Coelom'? Give example.
- (b) Define metamerism and give example.
- (c) Write down the function of Stigma of Euglena Sp.
- (d) State the differences between digenea and monogenea.
- (e) Draw and label a choanocyte.
- (f) State the differences between taxonomy and systematics.
- (g) State the evolutionary significance of bilateral symmetry in animals.
- (h) Write down the location of 'Botryoidal tissue' and 'colloblast'.

2. Answer any two from the following:

 $5 \times 2 = 10$

- (a) What is principle of priority? Write down the five kingdom concept of classification (Whittaker).
- (b) Draw and label the longitudinal sectional view of Sycon body wall.
- (c) "Amoeba, Paramoecium and Monocystis are included in different phyla but in same subphylum."— Explain.
- (d) How does 'metagenesis' differ from 'Alternation of generation'? Briefly describe the factors involved in coral reef formation.
 2+3

Answer any two of the following:

 $10 \times 2 = 20$

- (a) Describe with a labelled diagram of a mature proglottid of Taenia showing reproductive organs. Write briefly on 'Cysticercosis Bovis'.
- (b) Name the phylum that represented 'Division of Labour' in course of evolution. Classify the said phylum upto orders with suitable examples.
- (c) Describe the events of micronuclear changes during conjugation in *Paramoecium*. How does endo-mixis differ from hemi-mixis?
- (d) Describe the microfilarial periodicity in the life history of Wuchereria bancrofli. Elaborate different factors influencing the periodicity.
 7+3