

U.G. 1st Semester Examination - 2023

ZOOLOGY

[HONOURS]

Course Code : ZOOL-H-CC-T-02

[Old CBCS Syllabus]

Full Marks : 40

Time : 2½ Hours

The figures in the right-hand margin indicate marks.

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

1. Answer any five questions of the following:

2×5=10

- a) Name the ganglions present in the nervous system in Gastropoda.
- b) What is moulting?
- c) State the function of 'Stone Canal'.
- d) What is madreporite?
- e) What is the difference between commissure and connective?
- f) What are the zoological importance of Onychophora?

[Turn over]

g) Why *Peripatus* is called a connecting link?

2. Answer any two questions of the following:

$$5 \times 2 = 10$$

- a) What are Plastron respiration and Integumental respiration? Where they are seen?
- b) Write down the structure of a Tube feet with suitable diagram.
- c) Describe hormonal control of metamorphosis in insects.
- d) Describe any two larval forms found in Echinodermata.

$$2\frac{1}{2} \times 2 = 5$$

3. Answer any two questions of the following:

$$10 \times 2 = 20$$

- a) State the features of a Coelom. Where it is found? Differentiate between Coelom and Pseudocoelom with examples. Explain Schizocoely and Enterocoely Coelom with diagram.
- b) What is holopneustic tracheal system? Describe the mechanism of tracheal respiration in insects with suitable diagrams. Distinguish between Protostomia and Deuterostomia. Describe the enterocoel theory of coelom

$$2 + 1 + 3 + (2 + 2)$$

formation proposed by Lankester (1875).

$$2 + 3 + 2 + 3 = 10$$

- c) Which type of Metamorphosis is seen in Lepidopteran insects? Briefly describe the process of that metamorphosis. Name the Hormones that influences metamorphosis in insects.
- d) How many types of nephridia are found in annelids? Describe the structure of septal nephridia with a diagram. Describe the significance of echinoderm larvae.

$$2 + 5 + 3$$

$$2 + 4 + 4 = 10$$