311/Zool 22-23 / 22611

B.Sc. Semester-II Examination, 2022-23 ZOOLOGY [Honours]

Course ID: 22611 Course Code: SH/ZOO/201/C-3

Course Title: Non-chordates II

Time: 1 Hour 15 Minutes Full Marks: 25

The figures in the right-hand margin indicate marks.

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

UNIT-I

1. Answer any **five** of the following questions:

 $1 \times 5 = 5$

- a) Define Metamerism.
- b) What do you mean by Cephalopoda?
- c) What you mean by Eusociality?
- d) What is Pseudocoelom?
- e) Why hemichordates are now considered as invertebrates?
- f) In which Phylum all the species are exclusively marine?
- g) What is Osphradium?
- h) What is Tiedemann's body?

UNIT-II

- 2. Answer any **two** of the following questions: $5 \times 2 = 10$
 - a) Draw and describe the structure of a septal nephridia. Why it is known as enteronephric nephridia? (2+2)+1=5
 - b) Write down the changes that occur due to torsion in gastropods and the advantages of these changes. 4+1=5
 - c) Write the characteristic features of two larval forms of Echinodermata with suitable diagram.

$$(2\frac{1}{2}+2\frac{1}{2})=5$$

d) Describe the general characteristics of Onychophora giving one example. Why Onychophora is said to be connecting link between Annelida and Arthropoda? 4+1=5

UNIT-III

3. Answer any **one** of the following questions:

$$10 \times 1 = 10$$

- a) Classify Phylum Mollusca up to Class with characteristic features and example. 2+8=10
- b) Describe the structure of an ommatidium of Prawn with suitable labelled diagram (longitudinal section). Briefly describe the mechanism of formation of a superposition image by a compound eye. (5+2)+3=10