

2019

B.Sc. (Hons.)

2nd Semester Examination

ZOOLOGY

Paper—C3T

Non Chordates

Full Marks : 40

Time : 2 Hours

The figures in the margin indicate full marks.

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

1. Answer any five questions : $5 \times 2 = 10$

- (a) Mention one chordate and one non chordate feature of Balanoglossus sp.
- (b) Distinguish between worker and soldier termite.
- (c) Name the earlier larvae of asteroidea and holothuroidea
- (d) What is madreporite ?
- (e) Distinguish between protonephridia and metanephridia

[Turn Over]

(2)

- (f) Name the only non-chordate phylum endemic to terrestrial habitat ? What is velvet worm ?
- (g) What do you mean by metameric segmentation?
- (h) Name one phylum which is exclusively marine. Give two salient features of that phylum.

2. Answer any *four* questions : 4×5=20

- (a) What are schizocoelic and enterocoelic coelom? State the difference between protostome and deuterostome with examples.

2+3

- (b) With diagram describe the structure of excretory system in class Hirudinea. 2+3

- (c) Comment on biochemical evidences, to trace affinity of echinodermata with hemichordata. Name the larva of hemichordata. 4+1

- (d) With necessary diagram describe the structure of gill in prawn.

- (e) Write a note on metamerism in annelida.

- (f) Describe the nervous system of any gastropoda with labelled sketches. 3+2

(3)

3. Answer any *one* question : $1 \times 10 = 10$

(a) Place the following animals into respective phyla and classes with two salient features for each taxa.

Nereis sp, Antedon sp, Limulus sp, Pila sp

$$2\frac{1}{2} \times 4 = 10$$

(b) Write short notes on any *two* of the following :
5+5

(i) Structure of a single ommatidium.

(ii) Role of hormone in insect metamorphosis

(iii) Respiration in Pila.
