2020
ZOOLOGY (Honours)
Paper- ZOOL-H-DC-2-T
[Non-Chordates - II (Coelomates)]
(CBCS)

Full Marks : 25   Time : Two 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 *eight* questions :   ½×8=4

   (a) Leech belongs to the class _____ . (Fill in the blank)

   (b) The main body cavity of Arthropods is a _____ (Fill in the blank).

   (c) The role of typhlosole in the intestine of earthworm is _____. (Choose the correct option)

      (i)   To increase absorptive surface

      (ii) To control flow of blood

      (iii) To kill bacteria

   (d) In echinoderms anus develops from blastopore. (True or False)

   (e) Give an example of wing-less insect.

   (f) Book lung is the respiratory organ of _____ (Fill in the blank).

   (g) Name the notochord-like structure found in Hemichordata.

(h) The mouth parts of housefly are sucking and _____ type (Fill in the blank).

(i) Cuttlefish is the common name of _____ sp. (Fill in the blank)

(j) Name the larva which is present only in members of gastropods.

(k) Aristotle's lantern is found in _____ (star fish / sea urchin).

(l) What is the meaning of the term, "hemichordate"?

2. Answer any *two* questions :   2½×2=5

(a) Write the significance of metamerism.

(b) Write the characteristics of phylum Hemichordata.

(c) Write a short note on detorsion.

(d) Differentiate pseudocoelom and coelom with examples.

3. Answer any *four* questions :   4×4=16

(a) Write the general characteristics of phylum annelida with example.

(b) With a neat diagram briefly describe the different parts of the water vascular system of *Asterias* sp.

(c) Describe the mode of aquatic respiration in *Pila* sp. with proper diagram.

(d) Briefly describe the general characteristics and evolutionary significance of Onychophora.   2+2=4

(e) Briefly describe the mechanism of blood circulation in earthworm.

(f) Discuss the relationship of hemichordata with non-chordates and chordates.

(g) Briefly describe the metamorphosis in any Lepidopteran insect.

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