



2019/TDC/EVEN/ZOOHC-201T/009

TDC (CBCS) Even Semester Exam., 2019

ZOOLOGY

(2nd Semester)

Course No. : ZOOHCC-201T

(Non-Chordates—II : Coelomates)

Full Marks : 50

Pass Marks : 20

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

Answer all questions

UNIT—I

1. Answer any *two* of the following questions : $2 \times 2 = 4$

(a) Define metamerism. Name the germinal layer that lines the coelom.

(b) Differentiate between enterocoelus and schizocoelus animals.

(c) Write a brief note on the evolution of coelom.



(2)

2. (a) Write the general features of phylum Annelida. Classify Annelida up to classes with suitable examples. 3+3=6

Or

(b) Describe structure of testicular nephridia of leech with diagrams and the physiology of excretion. 4+2=6

UNIT—II

3. Answer any two of the following questions : 2×2=4

(a) Write four distinctive features of class Insecta.

(b) How many pairs of gills prawn possess? What is phyllobranch? 1+1=2

(c) Define metamorphosis. Name the hormones that regulate metamorphosis in insects. 1+1=2

4. (a) What is Ommatidium? Discuss the structure of Ommatidium and vision in Arthropoda through compound eye. 1+3+2=6

Or

(b) What is meant by social behaviour? Give an account of social organization in honeybee. 1+5=6

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(Continued)

(3)

UNIT—III

5. Answer any two of the following questions : 2×2=4

(a) What is the common name of Onychophorans? Write their geographical distribution at present.

(b) What is the function of oral papilla and slime glands in Peripatus?

(c) Write a short note on Xiphosura.

6. (a) Write the distinctive characters of Onychophora which are peculiar to them only. Discuss affinities of Onychophora and comment on their taxonomic positions. 2+3+1=6

Or

(b) What is Frontal organ in Limulus and how many pairs of walking legs do they possess? Describe the similarities and dissimilarities of Limulus with that of Arachnida. Comment on its phylogenetic position. 2+3+1=6

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(Turn Over)



(4)

UNIT—IV

7. Answer any two of the following questions : $2 \times 2 = 4$

(a) Write four distinctive features of class Cephalopoda. Cite examples.

(b) What is osphradium?

(c) What is pearl? Give scientific name of one marine pearl oyster.

8. (a) Describe double mode of respiration and respiratory devices in *Pila* with suitable diagrams. 6

Or

(b) Discuss the phenomenon of torsion in Gastropoda with necessary diagrams.

What is the significance of torsion in the life history of Gastropods? $3+2+1=6$

UNIT—V

9. Answer any two of the following questions : $2 \times 2 = 4$

(a) Write four distinctive features of the class Holothuroidea. Cite examples.

(b) Name major classes of phylum Echinodermata with two examples of each class.

(c) Give a short note on Bipinnaria larva of Echinoderms.

(5)

10. (a) Describe structural details of ambulacral system of *Asterias* with a neat labelled diagram. What is the functional significance of the system? $5+1=6$

Or

(b) Discuss affinities of Echinoderms with the Chordates. Comment on their phylogenetic position. $4+2=6$
