



WEST BENGAL STATE UNIVERSITY
B.Sc. Honours 2nd Semester Examination, 2019



ZOOACOR03T-ZOOLOGY (CC3)

Time Allotted: 2 Hours

Full Marks: 40

*The figures in the margin indicate full marks.
Candidates should answer in their own words and adhere to the word limit as practicable.
All symbols are of usual significance.*

1. Answer any **eight** questions from the following: 2×8 = 16
- Write two similarities of phylum Hemichordata with phylum Annelida.
 - What is ommatidium? Mention its function.
 - Name marine and fresh water oysters responsible for productions of pearl.
 - Define coelom. Name one pseudocoelomate animal.
 - Write two main characters of phylum Mollusca.
 - Name the phylum with (i) no fresh water animals and (ii) with largest number of animals.
 - How do you justify the name "Hemichordata"?
 - What is madreporite? Write its function.
 - Name the phylum to which *Peripatus* belongs. Write two characters of the phylum.
 - Write the functions of radula and osphradium.
 - What do you mean by "metamere"? Which two body-parts never be metameric?
 - What is the difference between open and closed types of blood circulation?
2. Answer any **three** questions from the following: 3×3 = 9
- Draw, label and describe the structure of Pluteus larva. 1+1+1
 - In which phylum following structures are found? 1+1+1
 - Cirri,
 - Ctenidia,
 - Tiedmann's body
 - Briefly illustrate the divisions of labour found in different castes of a honey bee. 3
 - State significance of torsion in gastropods. 3
 - Write short note on any one: (i) Schizocoelom, (ii) Book lung. 3×1 = 3

3. Answer any *three* questions from the following: 5×3 = 15
- (a) Name the phylum and class of the following animals: 1×5
(i) *Lepisma* sp., (ii) *Saccoglossus* sp., (iii) *Nereis* sp.,
(iv) Squids, (v) Sea cucumber
- (b) Classify phylum Annelida up to classes with example. 5
- (c) Discuss the different types of metamorphosis found in insects with suitable example. 5
- (d) Write the scientific names of two pearl forming bivalves. What is the mechanism of natural pearl formation? What is blister pearl? 2+2+1
- (e) Draw and label the component parts of a typical water vascular system of *Asterias* sp. and briefly describe the mechanism of water-flow through it. 3+2

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