



WEST BENGAL STATE UNIVERSITY
B.Sc. Honours 2nd Semester Examination, 2022

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.*

1. Answer any **eight** questions from the following: 2×8 = 16
- What is chiastaneury?
 - What is coelom? Name one pseudocoelomate animal.
 - Write the functions of radula and osphradium.
 - Mention two functions of worker bees in a honey comb.
 - Write two similarities of Phylum Hemichordata with Phylum Annelida.
 - Write two characters of Bipinnaria larva of Phylum Echinodermata.
 - Mention the function and location of tubefeet.
 - What is madreporite? State its function.
 - What is Parapodia? Where is it found?
 - What is ink gland? State its function.
 - What is metamere? Name an animal which shows true metamerism.
 - Define a metabolous metamorphosis in insects. Give example.
2. Answer any **three** questions from the following: 3×3 = 9
- To which Phylum does the following structures belong and mention one function of each
(i) Clitellum (ii) Malpighian tubules (iii) Ctenidia
 - State the general characteristic features of Phylum Onychophora.
 - Compare between Schizocoelous and enterocoelous mode of coelom formation.
 - Draw a labelled diagram and write the salient features of Pluteus larva. 1+2
 - State the advantages and disadvantages of torsion in Gastropods.
3. Answer any **three** questions from the following: 5×3 = 15
- Name the Phylum and class of the following animals—
(i) Sea cucumber (ii) King crab (iii) Devil fish (iv) *Saccoglossus* sp.
(v) *Hirudinaria* sp.

- (b) Write short notes on any *two* of the following: $2\frac{1}{2} \times 2 = 5$
- (i) Holometabolous metamorphosis of insects
 - (ii) Reproductive caste of termites
 - (iii) Protonephridia
- (c) Describe the structure associated with aquatic respiration in mollusca with suitable diagram. 3+2
- (d) Describe the structure of water vascular system of *Asterias* sp. with a suitable diagram. 3+2
- (e) Classify Phylum Annelida up to class with suitable examples.

N.B. : *Students have to complete submission of their Answer Scripts through E-mail / Whatsapp to their own respective colleges on the same day / date of examination within 1 hour after end of exam. University / College authorities will not be held responsible for wrong submission (at in proper address). Students are strongly advised not to submit multiple copies of the same answer script.*

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