



WEST BENGAL STATE UNIVERSITY
B.Sc. Honours 2nd Semester Examination, 2020

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
- (a) State two main characteristics of Phylum Annelida.
 - (b) Define “Nacre”.
 - (c) Name the hormones that control metamorphosis in insects.
 - (d) Define rhabdomere.
 - (e) Define stone canal. Write its functions.
 - (f) What is coelomoducts?
 - (g) What do you mean by mosaic vision?
 - (h) Differentiate between haemolymph and haemocyanin.
 - (i) State two characteristic features of Bipinnaria larva of Echinodermata.
 - (j) What is the function of Drone bees?
 - (k) Define chiastoneury.
 - (l) State two examples (Scientific names) of subphylum Crustacea of Phylum Arthropoda.
 - (m) Differentiate between torsion and detorsion.
 - (n) How do you justify the name Echinodermata?
 - (o) Name one acoelomate and one coelomate animal.
2. Answer any **three** questions from the following: 3×3 = 9
- (a) Write short note on any **one**: 3×1
 - (i) Nephridium
 - (ii) Ctenidia
 - (b) State the general characteristics of Onychophora.
 - (c) In which Phylum the following structures are found? 1+1+1
 - (i) Osphradium
 - (ii) Rectal gills
 - (iii) Ambulacral groove

- (d) Briefly describe the various castes found in the social life of a termite.
- (e) Discuss the advantages of torsion.
- (f) Why are hemichordates not considered as chordates?
- (g) Describe Hemimetabolous metamorphosis in insects with suitable diagram. 2+1

3. Answer any *three* questions from the following: 5×3 = 15

- (a) Briefly describe the structure of Auricularia larva with proper diagram. 3+2
- (b) Name the Phylum and Class of the following animals:
 - (i) Sea Lily
 - (ii) *Bombyx mori*
 - (iii) *Hirudinaria sp.*
 - (iv) Cuttlefish
 - (v) *Dolichoglossus sp.*
- (c) Classify Phylum Echinodermata up to classes with examples.
- (d) State briefly the significance of Trochophore larva.
- (e) Describe the structures associated with terrestrial respiration process in Mollusca with suitable diagram. 3+2
- (f) Write short notes on any *two* of the following: 2 $\frac{1}{2}$ × 2
 - (i) Superposition image
 - (ii) Arthrobranch gill
 - (iii) Nuptial flight of honey bee
- (g) Describe briefly different types of metamerism found in different animals with suitable diagrams.

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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