

Reg. No. :

Code No.: 6536

Sub. Code: ZZOM 11

M.Sc. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2021

First Semester

Zoology - Core

STRUCTURE AND FUNCTION OF INVERTEBRATES

(For those who joined in July 2021 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. Systema Naturae was written by
 - (a) Wallace
 - (b) Linnaeus
 - (c) Charles Darwin
 - (d) Aristotle
2. Phylogenetic classification is based on
 - (a) External similarity
 - (b) Common evolution
 - (c) Habit and habitat
 - (d) Utilitarian system

3. Contractile vacuole in a protozoan is responsible for
 - (a) Ingestion
 - (b) Locomotion
 - (c) Digestion
 - (d) Osmoregulation
4. Torsion is the characteristic of
 - (a) Gastropoda
 - (b) Scaphopoda
 - (c) Pelecypoda
 - (d) Aplacophora
5. Amoeba respire through its
 - (a) Plasmalemma
 - (b) General body surface
 - (c) Cytoplasm
 - (d) Pellicle
6. Amoeba shows
 - (a) Phototaxis
 - (b) Chemotaxis
 - (c) Thermotaxis
 - (d) All the above
7. Pinctata belongs to the class
 - (a) Cephalopoda
 - (b) Scaphopoda
 - (c) Gastropoda
 - (d) Bivalve
8. Shell of Mollusca is secreted by
 - (a) Ectodermis
 - (b) Endodermis
 - (c) Mantle
 - (d) All the above
9. The larva of echinoderm shows
 - (a) Radial symmetry
 - (b) Biradial symmetry
 - (c) Pentamerous symmetry
 - (d) Bilateral symmetry

10. Tube feet of echinoderms help in
(a) Respiration (b) Locomotion
(c) Capture of prey (d) All of these

PART B — ($5 \times 5 = 25$ marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Explain the Natural classification.
Or
(b) Differentiate the Acoelom and Pseudocoelom.
12. (a) Describe the food and feeding mechanism of scorpion.
Or
(b) Explain the food and feeding habits of star fish.
13. (a) Write a brief account on aerial respiration.
Or
(b) List out the types of tracheae.
14. (a) Write the evolution of the nervous system.
Or
(b) Write the earthworm nervous system.
15. (a) Enlist the biological importance of trochophore larva.
Or
(b) Write the larval forms of Arthropoda in Nauplius.

PART C — ($5 \times 8 = 40$ marks)

Answer ALL questions, choosing either (a) or (b)
Each answer should not exceed 600 words.

16. (a) Discuss the Binomial nomenclature.
Or
(b) Write a detailed account on taxonomic collection of biological specimens.
17. (a) Explain the digestion of Protozoa.
Or
(b) Describe the digestive system of Prawn.
18. (a) Enumerate the mechanism of respiration invertebrates.
Or
(b) Describe the excretory system of Palaemon.
19. (a) Specify the nervous system of nereis.
Or
(b) Discuss the scorpion nervous system.
20. (a) Write the characteristic of Crustacean and their example any three.
Or
(b) Write the following
(i) Bipinnaria larva
(ii) Brachiolaria larva.
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