

Avinashilingam Institute for Home Science and Higher Education for Women
(Deemed to be University), Coimbatore- 641043

Master's Degree Examination- November 2018
SEMESTER - I

CLASS: I PG
MAJOR: Zoology

Time : 3 Hr
Max. Marks: 60

17MZOC01 Functional Morphology of Invertebrates

PART-A

10x1/2 = 5

Choose the correct answer

1. What does ICZN stand for?
(a) International Council of Zoological Nomenclature
(b) International Code of Zoological Nomenclature
(c) Indian Code of Zoological Nomenclature
(d) Indian Council for Zoological Nomenclature
2. Protoplasmic grade organization found in
(a) *Amoeba* (b) Hydra (c) Sponge (d) a & b
3. Locomotion of *Globigerina* is
(a) Filopodia (b) Rhizopodia (c) Lobopodia (d) Axopodia
4. Great wing, mucous bag and food cup are associated with
(a) filter feeding (b) sand feeding (c) mud feeding (d) browsers
5. Respiratory pigment in Phyla
(a) Haemerythrin (b) Haemovyanin
(c) Haemoglobin (d) Chlorocruorin
6. Cyclosis referred as
(a) circulation of cytoplasm within a cell
(b) circulation of cytoplasm between cells
(c) Both a & b (d) circulation of blood between cells
7. Bilobed structure of brain present above the oesophagus of crustacean is called
(a) supra ganglia (b) oesophagus ganglia
(c) supra-oesophagus ganglia (d) None of the above
8. Ommatodium is a
(a) compound eye (b) simple eye
(c) antennules (d) All the above
9. Function of Green glands is
(a) respiration (b) excretion (c) reproduction (d) digestion
10. The first fundamental larval stage in all crustaceans
(a) nauplius (b) mysis (c) Zoea (d) Phyllosoma

PART-B

5x4 =20

Answer all questions

Answer should not exceed 200 words or one page

- 11 (a) Discuss about Binomial Nomenclature
(Or)
(b) Differentiate radial, bilateral and biradial symmetry with examples.
- 12 (a) Explain the Amoeboid movement.
(Or)
(b) Illustrate the filter feeding mechanism of Polychaetes.
- 13 (a) List out the different respiratory pigments in invertebrates with examples.
(Or)
(b) Give an account on gas exchange system of sponges.
- 14 (a) With suitable diagram explain the primitive nerve system of Coelenterata.
(Or)
(b) What is Osphradium?. Explain the function of Osphradium.
- 15 (a) Draw a neat diagram of green gland and brief its Physiological functions.
(Or)
(b) Discuss about Zoea larva.

PART-C

5x7 =35

Answer all questions

Answer should not exceed 600 words or three pages

- 16 (a) Interpret the natural, artificial and phylogenetic classification
(Or)
(b) Discuss about the organization of coelom in invertebrates with suitable diagram .
- 17 (a) What is Ciliary movement explain with reference to *Paramecium*?
(Or)
(b) Draw a neat diagram of water vascular system of star fish and explain.
- 18 (a) With suitable diagram explain the Gills respiration of Crustacean.
(Or)
(b) Differentiate the open and closed circulatory systems in invertebrates.
- 19 (a) Give an account on structure and function of Annelida nerves system.
(Or)
(b) Describe various sense organs of invertebrates.
- 20 (a) Explain structure and function of Nephridia.
(Or)
(b) List out different larval forms of Echinodermata and explain their evolutionary Significance.
