

*Total number of printed pages – 4*

**63 (FY)SEM-5/MIN/ZOOMIN3014**

**2025**

**ZOOLOGY**

( Minor )

Paper : ZOOMIN3014

**[ Taxonomy and Diversity of Life-I  
( Non-Chordates ) ]**

*Full Marks : 50*

*Pass Marks : 20*

*Time : Two hours*

***The figures in the margin indicate  
full marks for the questions.***

1. Choose the correct answer : 1×5=5

(a) The system of scientific naming using two words was proposed by

(i) Aristotle

(ii) Darwin

(iii) Linnaeus

(iv) Lamarck

- (b) ICZN deals with the nomenclature of
- (i) Plants
  - (ii) Animals
  - (iii) Bacteria
  - (iv) Viruses
- (c) Locomotion in Amoeba takes place by
- (i) Cilia
  - (ii) Flagella
  - (iii) Pseudopodia
  - (iv) Parapodia
- (d) Torsion in gastropods results in
- (i) Straightening of the body
  - (ii) 180° twisting of visceral mass
  - (iii) Loss of shell
  - (iv) Formation of operculum
- (e) The canal system is a characteristic feature of
- (i) Cnidaria
  - (ii) Porifera
  - (iii) Annelida
  - (iv) Mollusca

2. Answer the following : **(any five)** 2×5=10
- (i) State *any two* rules of taxonomic nomenclature.
  - (ii) Write a short note on locomotion in Paramecium.
  - (iii) Mention *two* features of spicules in sponges.
  - (iv) Write *two* features of coral reefs.
  - (v) Mention *two* classes of Phylum Annelida with examples.
  - (vi) Write about trachea as respiratory organs of Arthropoda.
  - (vii) What is the function of nephridia in Annelida ?
3. Answer the following questions : **(any five)**  
5×5=25
- (i) Describe the principles and importance of the ICZN.
  - (ii) Explain reproduction in Amoeba.
  - (iii) Describe the canal system in Porifera with a neat diagram.
  - (iv) Explain polymorphism in Cnidaria with suitable examples.

- (v) Describe the life cycle and pathogenicity of *Taenia solium*.
- (vi) Give an account of excretion and vision in Arthropoda.
- (vii) Explain torsion and detorsion in Gastropoda.
- (viii) Describe the water vascular system in Asterozoa and its functions.

4. Answer the following questions : **(any one)**  
10×1=10

- (i) Discuss the evolutionary significance of Onychophora, highlighting its characters as connecting link.
- (ii) Discuss the affinities of Echinoderms with other animal groups.