Total No. of Printed Pages: 2

SUBJECT CODE NO: - SS-6648
FACULTY OF SCIENCE AND TECHNOLOGY
M.Sc. (Zoology) (Sem-I)
Examination May / June - 2023
Biosystematics and Animal Diversity ZOO-101

[Time: 3:00 Hours] **[Max. Marks: 80]**

Please check whether you have got the right question paper.

N. B
1) Question paper is divided in Part-A & Part –B.
2) Part - A is Compulsory.
3) Attempt any five question from the Part-B.
4) Draw well labelled diagrams wherever necessary.

PART- A

Q.1 Attempt the following Multiple choice questions. **20**

1. Classical taxonomy is also referred as _____.
   a) β – taxonomy b) Systamatics
   c) descriptive taxonomy d) experimental taxonomy

2. 'Species' comprises of a population
   a) Interbreeding b) Sharing the same Niche
   c) Reproductive isolated d) feeding over same food

3. Taxonomy deals with
   a) Classical taxonomy b) Chemotaxonomy
   c) Phylogeny d) experimental taxonomy

4. Diatoms are grouped under
   a) Chrysophytes b) Protozoans c) Dianoflagellates d) Euglenoids

5. Which of the following taxa does not belong to the same Cnidarian class as the others?
   a) Hydrocorals b) Gorgonians c) Hydroids d) Siphonophors.

6. Platyhelminthes is considered a primitive phyllury in protosomia because
   a) Nervous system lacking b) an anus is present
   c) Pseudocoelomic d) Celom is true

7. Phylum Porifera is classified based on
   a) Branching b) Symmetry c) Reproduction d) Spicules

8. Periplaneta belongs to which phylum
   a) Mollusca b) Arthropda c) Annelida d) Echinodermata

9. Ernst Mayr postulated
   a) Morphological Species Concept c) Evolutionary Species Concept
   b) Biological Species Concept d) Lineage Species Concept

10. Pseudopodia in Amoeba is / are types
   a) Lobopodia b) Filopodia c) Axopodia d) All of above

PART - B
(Attempt any Five) **12**

Q.2 Write an essay on ethics in taxonomy.

Q.3 Describe Structural and functional adaptation in fishes. **12**

Q.4 Different theories of Metazoan origin. **12**

Q.5 Concept of species and speciation. **12**

Q.6 Explain general characters, classification and systematic position of cephalochordata. **12**

Q.7 Explain evolutionary advantages of coelom. **12**

Q.8 Note on (Any two) **12**
1. IEZN
2. Cambrian explosion
3. Phylogenetic trees.