

**MSZ**  
**First Semester**  
**Animal Diversity, Taxonomy and Biosystematics**  
**(MSZ-01)**

**Duration: 3 Hrs**

**Full Marks - 70**

**PART B: Descriptive**

**Duration: 2 Hrs 40 minutes**

**Marks - 50**

**1. Answer the following questions (Any five) : 2 × 5 = 10**

- a) Name the different respiratory pigments.
- b) Write four significances of artificial parthenogenesis.
- c) How did chordate originate?
- d) Write about types of asexual reproduction in Ectoprocta.
- e) What is taxonomic key? Define with examples.
- f) Differentiate between taxonomy and classification.
- g) Write a brief note on body organization of amoeba.

**2. Answer the following questions (Any five) 3 × 5 = 15**

- a) Describe in brief about the Crustacean mode of feeding.
- b) What is a hermaphrodite?
- c) Define parthenogenesis. What are the different types of parthenogenesis?
- d) Write in briefly about the organs of respiration in organisms.
- e) Write a note on the history of classification.
- f) What is hierarchy of categories in taxonomy? Define with examples.
- g) Write a short note on ICZN (International code of Zoological nomenclature).

**3. Answer the following questions (Any five)**

**5 × 5 = 25**

- a) What are the different layers of vertebrate integumentary system? Explain briefly.
- b) Write a short note on Edysone of Juvenile hormone.
- c) What is Sol Gel theory? Discuss.
- d) What is the need of biological classification? Write on the different types of biological classification.
- e) What are chemotaonomy, cytotaxonomy, numerical and molecular taxonomy. Elaborate on each.
- f) Discuss on the different species concepts.
- g) Discuss the general characteristics of protochordata, eurochordata and cephalochordata.

\*\*\*\*\*

**MSZ**  
**First Semester**  
**Animal Diversity, Taxonomy and Biosystematics**  
**(MSZ-01)**

**PART A: Objective**

**Duration : 20 minutes**

**Marks - 20**

1. Looping movement is found in
  - a) Protozoa
  - b) coelenterate
  - c) Platyhelminthes
  - d) None of the above
  
2. Artificial parthenogenesis caused by-
  - a) Strychuine
  - b) Maltose
  - c) Warm water
  - d) All of the above
  
3. Germination is the process of
  - a) Sexual reproduction
  - b) Asexual reproduction
  - c) Partenogenesis
  - d) All of the above
  
4. Corona or wheel organ is the most striking feature of
  - a) Protozoa
  - b) Porifera
  - c) Rotifera
  - d) None
  
5. Euglena moves with the help of
  - a) Pseudopodia
  - b) Cilia
  - c) Flagella
  - d) All of the above
  
6. In insects excretion is carried out by
  - a) Rectum & Malphigian tubule
  - b) Hemocoel
  - c) Remocoel & Rectum
  - d) Hindgut and Midgut
  
7. What is the "angle of attack" in flying mechanics?
  - a) Angle made by butterflies while flying
  - b) Angle of birds wing with respect to the direction of flight.
  - c) Angle made between the limbs and body of birds.
  - d) None of These
  
8. Phylogenetic classification is based on
  - a) Artificial characters
  - b) Ancestral characters
  - c) Both
  - d) none of these

9. Binomial nomenclature consists of two names –
- a) Phylum and species                      b) Class and species  
c) Genus and species                         d) species & subspecies
10. The father of taxonomy is
- a) Bentham- Hooker                            b) Aristotle  
c) Carolus Linnaeus                            d) Engler
11. Animals are characterised by
- a) Absence of cell wall                         b) Absence of Chlorophyll  
c) active locomotion                            d) All these
12. Who introduced binomial nomenclature?
- a) Hutchinson                                    b) Bentham  
c) C. Linnaeus                                    d) Prantle
13. Which of the following group contains the most closely related organisms'?
- a) Class    b) Phylum  
c) Order    d) Genus
14. Protozoans are
- a) Diploblastic                                    b) triploblastic  
c) lack germ layers                              d) single germ layered
15. Which of the following is not a taxonomical aid?
- a) Zoological gardens                            b) Taxonomic key  
c) Bacteria & viruses                            d) Herbarium
16. Flatworms are
- a) Coelomate                                      b) Acoelomate  
c) Pseudocoelomate                              d) None of the above
17. Prothoracicotropic hormone is the precursor for -----
18. Feeding mechanism in crustacean is called-----
19. Haploid parthenogenesis is also known as-----
20. Mode of nutrition in protozoa is
- a) Holozoic                                         b) Somersaulting  
c) Both    d) filter feeding

\*\*\*\*\*