

## SECTION-A

## (Multiple Choice Questions (MCQ's))

- Q.1 Choose the correct answer for each from the given option:**
- (i) Study of structure, function and composition of cell is called:  
 (a) Cell-Biology (b) Histology  
 (c) Anatomy (d) genetic Engineering
- (ii) Prokaryotic cells do not contain:  
 (a) Nucleus (b) Cell-membrane  
 (c) Ribosome (d) Membrane bound nucleus
- (iii) Closely related species are grouped together into:  
 (a) Family (b) Genus (c) Order (d) Class
- (iv) Nucleus of cell was discovered by:  
 (a) Robert Hooke (b) Schleiden  
 (c) Robert Brown (d) Virchow.
- (v) The number of chambers in the heart of frog is:  
 (a) Two (b) Three (c) Four (d) Five
- (vi) Characteristic of viruses due to which they are considered as living:  
 (a) Noncellular structure (b) Total Parasite  
 (c) Undergo crystallization (d) Undergo reproduction
- (vii) Streptococci are the bacteria which occur:  
 (a) Two in number (b) Four in number  
 (c) In Chain (d) In bunch
- (viii) The characteristic not associated with fungi.  
 (a) Non-chlorophyllous (b) Coenocytic  
 (c) Body called mycelium (d) True cellulose
- (ix) Which one is not an Alga?  
 (a) Chlorella (b) Volvox  
 (c) Spirogyra (d) Yeast
- (x) The group of Funaria is:  
 (a) Hepaticae (b) Musci  
 (c) Hornwort (d) Anthocerotae
- (xi) It is not multicellular.  
 (a) Porifera (b) Arthropoda  
 (c) Nematoda (d) Protozoa
- (xii) These are exclusively marine.  
 (a) Protozoa (b) Annelida  
 (c) Echinodermata (d) Mollusca
- (xiii) It has no teeth in mouth.  
 (a) Shark (b) Frog  
 (c) Elephant (d) Sparrow
- (xiv) It gives birth to young one:  
 (a) Pigeon (b) turtle (c) Dog (d) None of these
- (xv) Organisms which use inorganic material from environment as nutrient are:  
 (a) Saprophytes (b) Parasites  
 (c) Autotrophs (d) None of them
- (xvi) Glycogen is molecule that belongs to:  
 (a) Carbohydrate (b) Fats (c) Protein (d) Vitamins
- (xvii) The respiratory organs of insects are:  
 (a) Flame cells (b) Malpighian tubules  
 (c) Tracheae (d) Lungs

## Section-B (Short Answers)

**Note:** Answer any EIGHT of the following questions. Each question carries 5 marks.

- Q.2 Define Physiology and Taxonomy.  
 Q.3 Sponges are sessile. How do they get food while staying at one place?  
 Q.4 Define cell and Tissue.  
 Q.5 Why is upper surface of dicot leaf much darker than the lower surface?  
 Q.6 Distinguish between " Mitochondria and Plastids.  
 Q.7 Distinguish between Prokaryotic cell and Eukaryotic cell.  
 Q.8 What are units of classification.  
 Q.9 What are the four types of bacteria according to shapes?  
 Q.10 Briefly mention the scientific contribution of Abu- Ali- Sina and Ali bin Isa.  
 Q.11 Define Gymnosperms.  
 Q.12 Why are amphibians regarded as having "dual life"?  
 Q.13 Define the terms of Fauna, Fauna and Flora.

## Section-C (Descriptive)

**Note:** Answer any TWO of the following questions in detail. Each question carries 14 marks.

- Q.14 Describe digestive system of frog with the help of diagram.  
 Q.15 Discuss in detail the discovery characteristics, structure and types of viruses.  
 Q.16 Give economic importance of fungi.