

General Instructions :

The question paper is divided into four sections.

1. **Section A :** Q.No.1 contains Seven multiple choice type of questions carrying one mark each.
 - i) For each multiple choice type of questions it is mandatory to write the correct answer along with its alphabet. eg. a) / b) / c) / d) etc. No marks shall be given if **ONLY** the correct answer or alphabet of the correct answer is written.
 - ii) In case of MCQ, evaluation will be done for first attempt only.
- Q.No.2 contains Seven very short answers type of questions carrying one mark each.
2. **Section B :** Q.No.3 to Q.No.13 are short answer type of questions carrying two marks each.
3. **Section C :** Q.No.14 to Q.No.19 are short answer type of questions carrying three marks each.
4. **Section D :** Q.No.20 to Q.No.23 are long answer type of questions carrying four marks each.
5. Begin the answer of each section on a new page.

Section - A**Q.1 Select and Write the correct answer.****(7)**

- i) Taxonomical aid used for classification of plants and animals which is based on contrasting characters
 - a) Herbarium
 - b) Museum
 - c) Key
 - d) Zoo
- ii) Causative agent of red tide is _____
 - a) Dinoflagellate
 - b) Euglenoid
 - c) Chrysophyte
 - d) Lichen
- iii) _____ is an oviparous mammal.
 - a) Macaca
 - b) Pteropus
 - c) Macropus
 - d) Duck billed platypus
- iv) Cell wall is present in
 - a) Plant cell
 - b) Prokaryotic cell
 - c) Algal cell
 - d) All of the above
- v) Which of the following is a Brown algae
 - a) Laminaria
 - b) Pteris
 - c) Ulothrix
 - d) Gelidium
- vi) Schwann cells and nodes of Ranvier are found in
 - a) Neurons
 - b) Chondroblast
 - c) Osteoblasts
 - d) Epimysium
- vii) Which one of the following belongs to subphylum Cephalochordata ?
 - a) Amphioxus
 - b) Herdmania
 - c) Petromyzon
 - d) Ascidia

Q.2 Answer the following questions.**(7)**

- i) What are neuroglial cells?
- ii) Define cell
- iii) Name the Limbless amphibian.
- iv) Name the flightless bird.
- v) Enlist the accessory pigments of algae.
- vi) Unicellular eukaryotic organism is included in which kingdom ?
- vii) What is a herbarium ?

Section - B**Attempt any Eight****(16)**

- Q.3 What will be the shape of a bacillus and coccus type of bacteria?
- Q.4 Draw neat and labelled diagram of Paramoecium.
- Q.5 Write a note on economic importance of fungi.
- Q.6 Differentiate between Plantae and Animalia.
- Q.7 Draw neat and labelled diagram of Spirogyra.
- Q.8 Differentiate between Rhodophyceae and Phaeophyceae.
- Q.9 Give adaptations in Aves for flying.
- Q.10 Differential between : Chlorophyceae and Phaeophyceae
- Q.11 "Lysosomes are called suicide bags of the cell". Why?
- Q.12 Write a note on economic importance of algae.
- Q.13 How are neurons classified depending on the presence or absence of myelin sheath?

Section - C**Attempt any Four****(12)**

- Q.14 Draw a neat labelled diagram of Structure of multipolar neuron.
- Q.15 Describe the structure of mitochondria.
- Q.16 What are the types of Plastids?
- Q.17 Mention the characteristics feature of class Cyclostomata.
- Q.18 Write a note on Chlorophyceae.
- Q.19 What are the essentials of a good herbarium?

Section - D**Attempt any Two****(8)**

- Q.20 Give important features of class Mammalia.
- Q.21 Explain the structure of plasma membrane on the basis of Fluid Mosaic Model.
- Q.22 Describe the structure of Nucleus.
- Q.23 Differentiate between Medullated and Non-Medullated nerve fibre.
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