

XI First Semester Exam - 2023

Biology Question Bank

Section A

Q1. Select and write the correct answer.

1. Taxonomical aid used for classification of plants and animals which is based on contrasting characters
 - a. Herbarium
 - b. Museum
 - c. Key
 - d. Zoo
2. The statement in a key is called
 - a. Herbarium
 - b. Biodiversity
 - c. Museum
 - d. Lead
3. Which of the following shows single standard RNA and lacks protein coat?
 - a. Bacteriophage
 - b. Plant virus
 - c. Viroid
 - d. Animal Virus
4. Causative agent of red tide is
 - a. Dinoflagellate
 - b. Euglenoid
 - c. Chrysophyte
 - d. Lichen
5. Which organism belongs to kingdom Monera?
 - a. Cyanobacteria
 - b. Mushroom
 - c. Euglena
 - d. Moss
6. Unicellular non-motile alga is
 - a. Chara
 - b. Chlorella
 - c. Funaria
 - d. Chlamydomonas

7. Which of the following is a brown algae?
 - a. Laminaria
 - b. Pteris
 - c. Ulothrix
 - d. Gelidium
8. Which one of the following belongs to subphylum Cephalochordata?
 - a. Amphioxus
 - b. Herdmania
 - c. Petromyzon
 - d. Ascidia
9. Select the animal having venous heart?
 - a. Crocodile
 - b. Salamander
 - c. Rohu
 - d. Toad
10. Which of the following is INCORRECT in case of birds?
 - a. Presence of teeth
 - b. Presence of scales
 - c. Nucleated RBCs
 - d. Hollow bones
- 11.----- is an oviparous mammal.
 - a. Macaca
 - b. Pteropus
 - c. Macropus
 - d. Duck billed platypus
12. Cell wall is present in
 - a. Plant cell
 - b. Prokaryotic cell
 - c. Algal cell
 - d. All of the above
13. Plasma membrane is
 - a. Selectively permeable
 - b. Permeable
 - c. Impermeable
 - d. Semipermeable

14. Mitochondria DNA is
- Naked
 - Circular
 - Double stranded
 - Each one of the above
15. Nissl's granules are found in
- Cartilage cell
 - Nerve cell
 - Muscle cells
 - Osteoblasts
16. Schwann cells and nodes of Ranvier are found in
- Neurons
 - Chondroblast
 - Osteoblasts
 - Epimysium

Q2. Answer the following question.

- What are neuroglial cells?
- Why neurons are not capable of regeneration?
- Define cell
- What is the function of contractile vacuole in paramecium?
- What are plastids?
- Name the limbless amphibian.
- Reptiles are known for having three chambered heart. Which animal shows a near four chambered condition in reptiles?
- Name the flightless bird.
- Enlist the accessory pigments of algae.
- Define nomenclature.
- Unicellular eukaryotic organism are included in which kingdom?
- What is a herbarium?

Section B

- Q 1. Write a note on "key" used as a taxonomical aid.
- Q 2. What will be the shape of a bacillus and coccus type of bacteria?
- Q 3. Draw neat and labelled diagram of Paramecium.
- Q 4. Write a note on economic importance of fungi.
- Q 5. Differentiate between Plantae and Animalia.

- Q 6. Draw neat and labelled diagram of Spirogyra.
- Q 7. Differentiate between Chlorophyceae and Phaeophyceae.
- Q 8. Differentiate between Rhodophyceae and Phaeophyceae.
- Q 9. Economics importance of algae.
- Q 10. Give adaptations in Aves for flying.
- Q 11. Explain the term totipotency.
- Q 12. "Lysosomes are called suicide bags of the cell". Why?
- Q 13. Mitochondria are power house of the cell. Give reasons.
- Q 14. How are neurons classified depending on the presence or absence of myelin sheath?

Section C

- Q 1. Draw a neat labelled diagram of Structure of multipolar neuron.
- Q 2. Distinguish between Plant cell and animal cell.
- Q 3. What are the types of Plastids?
- Q 4. Describe the structure of Mitochondria.
- Q 5. Write a short note on Amphibians.
- Q 6. Mention the characteristics feature of class Cyclostomata.
- Q7. Write a note on Chlorophyceae.
- Q 8. What are the essentials of a good herbarium?

Section D

- Q 1. Give important features of class Mammalia.
- Q 2. Explain the structure of plasma membrane on the basis of Fluid Mosaic Model.
- Q 3. Describe the structure of Nucleus.
- Q 4. Differentiate between Medullated and Non-Medullated fibre.