

II. Short Answer Type Questions

Question 1. Give the characteristics of Monera.

Answer:

- (a) Organisms are unicellular, do not have a defined nucleus.
- (b) Organisms may "have cell wall or may not have cell wall.
- (c) Mode of nutrition is either autotrophic or heterotrophic.

Question 2. Give the characteristics of Protista. Answer:

- (a) Organsims are unicellular and eukaryotic.
- (b) Use appendages for locomotion like cilia, flagella, etc.
- (c) Nutrition is either autotrophic or heterotrophic.
- (d) E.g., algae, protozoa.

Question 3. Give the difference between thallophyta and bryophyta. Answer:

Thallophyta	Bryophyta
differentiated into -root, stem.	Plant Body is differentiated into stem and leaf like structures. Example: Moss.

Question 4. What are hermaphrodites? Give two examples. Answer: When an organism has both the sexes, i.e., it can produce both sperms and eggs are called hermaphrodites. Example: Sponges, earthworms.

Question 5. Give the difference between monocots and dicots. Answer:

Monocots	Dicots
1. Seeds with one cotyledon.	Seeds with two cotyledons.
2. Leaves have parallel venation.	Leaves have reticulate venation.
3. Root system—fibrous.	Root system—tap root.

Question 6. Give the difference between two types of symmetry that animals show.

Answer: Symmetry—Bilateral and Radial

Bilateral Symmetry	Radial Symmetry
Any organism that has same design on left and right halves of the body.	Any organisms with a body design such that it can be divided into two equal halves from any radius.
Example: Earthworm, spider, cockroach.	Example: Starfish sea urchin.

Question 7. Differentiate between vertebrates and invertebrates. Answer:

Vertebrates	Invertebrates
Notochord is present. True internal skeleton present.	Notochord is absent. No true internal skeleton present.

Question 8. Name the phylum of the following animals:

- (a) Tapeworm (b) Starfish
- (c) Jellyfish (d) Octopus

Answer:

- (a) Tapeworm Flatyhelminthes
- (b) Starfish Echinodermatai
- (c) Jellyfish Coelenterata
- (d) Octopus Mollusca

Question 9. Identify the phylum for the following characteristics given:

- (a) Organisms with joint appendages.
- (b) Organisms are generally flat worms.
- (c) Body is segmented.
- (d) Skin of organisms is full of spikes.

Answer:

- (a) Arthropoda
- (b) Platyhelminthes
- (c) Ann elida
- (d) Echinodermata

Question 10. State the features of all chordates.

Answer: All chrodates possess the following features:

- 1. Have a notochord
- 2. Have a dorsal nerve chord
- 3. Are triploblastic
- 4. Have paired gill pouches

Question 11. Give general characteristics of Porifera.

Answer

- (a) Animals with pores all over the body.
- (b) Body is not well differentiated.
- (c) Non-motile animals, remain attached to solid support.
- (d) Body is covered with hard outer skeleton. Example, sponges.

Question 12. How are pores or holes all over the body of Porifera important?

Answer: The pores or holes present all over the body of the organisms lead to a canal system that helps in circulating water throughout the body to bring in food and oxygen.

Question 13. Give general characteristics of 'Platyhelminthes'? Answer:

- (a) These are flat worms.
- (b) Most of them are parasites.
- (c) Animals are triploblastic
- (d) No true internal body cavity.
- E.g., Tapeworm, planaria, Liver fluke.

Question 14. Give specific characteristics of Coelenterata.

Answer:

- (a) Water living animals.
- (b) Body is made of two layers of cells.
- (c) Some of them live in colonies (corals), while others have solitary life-span (Hydra).
- (d) Body cavity present.

Question 15. Give the characteristics of Arthropoda with 2 examples. Answer:

- (a) Arthropoda means jointed legs'.
- (b) Animals are bilaterally symmetrical and segmented.
- (c) It has an open circulatory system.
- (d) This is the largest group of animals.

Example: Spider, scorpionts, crabs, house flies.

Question 16. Give the characteristic features of Echinodermata. Answer:

- (a) Spikes present on skin.
- (b) Free living, marine animals.
- (c) Triploblastic and have a coelomic cavity.
- (d) Have a peculiar water driven tube system used for moving around.
- (e) Have hard calcium carbonate structure that is used as a skeleton.

Example, Starfish, seaurchin.

Question 17. Give the characteristics of mammals.

Answer:

- (a) Mammals are warm-blooded animals.
- (b) Four-chambered heart.
- (c) Mammary glands for production of milk to nourish their younger one.
- (d) Skin has hairs, sweat glands and oil glands.
- (e) Most of them produce their young ones (viviparous).

Question 18. What are the conventions followed for writing the scientific names?

Answer: The conventions followed while writing the scientific names are:

- 1. The name of the genus begins with a capital letter.
- 2. The name of the species begins with a small letter.
- 3. When printed, the scientific name is given in italics.
- 4. When written by hand, the genus name and the species name have to be underlined separately.

Question 19. Differentiate between algae and fungi Answer:

Algae	Fungi
Contain chlorophyll (green in colour).	1. Do not contain chlorophyll (non-green)
2. Autotrophic nutrition.	2. Heterotrophic nutrition.
3. Food is stored in the form of starch.	3. Food is stored in the form of glycogen.

Question 20. Name the phylum of the following organisms, whose exclusive characteristics is given below:

(a) Hollow bones

(b) Jointed

appendages

(c) Flat worm parasitic

(d) Round worms,

(e) Soft body, muscular marine animal (f) Radially symmetrical, spiny skin.

Answer:

- (a) Phylum chordata, subphylum—vertebrata, class—Aves
- (b) Phylum—Arthropoda
- (c) Phylum—Platyhelmithes
- (d) Phylum-Aschelminthes
- (e) Phylum-Mollusca

(f) Phylum—Echinodermata

Question 21. Give the characteristibs of amphibians.

Answer: Amphibians are vertebrates that lives on land and in water.

- (a) They are cold-blooded.
- (b) Heart is three-chambered.
- (c) Fertilization is external.
- (d) Respiration through lungs on land and through moist skin when in water. Example, Frog, Toads

Question 22. Give the characteristics of Aves.

Answer:

- (a) Aves/birds can fly.
- (b) Streamlined body.
- (c) Hollow and light bones.
- (d) Forelimbs are modified into wings.
- (e) Warm-blooded animals, heart with four chambers.
- (f) Egg laying animals.
- (g) Beak present, teeth are absent.

Question 23. Why do most of the amphibians lay their eggs in water and reptiles lay their eggs on land?

Answer: Amphibians lay their eggs in water because the tadpeles or young, ones that hatch out of egg has gills at initial stages, that allows them to breathe in water.

In case of reptiles the young ones that hatch out does not have gplls and the hatching of eggs requires warmth that is given by the mother, reptile.

Question 24. Give the hierarchy of 5 kingdom classification of living world.

Answer: Living World Eukaryotes E.g., blue-green algae Unicellular Multicellular -Protista E.g., protozoa with cellwall without cellwall Kingdom-Animalia Cannot prepare their own food can prepare their own food Kingdom-Fungi Kingdom-Plantae E.g., yeast and mushroom

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