

1. Which of the following animals are invertebrates?  
Housefly, silverfish, trout, jellyfish, whale, penguin, lizard, sponge
2. Write at least three differences between vertebrates and invertebrates.
3. Give the differences among classes of chordata in following terms:
  - (a) Heart chamber
  - (b) Mode of respiration
  - (c) Habitat
4. Fill in the blanks:
  - (a) \_\_\_\_\_ is an organism whose members can interbreed among themselves to produce fertile offspring.
  - (b) Mosses and liverworts belong to \_\_\_\_\_ sub division of plantae.
  - (c) \_\_\_\_\_ have parallel venation.
  - (d) \_\_\_\_\_ bears many pores on their body.
  - (e) Phylum \_\_\_\_\_ involves segmented worms.
  - (f) \_\_\_\_\_ is the largest phylum
5. Answer the following questions:
  - (a) Body symmetry in Echinodermata
  - (b) Snail, oysters belong to which phylum.
  - (c) Type of body cavity in annelids\_
  - (d) Why Monerans are called prokaryotes.
  - (e) Scientist who gave five kingdom classification methods .
6. Mark the sentence with true or false and rewrite the correct statement.
  - (a) Tigon is a hybrid of tiger and giraffe
  - (b) Thallophyta body can be differentiated into root, stem and leaves.
  - (c) Corvus splendens is the binomial name of hill crow.
  - (d) Sponges have a skeleton of microscope spicules.
  - (e) Nematodes have false coelom.
  - (f) Clitellum is the reproductive structure of arthropods.

7. Match the following column A with column B

Column A	Column B
Moulting	Roundworm
Ascaris	Hard $\text{CaCO}_3$ skeleton
Corals	Regrowing of exoskeleton
Cycas	Fungi
One cotyledon	Gymnosperm
Hyphae	Monocot

8. Given statements are incorrect. Write the correct statements of them

- (a) True coelom is present in Platyhelminthes
- (b) Arthropods have muscular foot for locomotion

9. Give the economic importance of earthworms.

10. Answer the following question in one word:

- a. Two chamber heart is found in which organism
- b. Which organisms have leathery shells on their eggs.
- c. The product of goat and sheep.
- d. Name a fish whose skeleton is made up of cartilage.

11. Define the following terms:

- a. Species
- b. Prokaryotic Cell
- c. Saprophytic Nutrition
- d. Binomial Nomenclature

12. Write some important characteristics of Arthropoda and class Mammalia.

13. Give difference among Platyhelminthes, Nematoda and Annelida.

14. Name the phylum to which the following organism belongs.

- a. Sea-urchin, brittle star
- b. Hookworm and Ascaris
- c. Jellyfish, corals and sea anemone
- d. Crabs, centipedes and scorpions

15. Under the term which does not match with

- a. Salamander: Slimy skin, hairs on body, 3-chamber heart
- b. Starfish: Bilateral symmetry, Marine, unsegmented
- c. Nereis: segmented body, pseudo coelom, nocturnal
- d. Sponges: pores on body, tissue level organization, aquatic animals

16. Give differences between following:

- a. Bryophyta and Pteridophyta
- b. Gymnosperm and Angiosperm
- c. Radial and Bilateral symmetry
- d. Cold Blooded and warm blooded organism
- e. Coelomates and Acoelomate