

International Indian School, Riyadh
WORKSHEET - SAT

SUBJECT - BIOLOGY

CLASS - IX

Chapter - 7

Diversity in living organisms

I Very short Answer type questions (1 mark)

1. Name the term which is used for the following.
(a) The left and right halves of the body have the same design.
(b) The animal tissue differentiated from the three embryonic germ layers.
2. Rewrite the scientific names correctly.
(a) panthera tigris (b) periplaneta Americana
3. State the phylum to which centipede and prawn belong.
4. Which division among plants has the simplest organisms?
5. Name the phylum in which the animals have water vascular system.
6. Name the group in which related genera are placed.
7. Name the group in which (a) Seeds are naked
(b) Reproductive organs are flowers
8. To which division of Cryptogams do algae belong?
9. Why are mammals so called?
10. In which groups are diploblastic animals found?
11. What is metameric segmentation? In which group of animals is it reported?
12. Why are bats not placed in birds?

13. Give one difference between cartilaginous and bony fishes.
14. Which group of plants is called vascular cryptogams?
15. Name the largest phylum among invertebrates.

I Short answer type questions (2 marks)

1. State any two characteristics of mammalia. Name two egg laying mammals.
2. An animal is dorsoventrally flattened, has three embryonic germ layers and is acoelomate. Which phylum does it belong to? What are they commonly called? Give one example.
3. List two distinguishing features between Annelid animals and Arthropods.
4. What is notochord? Mention its functions.
5. (a) Write one ^{main} characteristic feature that differentiates gymnosperms from Angiosperms.
(b) Give one example of each of Gymnosperm and Angiosperm.
6. Why bryophytes are called the amphibians of the plant kingdom?
7. (a) State two characteristic features of nematodes.
(b) Identify the phylum with the help of following features.
(i) Spiny-skinned, radially symmetrical and have tube feet
(ii) triploblastic, wormlike, having segmented body.
8. Name the group of angiosperms in which:
(a) one cotyledon is present
(b) two cotyledons are present.

9. Characteristics of some organisms are given. Identify the group and give one example of each.

- (a) Single celled, eukaryotic and photosynthetic
- (b) The body is divided into segments, may be unisexual.

10. What are the criteria for deciding divisions in plants different from the criteria for deciding the subgroups among animals?

Short answer type questions 3 marks.

1. Why do we keep both snake and lurcher in the same class?

2. Name the largest group of animals. Write the salient features of this group. Give two examples.

3. Differentiate between Bryophyta and Pteridophyta. Give one example of each.

4. Write the names used for the following.

- (a) Plants which bear seeds with two cotyledons
- (b) Animals which have pseudocoelom.
- (c) Animals which maintain a certain body temperature over a wide range of temperatures in the environment

5. State the appropriate terms for the following.

- a) Plants which bear seeds with 2 cotyledons
- b) Animals which do not have coelom
- c) Edible fungi

6. Identify the class of animals having the following characteristics.
- The warm blooded animals that lay eggs and have four chambered heart and a covering of feathers.
 - The cold blooded animals having scales and they breathe through lungs.
 - Give one example of animal belonging to each of these classes.

7. List any two basis of five kingdom classification proposed by Robert Whittaker. Mention in brief the basis of classification between (a) bacteria and fungi (b) plants and animals.

8. Draw a neat diagram of hydra. Label mesoglea and gastrovascular cavity. Name the group of animal it belongs to.
- Long answer type questions 5 marks

1. Draw a flow chart to show different divisions of kingdom plantae and answer the following.
- which division has the simplest plants.
 - To which division Pinus and Cycas belong.
 - What is the other name given to flowering plants? Classify them on the basis of number of cotyledons present in the seed.

2. State two characteristics features of vertebrates. State reasons for each of the following statements.

(a) Echidna and Platypus lay eggs but considered as mammals.

(b) Forelimbs of birds are modified

(c) Crocodiles have 4 chambered heart but are still reptiles.

3. A person enters a museum and observe the animal specimens - He looks at the one marked "Salamander" and call it a "lizard". How will you explain to him that Salamander and lizards belongs to two different classes. List four distinguishing features and also give one example each of the members of the above two classes.

4. State appropriate term for the following

a) Animals which do not have coelom

b) Animals having notochord

c) Animals that are able to maintain a certain body temperature over a wide range of temperature in the environment

d) Plants which bear naked seeds

5. Name the five classes of vertebrates. Compare any two on the basis of their

a) Habitat

b) Covering of skin

c) Respiratory organs

d) Chambers of heart

e) Reproduction