

# Chapter 7 - Diversity in Living Organisms

## Short Answer Type Questions

1. Write true (T) or false (F)

- (a) Whittaker proposed five kingdom classification.
- (b) Monera is divided into Archaeobacteria and Eubacteria.
- (c) Starting from Class, Species comes before the Genus.
- (d) Anabaena belongs to the kingdom Monera.
- (e) Blue green algae belongs to the kingdom Protista.
- (f) All prokaryotes are classified under Monera.

2. Fill in the blanks

- (a) Fungi shows \_\_\_\_\_ mode of nutrition.
- (b) Cell wall of fungi is made up of \_\_\_\_\_ .
- (c) Association between blue green algae and fungi is called as \_\_\_\_\_ .
- (d) Chemical nature of chitin is \_\_\_\_\_ .
- (e) \_\_\_\_\_ has smallest number of organisms with maximum number of similar characters
- (f) Plants without well differentiated stem, root and leaf are kept in \_\_\_\_\_ .
- (g) \_\_\_\_\_ are called as amphibians of the plant kingdom.

3. You are provided with the seeds of gram, wheat, rice, pumpkin, maize and pea. Classify them whether they are monocot or dicot.

4. Match items of column (A) with items of column (B)

(A)	(B)
(a) Naked seed	(A) Angiosperms
(b) Covered seed	(B) Gymnosperms
(c) Flagella	(C) Bryophytes
(d) <i>Marchantia</i>	(D) <i>Euglena</i>
(e) <i>Marsilea</i>	(E) Thallophyta
(f) <i>Cladophora</i>	(F) Pteridophyta
(g) <i>Pentstemon</i>	(G) Fungi

5. Match items of column (A) with items of column (B)

(A)	(B)
(a) Pore bearing animals	(A) Arthropoda
(b) Diploblastic	(B) Coelenterata
(c) Metameric segmentation	(C) Porifera
(d) Jointed legs	(D) Echinodermata
(e) Soft bodied animals	(E) Mollusca
(f) Spiny skinned animals	(F) Annelida

6. Classify the following organisms based on the absence/presence of true coelom (i.e., acoelomate, pseudocoelomate and coelomate)

<b><i>Spongilla</i>,</b>	<b>Sea anemone,</b>	<b>Planaria,</b>	<b>Liver fluke</b>
<b><i>Wuchereria</i>,</b>	<b><i>Ascaris</i>,</b>	<b><i>Nereis</i>,</b>	<b>Earthworm,</b>
<b>Scorpion,</b>	<b>Birds,</b>	<b>Fishes,</b>	<b>Horse.</b>

7. Endoskeleton of fishes are made up of cartilage and bone; classify the following fishes as cartilaginous or bony

Torpedo,	Sting ray,	Dog fish,
Rohu,	Angler fish,	Exocoetus.

8. Classify the following based on number of chambers in their heart.

Rohu, Scoliodon, Frog, Salamander, Flying lizard, King Cobra, Crocodile, Ostrich, Pigeon, Bat, Whale

9. Classify Rohu, Scoliodon, Flying lizard, King Cobra, Frog, Salamander,

Ostrich, Pigeon, Bat, Crocodile and Whale into the cold blooded/warm blooded animals.

10. Name two egg laying mammals.

11. Fill in the blanks

- (a) Five kingdom classification of living organisms is given by \_\_\_\_ .
- (b) Basic smallest unit of classification is \_\_\_\_ .
- (c) Prokaryotes are grouped in Kingdom \_\_\_\_ .
- (d) Paramecium is a protist because of its \_\_\_\_ .
- (e) Fungi do not contain \_\_\_\_ .
- (f) A fungus \_\_\_\_ can be seen without microscope.

- (g) Common fungi used in preparing the bread is \_\_\_\_ .
- (h) Algae and fungi form symbiotic association called \_\_\_\_ .

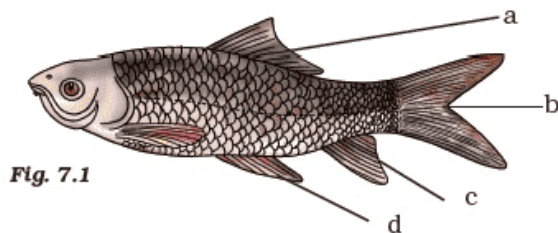
12. Give True (T) and False (F)

- (a) Gymnosperms differ from Angiosperms in having covered seed.
- (b) Non flowering plants are called Cryptogamae.
- (c) Bryophytes have conducting tissue.
- (d) Funaria is a moss.
- (e) Compound leaves are found in many ferns.
- (f) Seeds contain embryo.

13. Give examples for the following

- (a) Bilateral, dorsiventral symmetry is found in \_\_\_\_ .
- (b) Worms causing disease elephantiasis is \_\_\_\_ .
- (c) Open circulatory system is found in \_\_\_\_ where coelomic cavity is filled with blood.
- (d) \_\_\_\_ are known to have pseudocoelom.

14. Label a,b,c and d. given in Fig. 7.1 Give the function of (b)



15. Fill in the boxes given in Fig. 7.2 with appropriate characteristics/plant group (s)

- (b) Coelom
- (c) Triploblastic

5. You are given leech, Nereis, Scolopendra, prawn and scorpion; and all have segmented body organisation. Will you classify them in one group? If no, give the important characters based on which you will separate these organisms into different groups.
6. Which organism is more complex and evolved among Bacteria, Mushroom and Mango tree. Give reasons.
7. Differentiate between flying lizard and bird. Draw the diagram.
8. List out some common features in cat, rat and bat.
9. Why do we keep both snake and turtle in the same class?