**Chapter 7**

**Diversity in Living Organisms**

**( Deleted topics for 2020-2021 Diversity of plants and animals-basic issues in scientific naming, basis of classification. Hierarchy of categories/groups, Major groups of plants salient features( Bacteria, Thallophyta , Bryophyta , Pteridophyta , Gymnosperms and Angiosperms, Major groups of animals salient features –( Non-Chordates up to phyla and Chordates up to classes)**

1. What is classification? Why do we need to classify organisms?
2. Who was responsible for giving five kingdoms classification?
3. When the plant body is not divided into stem, root and leaves than the plant body is referred as \_\_\_\_\_\_\_\_.
4. Why is blue-green algae not placed under Kingdom Plantae?
5. Write full form of IUCN.
6. What are the main criteria used to classify animals?
7. Name the following
8. Group of plant often referred as amphibian
9. Group having single-celled eukaryotic photosynthetic
10. Group to which turtle belongs
11. Group to which lactobacillus belongs
12. Group to which mosses belong
13. Give reasons for the following
14. The whales are not grouped under the class Pisces.
15. The turtles and snake are placed in the same class.
16. Pteridophytes are cryptogammae
17. Bryophyta is referred as the amphibians of plant kingdom.
18. Platy helminthes are also known as flatworms.
19. Euglena is known as plant animal
20. Differentiate between the following
21. Diploblastic and triploblastic animals
22. Cryptogamae and Phanerogams
23. Bony and cartilaginous fishes
24. Open and closed circulatory system
25. Write 2 examples of the following
26. Egg laying mammals
27. Organism with closed circulatory system.
28. Animals have jointed legs and compound eyes.
29. Plants that have naked seeds or seeds are not enclosed in a fruit.
30. Prokaryotic organisms
31. Ram found 2 worms A and B. Worm A had long dorsi ventrally flattened body and the worm B was soft-bodied with ring like segments, both are bilaterally symmetrical. Identify the worm A and worm B.
32. Name the group of plants which does not require water for fertilisation. Give example.
33. Why do we use scientific names? Which method is used for writing scientific name of living organism?
34. What are the bases on which plants and animal are put in different categories?
35. You are given large number of plants. What characteristic will you look to classify them as angiosperm, b) Moss c) Fungus d) Gymnosperm and Algae .
36. How are vertebrates different from invertebrates?
37. Complete the given table showing characters of different classes

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Characters | Osteocythes | Chondricythes | Amphibia | Reptilia | Aves | Mammals |
| Exoskeleton |  |  |  |  |  |  |
| Respiratory organ |  |  |  |  |  |  |
| Heart |  |  |  |  |  |  |
| Locomotroy Organs |  |  |  |  |  |  |
| Body temperatur |  |  |  |  |  |  |

1. List some common features of cat, rat and bat
2. You are given leech, prawn and scorpion and all of them have segmented body organisation, will all of them be classified in one group? If no give the important characteristic based on which you will put them in different groups?
3. Classify the following based on the presence or absence of true coloem ( aceolomate, pseudocoelomate and coelomate )

Spongilla, Liver fluke, Wauchereia, Ascaris, Earthworm, Birds, Horse and sea anemone

1. Fill in the blanks
2. Fungi shows \_\_\_\_\_\_\_\_\_ mode of nutrition.
3. Cell wall of fungi is made up of \_\_\_\_\_\_-.
4. Chemical nature of chitin\_\_\_\_\_\_\_\_\_\_.
5. Plants without well differentiated stem, root and leaf are kept in \_\_\_\_\_\_\_\_\_\_.
6. \_\_\_\_\_\_\_\_ are called amphibians of plant kingdom.
7. Multiple choice questions
8. \_\_\_\_\_\_\_\_\_ are plants not differentiated into leaf, root and stem
9. Thallophyta b) Pteridophyta c) Gymnosperm d) Angiosperm
10. The group of animals with largest number of animals in it is

a) Nema helminthes b) Arthopoda c) Mammals d) Echinodermata

1. All mammals give birth to young ones except the
2. Bat b) duck –billed platypus c) Kangaroo d) Lion
3. \_\_\_\_\_\_\_\_ is plant group to have primitive vascular system.
4. Algae b) Fungus c) Angiosperm d) Pteridophytes
5. What are characters shown by the birds that help it to fly in air?