CBSE Test Paper 03

Chapter 07 Diversity in living organism

1. The scientific name of an organism **(1)**

   a. may refer to more than one species
   b. may have more than one genus
   c. varies according to the native language of scientists
   d. is the same for scientists all over the world

2. Monocots and Dicots are the features of **(1)**

   a. Gymnosperms
   b. Bryophytes
   c. Angiosperms
   d. Pteridophytes

3. The correct identification of the following specimen is: **(1)**

   a. Moss
   b. Agaricus
   c. Spirogyra
   d. Fern

4. Binomial system of nomenclature means that every organisms has **(1)**

   a. one scientific name and one popular name
   b. one scientific name consisting of a generic name and a specific name

c. a number in an international catalogue by which an organism is identified.
d. a name given by two scientists

5. Earthworm is **(1)**

   a. bisexual with self-fertilization
   b. bisexual with cross-fertilization
   c. None of these
   d. unisexual with cross-fertilization

6. What is the common name of annelida? **(1)**

7. Define pseudocoelom. **(1)**

8. What is diversity? **(1)**

9. Name two countries that are centres of megadiversity. **(1)**

10. What is common/vernacular name? **(1)**

11. What is meant by characteristic of an organism? Mention two characteristics of class Reptilia. **(3)**

12. Describe the general characteristics of Gymnosperms. **(3)**

13. What are phanerogams? Describe the teo main divisions of phanerogams **(3)**

14. On what basis are plants and animals put into different categories? **(5)**

15. Write the important features of phylum Aschelminthes (Nematoda). **(5)**

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Answers

1. d. is the same for scientists all over the world
   Explanation: Scientific names are given to make the living organisms universally recognisable by the scientists all over the world because common name or vernacular names vary from place to place which makes it difficult to recognise the organism every where.
2. c. Angiosperms
   Explanation: Angiosperms are seed bearing plants and they bear two types of seeds. Seeds having single cotyledon- monocots, seeds having two cotyledons- dicots.
3. b. Agaricus
   Explanation: Agaricus is small umbrella-like fungi which grows in moist and damp places. Agaricus is a genus of mushrooms containing both edible and poisonous species, with possibly over 300 members worldwide. The genus includes the common ("button") mushroom (Agaricus bisporus) and the field mushroom (Agaricus campestris), the dominant cultivated mushrooms of the West.
4. b. one scientific name consisting of a generic name and a specific name
   Explanation: According to the binomial system of nomenclature, every organism is designated a scientific name with two parts:
   - Genus is written first and is capitalised (e.g. Homo)
   - Species follows and is written in lower case (e.g. Homo sapiens)
5. a. bisexual with cross-fertilization
   Explanation: Earthworm has both male and female reproductive organs but cannot fertilise itself because the reproductive organs are present on different segments.
6. Segmented worms.
7. Pseudocoelom is false body cavity which is generally endodermal in origin and not

lined by mesoderm, e.g., nematoda.

8. Diversity (L. diversities– variety) is the occurrence of various types of living beings which differ from one another in external form and appearance, internal structure, nutrition, behaviour, habitat, etc.

9. India (Western Ghats, N.E. Himalayas), Malaysia.
10. Common or vernacular name is regional name specific to a language which is given to an organism by local people.

11. Characteristics of an organism are the features that help us in knowing, identifying and classifying the organism.
    The two characteristics of class Reptilia are as follows:

    i. There are clod-blooded animals.
    ii. They respire through lungs.

12. Characteristics of gymnosperms.

    a. The stem is erect aerial branched or unbranhced.
    b. The leaves are usually dimorphic i.e., presence of two types of leaves on a plant.
    c. These are naked seeded plants i.e., their ovules are not enclosed in the ovary.
    d. The microsporophyll (male reproductive organ) and megasporphyll (female reproductive organ) are compactly arranged around the central axis forming male cone & female cone respectively

13. Phanerogams or spermatophyta are the most advanced type of plants bearing seeds. They have roots, stems, leaves and flowers. They Are divided into gymnosperms and angiosperms.
    Gymnosperms : Gymnosperms are naked – seeded plants, which mean that, in these plants the seeds are not enclosed in a fruit. These plants are mostly found in hills. Some of these possess ‘cones’ and are hence called ‘conifers’. Pine, fir, cycas are examples of gymnosperms.
    Angiosperms : Angiosperms are closed – seeded plants. In these plants the seeds are enclosed in a fruit. Flower is the reproductive structure of the angiosperms. Mango, apple, rose, sunflowers and pea are examples of flowering plants.

14. Plants and animals are placed in different categories because they differ in several characteristics.

    - **Shape.** Animals have a define shape while plants have less definite shape.
    - **Branching.** Animals are unbranched (exception sponges), while plants are generally branched.
    - **Growths.** Animals stop growing after reaching a certain size. Plants continue to grow till death.
    - **Locomotion.** Animals can move from place to place (exception corals, sponges) while plants are fixed.
    - **Nutrition.** Animals eat ready made food while plants manufacture their own food.
    - **Reserve Food.** It is glycogen in animals and starch in plants.
    - **Cell Wall.** Animal cells do not have a covering of wall while individual plant cells are surrounded by cell walls.
    - **Excretory Organs.** They are present in animals but absent in plants.
    - **Sense Organs and Nervous System.** They are found in animals but not in plants.

15. i. Most of them are small cylindrical or round worms. So they are also called round worms.
    ii. The body size ranges from microscopic to a few centimetres in length.
    iii. They all are mainly heterotrophic animals.
    iv. They are triploblastic.
    v. Body cavity has a true coelom.
    vi. Respiratory and circulatory systems are absent.
    vii. They have a complete alimentary canal.
    viii. Sexes are separate.

    Examples: Ascaris (roundworm), Enterobius, and Wuchereria (filarial worm)