

Chapter 2: Diversity in the Living World

Worksheet 1: Practice Questions — Set C

Name: _____

Date: _____

Class: 6 Section: _____

Marks: _____ / _____

Section 1: Multiple Choice Questions (10)

- The pattern of veins in a leaf is called:
(a) Venation (b) Cotyledon (c) Habitat (d) Adaptation
- Which of these has fibrous roots?
(a) Mustard (b) Hibiscus (c) Common grass (d) Chickpea
- Sadabahar (periwinkle) has:
(a) Taproot and reticulate venation (b) Fibrous root and parallel venation
(c) Taproot and parallel venation (d) Fibrous root and reticulate venation
- Which body part does a housefly use for movement?
(a) Only legs (b) Only wings (c) Legs and wings (d) Fins
- An animal's habitat provides it with:
(a) Only food (b) Only shelter (c) Food, water, air and shelter (d)
Only water
- Which of these is an aquatic habitat?
(a) Desert (b) Forest (c) Pond (d) Grassland
- What helps a cactus survive in a hot desert?
(a) Broad flat leaves (b) Thick, fleshy, water-storing stems (c) Long
roots only (d) Fast growth
- How many humps does a cold desert camel of Ladakh usually have?
(a) One (b) Two (c) Three (d) None

9. Sacred groves are mainly protected by:

- (a) The Forest Department only (b) Local communities (c) Tourists
(d) Farmers for farming

10. Which term describes the variety of plants and animals in a region?

- (a) Habitat (b) Adaptation (c) Biodiversity (d) Venation

Section 2: Fill in the Blanks (10)

1. A single main root with smaller side roots is called a _____.
2. Grasses and wheat have _____ roots.
3. Maize has a single thin _____.
4. Fishes have _____ bodies that help them swim in water.
5. Frogs are examples of _____ as they live both in water and on land.
6. Deserts, forests and mountains are examples of _____ habitats.
7. The long hair of a cold desert camel helps it survive the _____ of Ladakh.
8. Great Indian Bustard habitats have been declared as _____ areas.
9. Rhododendrons in Sikkim's mountains are _____ than those in the Shola forests.
10. The method of arranging living things into groups based on common features is called _____.

Section 3: True or False (10)

1. Chickpea is a monocot plant. [True / False]
2. A hibiscus leaf shows reticulate venation. [True / False]
3. Fibrous roots arise from one main root. [True / False]
4. Amphibians can live both on land and in water. [True / False]

5. A camel's habitat is a desert. [True / False]
6. Cutting down forests has no effect on biodiversity. [True / False]
7. The Great Indian Bustard's population has declined due to habitat loss. [True / False]
8. Deodar trees are found in deserts. [True / False]
9. Different regions have different biodiversity because of different environmental conditions. [True / False]
10. Sacred groves allow cutting of trees freely. [True / False]

Section 4: Answer in Two Lines (10)

1. What differences would you observe between a monocot and a dicot seed?

2. How is the venation of a plant's leaves related to its root type?

3. What is an adaptation? Give one example.

4. Differentiate between terrestrial and aquatic habitats with one example each.

5. Why do cold desert camels have shorter legs than hot desert camels?

6. What is the role of humps in camels?

7. Name two Indian scientists who contributed to biodiversity conservation.

8. What is the importance of habitats for living organisms?

9. How do human activities lead to loss of biodiversity?

10. What can we do to help protect biodiversity around us?

Section 5: Short Notes — 5 to 8 lines (5)

1. Write a short note on how plants can be grouped based on their seeds, roots and leaf venation.

2. Describe the concept of habitat and adaptation with suitable examples.

3. Explain why biodiversity varies from region to region.

4. Write a short note on the causes and effects of loss of biodiversity.

5. Why is grouping useful, and what are some bases on which plants and animals can be grouped?

Answer Key — Worksheet 1 — Set C

Section 1: Multiple Choice Questions

1. Venation
2. Common grass
3. Taproot and reticulate venation
4. Legs and wings
5. Food, water, air and shelter
6. Pond
7. Thick, fleshy, water-storing stems
8. Two
9. Local communities
10. Biodiversity

Section 2: Fill in the Blanks

1. taproot
2. fibrous
3. cotyledon
4. streamlined
5. amphibians
6. terrestrial
7. cold winters
8. Protected
9. taller
10. grouping

Section 3: True or False

1. False
2. True
3. False
4. True
5. True
6. False
7. True
8. False
9. True
10. False

Section 4: Answer in Two Lines

1. A dicot seed, like chickpea, splits into two cotyledons, while a monocot seed, like maize, has only a single cotyledon.
2. Plants with reticulate venation generally have taproots, while plants with parallel venation generally have fibrous roots.
3. An adaptation is a special feature that helps a plant or animal survive in its habitat; for example, the thick fleshy stem of a cactus helps it store water in the desert.
4. Terrestrial habitats are on land, such as forests, while aquatic habitats are in water, such as ponds.
5. Shorter legs help cold desert camels walk more easily on the mountainous, uneven terrain of regions like Ladakh.
6. Humps store food, which camels use during times when food is scarce in the desert.

7. Janaki Ammal and Salim Ali are two Indian scientists who contributed to biodiversity conservation.
8. Habitats provide plants and animals with food, water, air, shelter and other needs necessary for their survival.
9. Cutting down forests and damaging natural habitats for human needs destroys homes, food and resources of plants and animals, leading to loss of biodiversity.
10. We can avoid disturbing plants and animals, support conservation projects, protect habitats like sacred groves, and spread awareness about biodiversity.

Section 5: Short Notes

1. Plants can be grouped as monocots and dicots based on the number of cotyledons present in their seeds. Dicot plants, such as chickpea, have seeds with two cotyledons, a taproot system, and reticulate venation in their leaves. Monocot plants, such as maize and wheat, have seeds with a single cotyledon, a fibrous root system, and parallel venation in their leaves. Observing any one of these three features in a plant usually helps predict the other two, showing how these characteristics are closely related in nature.
2. A habitat is the place where a plant or animal lives and from where it gets food, water, air, shelter and other necessities. Adaptations are the special features that help organisms survive in their particular habitat. For example, cactus plants in hot deserts have thick, fleshy stems to store water, while deodar trees in cold mountains have a conical shape to let snow slide off easily. Camels show different adaptations in hot and cold deserts, such as differences in leg length, number of humps, and hair growth, to survive their specific conditions.
3. Biodiversity varies from region to region because different regions have different environmental conditions such as temperature, rainfall, and soil type. Plants and animals develop adaptations suited to their specific surroundings, so the biodiversity of a hot desert, like cactus and camels with wide hooves, is very

different from that of a cold mountain region, like deodar trees and camels with shorter legs. This is why the plants and animals found in one kind of region are usually different from those found in another kind of region.

4. Loss of biodiversity mainly happens due to damage of natural habitats caused by human activities such as cutting down forests to meet the growing needs of an increasing population. When habitats are damaged, plants and animals lose their homes, food, and other resources needed for survival. This has led to a decline in the population of species like the Bengal Tiger, Cheetah, and Great Indian Bustard in India. To address this, the government has started conservation projects and declared certain habitats as Protected areas, and it is important for everyone to help in protecting biodiversity.

5. Grouping is useful because it makes it easier to study, compare and understand the wide variety of plants and animals around us based on their similarities and differences. Plants can be grouped by height and stem type into herbs, shrubs and trees, or by seed, root and venation type into monocots and dicots. Animals can be grouped based on the way they move, such as flying, walking, or swimming, the body parts they use for movement, or the type of habitat they live in, such as terrestrial or aquatic. Different people may choose different features as the basis for grouping the same set of organisms.