

Chapter 2: Diversity in the Living World

Worksheet 1: Practice Questions — Set B

Name: _____ Date: _____
Class: 6 Section: _____ Marks: _____ / _____

Section 1: Multiple Choice Questions (10)

- Which plant part shows a net-like pattern of veins?
(a) Root (b) Stem (c) Leaf (d) Flower
- Which of these is an example of a tree?
(a) Tomato (b) Rose (c) Mango (d) Grass
- Wheat seeds have:
(a) Two cotyledons (b) A single cotyledon (c) No cotyledon (d) Three cotyledons
- Plants with weak stems that creep along the ground are called:
(a) Climbers (b) Creepers (c) Shrubs (d) Trees
- A goat is best described as an animal that lives in a:
(a) Aquatic habitat (b) Terrestrial habitat (c) Amphibian habitat (d) Ocean habitat
- Which animal is an amphibian?
(a) Fish (b) Frog (c) Cow (d) Sparrow
- Rhododendrons in the Shola forests of the Nilgiris are of shorter height mainly to:
(a) Survive heavy winds on mountain tops (b) Attract more insects (c) Get more sunlight (d) Store more water
- The Great Indian Bustard's habitats have been declared Protected areas in:

- (a) Kerala, Tamil Nadu, Karnataka (b) Gujarat, Rajasthan, Maharashtra
(c) Punjab, Haryana, Delhi (d) Assam, Bihar, Odisha

9. Janaki Ammal was a:

- (a) Wildlife photographer (b) Botanist (c) Ornithologist (d) Zoologist

10. The Silent Valley is located in:

- (a) Palakkad, Kerala (b) Nilgiris, Tamil Nadu (c) Coorg, Karnataka
(d) Wayanad, Kerala

Section 2: Fill in the Blanks (10)

1. Leaves of banana and grass show _____ venation.
2. Hibiscus is an example of a plant with a _____ root.
3. A duck has _____ feet that help it swim in water.
4. The population of the Bengal Tiger declined mainly due to loss of _____.
5. Chickpea seeds split into two parts, and each part is called a _____.
6. A cactus has thick and fleshy stems that help it store _____.
7. Animals that live in water are said to live in _____ habitats.
8. Salim Ali is referred to as the _____ of India.
9. Plants and animals depend on each other; for example, animals help spread _____ after eating fruits.
10. A tomato plant is an example of a _____.

Section 3: True or False (10)

1. Grass leaves show reticulate venation. [True / False]
2. A rose plant is an example of an herb. [True / False]
3. Dicot plants generally have a taproot system. [True / False]

4. A duck's webbed feet help it walk faster on land than a pigeon. [True / False]
5. Deodar trees have a conical shape with sloping branches. [True / False]
6. The habitat of a rhododendron is the ocean. [True / False]
7. Camels can survive for many days without drinking water. [True / False]
8. Sacred groves allow tree cutting for local use. [True / False]
9. Salim Ali documented the diversity of birds across India. [True / False]
10. Biodiversity is the same in every region of the world. [True / False]

Section 4: Answer in Two Lines (10)

1. What is a taproot? Give one example.

2. How are monocot seeds different from dicot seeds?

3. What are climbers and creepers?

4. How does the webbed feet of a duck help it?

5. Why do rhododendrons in different regions look different?

6. Name any two Government projects initiated to conserve India's biodiversity.

7. What is the contribution of Salim Ali towards biodiversity conservation?

8. What happens when the habitat of a plant or animal is damaged?

9. Give two examples of terrestrial habitats.

10. Why are camels of the cold desert different from camels of the hot desert?

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

1. Write a short note on the types of roots and their relationship with leaf venation.

2. Explain how animals are adapted to their habitats, using the fish and goat as examples.

3. Describe the importance of conservation projects like Project Tiger with reference to biodiversity loss.

4. Write a short note on the contribution of Janaki Ammal and Salim Ali to biodiversity conservation in India.

5. Why is grouping of plants and animals important? Explain with examples.

Answer Key — Worksheet 1 — Set B

Section 1: Multiple Choice Questions

1. Leaf
2. Mango
3. A single cotyledon
4. Creepers
5. Terrestrial habitat
6. Frog
7. Survive heavy winds on mountain tops
8. Gujarat, Rajasthan, Maharashtra
9. Botanist
10. Palakkad, Kerala

Section 2: Fill in the Blanks

1. parallel
2. taproot
3. webbed
4. natural habitat
5. cotyledon
6. water
7. aquatic
8. Birdman
9. seeds
10. herb

Section 3: True or False

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

Section 4: Answer in Two Lines

1. A taproot is a single main root with smaller side roots arising from it; mustard is an example of a plant with a taproot.
2. Monocot seeds, like maize, have a single cotyledon, while dicot seeds, like chickpea, have two cotyledons.
3. Climbers are plants with weak stems that need support to climb and grow, while creepers are plants that spread and grow along the ground.
4. The webbed feet of a duck help it paddle and swim easily in water, unlike birds such as pigeons that do not have webbed feet.
5. Rhododendrons develop different features, such as height and leaf size, as adaptations to survive local conditions like strong winds on mountain tops.
6. 'Project Tiger' initiated in 1973 and the 'Cheetah Reintroduction Project' initiated in 2022 are two such projects.

7. Salim Ali travelled across India documenting bird diversity and habitats and helped conserve regions like Keoladeo National Park and Ranganathittu Bird Sanctuary.
8. Damage to a habitat causes loss of homes, food and other resources for plants and animals, leading to loss of biodiversity.
9. Forests and deserts are examples of terrestrial habitats (grasslands and mountains are also acceptable).
10. They have adapted differently to survive the cold, mountainous conditions of Ladakh compared to the hot, sandy conditions of Rajasthan, such as having two humps and shorter legs.

Section 5: Short Notes

1. Plants generally show two types of roots: taproots, which have one main root with smaller side roots, as seen in mustard and hibiscus; and fibrous roots, which are a bunch of similar-sized thin roots, as seen in grass and wheat. There is a strong relationship between root type and leaf venation. Plants with taproots usually have reticulate (net-like) venation in their leaves, while plants with fibrous roots usually have parallel venation. This relationship helps in grouping plants scientifically.
2. Animals show special features, called adaptations, that help them survive and move in their habitat. Fishes live in water and have streamlined bodies along with fins, which help them swim efficiently. Goats live on land in grassy areas and use their legs to walk and jump. These differences in body structure and movement are directly related to the kind of habitat the animal lives in, showing how form matches function in nature.
3. Human activities such as cutting down forests for comfortable living have damaged the natural habitats of many animals, causing their populations to decline. The Bengal Tiger, Cheetah and Great Indian Bustard are examples of

species affected this way. To address this, the Government of India started 'Project Tiger' in 1973 to protect the Bengal Tiger, and the 'Cheetah Reintroduction Project' in 2022 to restore cheetah populations. Habitats of the Great Indian Bustard have also been declared Protected areas. Such projects are essential to prevent further loss of biodiversity.

4. Janaki Ammal (1897–1984) was an Indian botanist who worked to document and preserve India's plant biodiversity and played a key role in the 'Save Silent Valley' movement, which saved a rainforest in Kerala from a hydroelectric dam project. Salim Ali (1896–1987) travelled across India to study bird diversity, documenting species and their habitats, and helped conserve important bird regions such as Keoladeo National Park and Ranganathittu Bird Sanctuary. He wrote a landmark ten-book series on the birds of the Indian subcontinent and is known as the 'Birdman of India'.

5. Grouping plants and animals based on their similarities and differences makes it easier to study and understand the huge variety of living things around us. For example, plants can be grouped as herbs, shrubs and trees based on height and stem type, or as monocots and dicots based on their seeds, roots and venation. Animals can be grouped based on their movement, habitat or other features. Such systematic grouping helps scientists and students alike to study, compare and remember the features of a wide range of organisms in an organised way.