INDIAN SCHOOL AL WADI AL KABIR		
Class: VI	**DEPARTMENT: SCIENCE 2026-2027**	**DATE: 17/10/2026**
WORKSHEET NO: 7	**TOPIC: DIVERSITY IN THE LIVING WORLD**	**NOTE: A4 FILE FORMAT**
CLASS & SEC:	**NAME OF THE STUDENT:**	**ROLL NO.**

I. OBJECTIVE-TYPE QUESTIONS (1M):

1. Which of the following is a direct consequence of habitat damage?

(a) Increase in biodiversity
(b) Decline in the population of some animals
(c) Enhanced food resources for all species
(d) Unnecessary growth of new plants

2. The characteristics of three different plants are listed in the given table.

Name of the plant	Nature of stem	Height	Appearance of branches
Tomato	Green, Tender, Thin	Short	Close to the ground
Mango	Brown, Hard, Thick	Tall	Higher up on the stem
Rose	Brown, Hard, Thin	Medium	Close to the ground

Identify the correct classification among the following:
(a) Tomato-Herb, Mango-Tree, Rose-Shrub
(b) Tomato-Tree, Mango- Shrub, Rose- Herb
(c) Tomato-Shrub, Mango-Herb, Rose-Tree
(d) Tomato-Shrub, Mango-Tree, Rose-Herb

3. A student is asked to create a poster about an animal that lives in a hot desert. Which of the following would be an incorrect feature to include about the animal?
(a) They excrete small amounts of urine.
(b) They sweat profusely to cool down.
(c) They have long legs to walk on sand.
(d) They store food in their humps.

4. If a plant has taproots, what type of leaf venation and how many cotyledons does the plant have?
(a) Parallel venation, two cotyledons
(b) Reticulate venation, two cotyledons
(c) Parallel venation, one cotyledon

(d) Reticulate venation, one cotyledon

5. What is the main adaptation of trees in cold climates to withstand frequent snowfall?
(a) Conical shape and sloping branches
(b) Broad leaves
(c) Deep roots
(d) Thick bark

6. Animals that can live in water as well as on land are called:
(a) Arboreal
(b) Terrestrial
(c) Aquatic
(d) Amphibians

7. What is the 'Birdman of India' famous for?
(a) Writing books on Indian birds and their habitats.
(b) Documenting plant diversity in India.
(c) Leading the 'Save Silent Valley' movement.
(d) Discovering a new species of bird.

For the following questions, two statements are given- one labelled Assertion (A) and the other labelled Reason (R). Select the correct answer to these questions from the codes (A), (B), (C), and (D) as given below:
(A) Both A and R are true, and R is the correct explanation of the assertion.
(B) Both A and R are true, but R is not the correct explanation of the assertion.
(C) A is true, but R is false.
(D) A is false, but R is true.

8. **Assertion (A):** The population of Bengal Tigers has declined in India.
Reason (R): Their natural habitats are lost due to human activities.

9. **Assertion (A):** Dicot plants have reticulate venation in their leaves.
Reason (R): Plants with fibrous roots generally have parallel venation.

10. **Assertion (A):** The biodiversity of a region is not influenced by its environmental conditions.
Reason (R): Special features that enable a plant or animal to survive in a particular region are called adaptations.

II. VERY SHORT QUESTIONS (2M):

1. Differentiate monocotyledons and dicotyledons with examples.

[Hint: Plants with only one cotyledon are called monocotyledons (Monocots). Example: Maize. Plants that have seeds with two cotyledons are called dicotyledons (Dicots). Example: Chickpea.]

2. There is a close relationship between leaf venation, type of root and type of seed in plants. Explain. (WB-II.B.5)

[Hint: Dicot plants (Plants with two cotyledons) have reticulate venation and a taproot system, while monocot plants (plants with one cotyledon) have parallel venation and a fibrous root system.]

3. How are climbers different from creepers?

[Hint: Plants with weak stems that need support to climb and grow are called climbers. Example: Grapevine. Plants with weak stems that creep along the ground are called creepers. Example: Pumpkin]

4. Describe the main difference between a taproot and a fibrous root system.

[Hint: A taproot system has one main root with smaller side roots branching off from it. (e.g., a mustard plant). A fibrous root system consists of a bunch of thin, similar-sized roots that arise from the base of the stem (e.g., common grass).]

5. What is the significance of the streamlined body and fins of a fish? How does this relate to its habitat?

[Hint: The streamlined body and fins of a fish are special features, called adaptations, that help it to swim easily and quickly through water. These adaptations help fish move efficiently and survive in their aquatic habitat.]

III. SHORT ANSWER TYPE QUESTIONS (3M):

1. Describe how plants are grouped into herbs, shrubs, and trees? (WB-II.B.1)

[Hint: Plants which are typically small with soft and green stems are known as herbs. Example Tomato.

Plants that have brown woody stems that start branching very close to the ground are called shrubs. Example: Rose plant.

Plants that grow tall and have hard, thick, brown, and woody stems are called trees. Their branches typically start higher up on the stem and away from the ground. Example: Mango tree]

2. Differentiate terrestrial and aquatic habitats with examples. (WB.II.A.9)

TERRESTRIAL HABITATS	AQUATIC HABITATS
i. The plants and animals that live on land are said to live in terrestrial habitats.	**i. The plants and animals that live in water are said to live in aquatic habitats.**

ii. Some examples of terrestrial habitats are forests, deserts, grasslands and mountains.	**ii. Some examples of aquatic habitats are ponds, lakes, rivers and oceans.**
iii. Animals living in terrestrial habitats include camels, lions, and tigers.	**iii. Animals living in aquatic habitats include Fish and Blue Whale.**

3. What are the reasons for the loss of biodiversity? Why is it important to conserve our biodiversity?

[Hint: The damage to habitats of plants and animals results in loss of their homes, food, and other resources. This leads to biodiversity loss. We must protect biodiversity to ensure our Earth remains full of life, helping plants and animals survive and thrive. Human beings, too, can survive only if there is biodiversity.]

4. Explain the difference in features of Rhododendron plants found in Nilgiris and Sikkim. Why are they different?

[Hint:

Rhododendrons in Shola forests of Nilgiris	**Rhododendrons in Sikkim mountains**
The plants are of shorter height and have smaller leaves to survive through the heavy winds on mountain tops.	**The plants are taller than those found in the Nilgiris.**

These special features (adaptations) enable the plants to survive the conditions of those regions.]

5. What are veins? Define the term venation. Explain the two types of venation seen in plants with examples.

[Hint: Veins: The lines on the leaves of the plants are called veins.

Venation: The pattern of veins on the leaf is called venation.

The two types of venation seen in plants are called reticulate venation and parallel venation.

Reticulate venation: When the veins form a net-like pattern on both sides of the thick middle vein, it is called reticulate venation. For example, leaves of Hibiscus.

Parallel venation: When the veins run parallel, the pattern is called parallel venation. For example, the leaves of banana plants and grass.]

IV. LONG ANSWER TYPE QUESTIONS (5M):

1. Compare the features of a camel living in a hot desert with a camel living in a cold desert. Explain how these differences are a result of their adaptations to their specific habitats.

[Hint: Hot Desert Camel: They have long legs with wide hooves that help them walk on the sandy desert without sinking. They have one hump.

Adaptation: Their long legs and wide hooves are an adaptation to the sandy environment. Their single hump is for food storage, which helps them survive when food is not easily available in the desert.

Cold Desert Camel (Ladakh): Their height and legs are comparatively shorter than hot desert camels, which helps them walk easily in mountainous regions. They also grow long hair from their head to neck. They have two humps. The two humps shrink in late winters because they use the stored food during this time of food scarcity.

Adaptation: Their shorter legs are an adaptation to the mountainous terrain. Their two humps are for food storage, and their long hair is an adaptation to help them survive the cold winters.]

V. SOURCE-BASED/ CASE STUDY-BASED QUESTIONS:

Read the passage and answer the following questions.

A habitat is the natural environment in which a plant or animal species lives and thrives. It provides the necessary conditions for survival, including food, water, shelter, and space. Habitats can be found on land, in water, or even in the air, and they can range in size from a small patch of soil to an entire ecosystem. Different species have adapted to live in a wide range of habitats, from the freezing tundra to the hottest deserts, and from the deepest oceans to the highest mountains. Understanding habitats is crucial for conservation efforts, as it allows us to identify and protect the specific environments that support biodiversity.

i. What is a habitat?

[Hint: A habitat is the natural environment in which a plant or animal species lives and thrives.]

ii. What do habitats provide?

[Hint: Habitats provide the necessary conditions for survival, including food, water, shelter and space.]

iii. Why is understanding habitats crucial for conservation efforts?

[Hint: Understanding habitats is crucial for conservation efforts, as it allows us to identify and protect the specific environments that support biodiversity.]

ANSWERS FOR OBJECTIVE QUESTIONS 1 TO 10

1. (b) Decline in the population of some animals

2. (a) Tomato-Herb, Mango-Tree, Rose-Shrub

3. (b) They sweat profusely to cool down.

4. (b) Reticulate venation, two cotyledons

5. (a) Conical shape and sloping branches

6. (d) Amphibians

7. (a) Writing books on Indian birds and their habitats.

8. (A) Both A and R are true, and R is the correct explanation of the assertion.

9. (B) Both A and R are true, but R is not the correct explanation of the assertion.

10. (D) A is false, but R is true

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