INDIAN SCHOOL AL WADI AL KABIR		
CLASS: VI	**DEPARTMENT: SCIENCE** **2026 - 2027**	**DATE: 15/10/2026**
TEXTBOOK Q & A	**TOPIC** **DIVERSITY IN THE LIVING WORLD**	**NOTE: A4 FILE FORMAT**
NAME OF THE STUDENT:	**CLASS & SEC:**	**ROLL NO.**

1. Here are two types of seeds. What differences do you find among the roots and leaf venation of their plants?



(a) Wheat



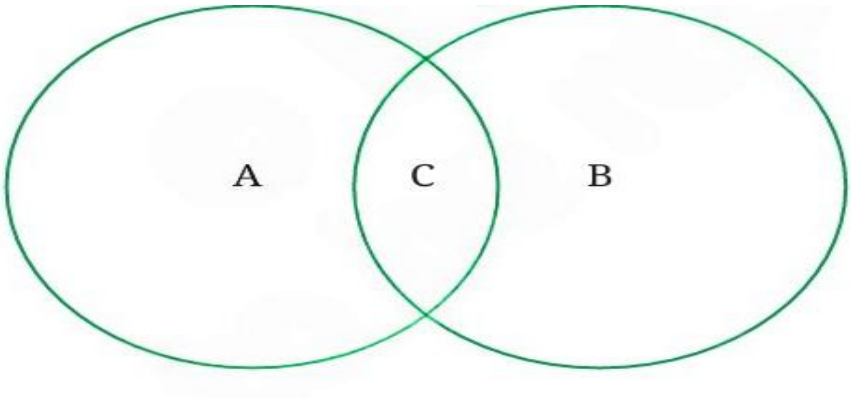
(b) Kidney beans

[Hint: Difference in the root and leaf venation.

Wheat (monocot) has fibrous roots and parallel venation.

Kidney beans (dicot) have tap roots and reticulate venation.]

2. Names of some animals are given below. Group them based on their habitats. Write the names of aquatic animals in the area marked 'A' and terrestrial animals in the area marked 'B'. Enter the names of animals living in both habitats in part C. Horse, Dolphin, Frog, Sheep, Crocodile, Squirrel, Whale, Earthworm, Pigeon, Tortoise



[Hint: Aquatic animals (A)-Dolphin, Whale

Terrestrial animals (B)-Horse, Sheep, Squirrel, Pigeon, Earthworm, Crocodile, Tortoise

Amphibians (C)-Frog]

3. Manu's mother maintains a kitchen garden. One day, she was digging out radish from the soil. She told Manu that radish is a kind of root. Examine a radish and write what type of root it is. What type of venation would you observe in the leaves of the radish plant?

[Hint: A radish is an example of a taproot system. The leaves of the radish plant exhibit reticulate venation.]

4. Look at the image of a mountain goat and a goat found in the plains. Point out the similarities and differences between them. What are the reasons for these differences?



(a) Mountain Goat



(b) Goat found in the plains

Hint: Differences between the mountain goat and the goat in the plains are:

MOUNTAIN GOAT	GOAT IN PLAINS
Has thick, long fur to protect against cold mountain temperatures.	Has shorter fur suited for a warmer climate.
Specialised hooves with a rough texture for better grip on rocky surfaces.	Hooves are more suited for walking on flat, grassy lands.
Generally stockier and more muscular, adapted for climbing rocky terrains.	A leaner build is suitable for moving efficiently across flat, open areas, as it allows faster movement.

Similarities:

i. Both goats belong to the same family.

ii. Both are herbivores. They eat plants, including roots, stems, leaves, etc.]

5. Group the following animals into two groups based on any feature other than those discussed in the chapter: cow, cockroach, pigeon, bat, tortoise, whale, fish, grasshopper, lizard.

[Hint: a) Animals with wings:
i. Pigeon
ii. Bat
iii. Cockroach
iv. Grasshopper

b) Animals without wings:
i. Cow
ii. Tortoise
iii. Whale
iv. Fish
v. Lizard

6. As the population grows and people want more comfortable lives, forests are being cut down to meet various needs. How can this affect our surroundings? How do you think we can address this challenge?

[Hint: Impact of Deforestation (cutting down forests):

i. Loss of Biodiversity

ii. Changes in Climate

iii. Soil Erosion

iv. Water Cycle Disruption

v. Decreased Air Quality

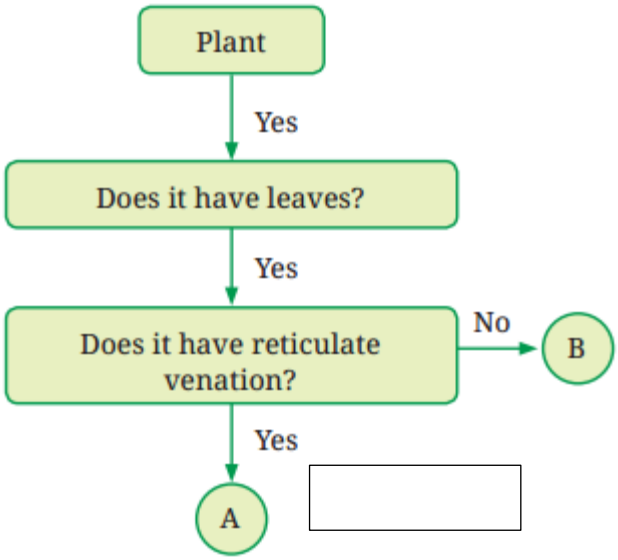
Addressing the Challenge:

i. Protected Areas: Establishing more national parks and wildlife sanctuaries to protect existing forests.

ii. Community Involvement: Engaging local communities in forest conservation efforts. We should plant more trees in our surroundings.

iii. Legislation: Implementing and enforcing laws that prevent illegal logging and deforestation.]

7. Analyse the flowchart. What can be examples of 'A' and 'B'?



[Hint: Examples of 'A': These are plants that have reticulate venation in their leaves. Examples: Mango, Hibiscus, Rose etc.

Examples of 'B': These are plants that have parallel venation. Examples: Wheat, Maize, Grass etc.]

8. Raj argues with his friend Sanjay that "Gudhal (hibiscus) plant is a shrub". What questions can Sanjay ask for clarification?

[Hint: i. What is the nature of its stem?

ii. What is the height of the plant?

iii. Is the stem of the Gudhal plant woody?]

9. Based on the information in the table, find examples of these plants for each group.

Group	Type of seed	Type of root	Examples
A	Dicot	Taproot	
B	Monocot	Fibrous roots	

(a) What other similarity do plants of group A have?

(b) What other similarity do plants of group B have?

[Hint: Examples for group A and B

1. Mustard, Mango, Chana, Radish, and Hibiscus

2. Grass, Wheat, Onions, Maize, Rice, etc.

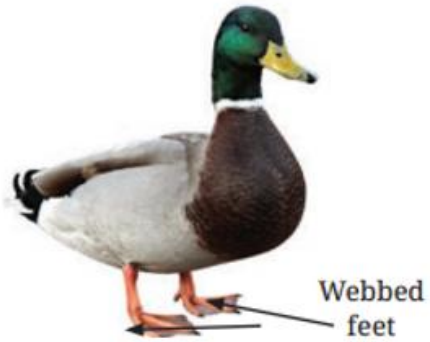
(a) Similarity of Plants in Group A

Plants in Group A (dicots) typically have leaves with reticulate venation.

(b) Similarity of Plants in Group B

Plants in Group B (monocots) generally have leaves with parallel venation.]

10. Observe the labelled part of a duck in the picture given below. What differences do you observe in the feet of the duck compared to the other birds? Which activity would the duck be able to perform using this part?



(a) Duck



(b) Pigeon

[Hint: Differences in the Feet:

A duck has webbed feet, whereas a pigeon does not have webbed feet. The pigeon has regular bird feet with separate toes.

Activities the duck can perform with webbed Feet:

Swimming: The webbed feet help the duck to paddle through water efficiently.

Webbed feet provide stability while walking on muddy or wet surfaces and prevent the duck from sinking.]

Prepared by: *Ms Neena Alex*	*Checked by:* *HOD Science*