

NCERT TEXTBOOK QUESTIONS WITH SOLUTIONS

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



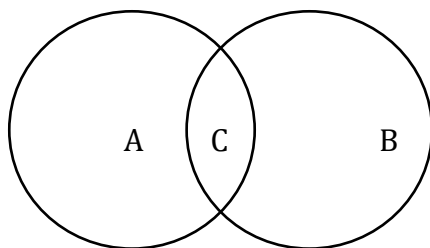
(a) Wheat



(b) Kidney bean

Ans. Wheat is a monocot and all monocots have parallel venation and fibrous root system. Kidney beans are dicots and all dicots have reticulate venation and tap root system.

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.



Ans. A represents aquatic organisms

E.g.– Dolphin, whale

B represents terrestrial organisms

E.g.– horse, squirrel, earthworm, pigeon, tortoise, crocodile.

C represents Amphibians

E.g.– 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 radish plant?

Ans. Radish has tap root system and 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 plains

Ans.

Similarities

Both are herbivores that eat leaves, grasses and shrubs.

Both have hooves that help them walk and climb.

Differences –

Mountain goat	Plains goat
It has thick and long fur to protect them from cold environment.	It has shorter fur, suitable for warmer climate.
It has curved horns.	It has straight horns.

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.

Ans. These animals can be categorized into two category terrestrial and aquatic – Terrestrial organisms include cow, pigeon, bat, cockroach, grasshopper, lizard, tortoise, and aquatic organisms include whale, fish.

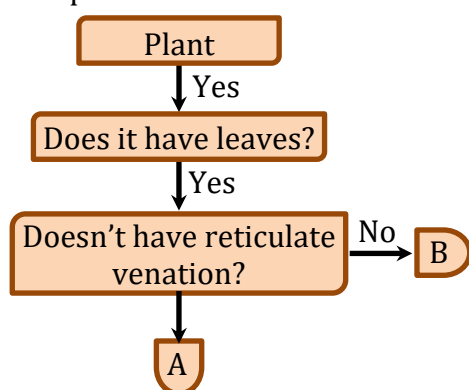
6. As the population grows and people want more comfortable lives, forests are being cut down to meet various needs. How can this affect our surroundings? How do you think we can address this challenge?

Ans. Effect of deforestation –

- (A) Loss of biodiversity
- (B) Changes in climate
- (C) Soil erosion

We can address this challenge by establishing more protected areas. We should plant more trees near our surrounding.

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



Ans. The plants that have reticulate venation in their leaves can be mango, rose, mustard etc. and the plants that do not have reticulate venation (i.e. they have parallel venation) can be wheat, rice, maize etc.

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

Ans. He can ask some questions for clarification like –

- (i) What is the nature of its stem?
- (ii) What is the height of the hibiscus?

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

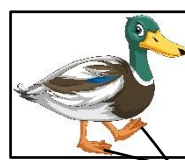
Group	Type of seed	Type of root	Ex
A	Dicot	Taproot	
B	Monocot	Fibrous roots	

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

Ans. Example of group A and B is Pea and rice respectively.

- (a) Plants of group A have leaves with reticulate venations.
- (b) Plants of group B have leaves with parallel venations.

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?



Webbed feet

(a) Duck



(b) Pigeon

Differences in the feet –

- (a) duck has webbed feet.
- (b) Pigeon does not have webbed feet.

Activities the duck can perform with webbed feet like swimming, walking.