

The Root

A. Choose the correct answer:

1. Which type of plants are adapted to live in deserts?
A) Aquatic plants
B) Cactus and Succulents
C) Climbers
D) Evergreen trees
2. Why do lotus and water lily plants have broad leaves?
A) To attract insects
B) To store food
C) To float easily on water
D) To protect from animals
3. Which of the following plants has spines instead of leaves to reduce water loss?
A) Mango tree
B) Cactus
C) Rose
D) Sunflower

B. Fill in the Blanks:

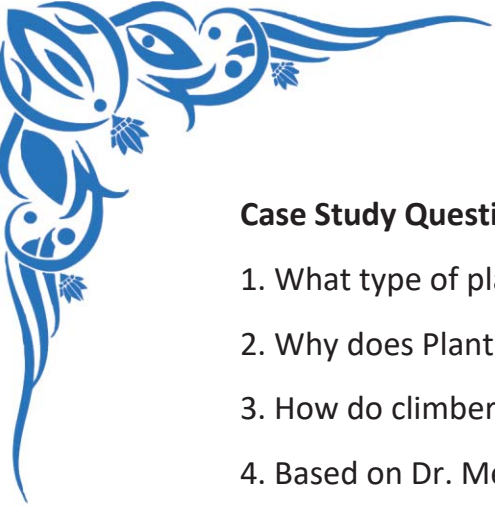
1. The process by which plants adjust to their surroundings is called _____.
2. Plants that grow in water are called _____ plants.
3. The spines in desert plants help reduce _____ loss.

C. Case Study:

A botanist, Dr. Meera, studied how different plants survive in extreme conditions. She observed three types of plants:

- **Plant A** grew in deserts and had thick stems for storing water, with spines instead of leaves.
- **Plant B** grew in ponds and had broad leaves that floated on water.
- **Plant C** climbed on other plants using tendrils to get sunlight.

After her study, she concluded that different plants develop special features to survive in their natural surroundings.



Case Study Questions:

1. What type of plant could Plant A be, and how is it adapted to its environment?
2. Why does Plant B have broad, floating leaves?
3. How do climbers like Plant C benefit from using tendrils?
4. Based on Dr. Meera's study, why do plants have different adaptations?

D. Short Answer Questions:

1. What is adaptation in plants?
2. How do desert plants survive in dry conditions?
3. Why do some plants grow in water while others cannot?

E. Long Answer Questions:

1. Explain the different types of plant adaptations with examples.
2. How do aquatic plants differ from desert plants in their adaptations?
3. Discuss how plants adapt to protect themselves from animals.