



Seed Structure and Its Germination

A. Choose the Correct Answer:

1. What is the outer protective layer of a seed called?

- A) Cotyledon
- B) Seed coat
- C) Root
- D) Shoot

2. Which part of the seed develops into the shoot during germination?

- A) Radicle
- B) Cotyledon
- C) Plumule
- D) Seed coat

3. What does a seed need for germination?

- A) Water, oxygen, and sunlight
- B) Water, oxygen, and warmth
- C) Water, soil, and fertilizers
- D) Oxygen, sunlight, and fertilizers

B. Fill in the Blanks:

1. The _____ is the part of the seed that stores food for the growing plant.
2. During germination, the _____ emerges first and grows downward into the soil.
3. The process by which a seed develops into a new plant is called _____.

C. Case Study:

A group of students conducted an experiment on seed germination.

- They took some seeds and placed them in moist soil with proper warmth and air.
- After a few days, they observed tiny roots emerging from the seeds.
- Soon, small shoots grew upward towards the sunlight.
- The students also noticed that seeds without water did not germinate properly.



Case Study Questions:

1. What conditions did the students provide for the seeds to germinate?
2. What part of the seed grew downward into the soil?
3. Why did the seeds without water fail to germinate?
4. What part of the seed developed into the shoot?

D. Short Answer Questions:

1. What is germination?
2. Name the three conditions necessary for seed germination.
3. What is the function of the seed coat?

E. Long Answer Questions:

1. Explain the structure of a seed with a labeled diagram and describe the function of each part.
 2. Describe the process of seed germination step by step.
 3. Why is water, oxygen, and warmth necessary for seed germination?
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