

Section A: 2-Marks Questions (10 Questions)

- What is microsporogenesis?
- Why are pollen grains generally produced in large numbers in angiosperms?
- Define apomixis and mention its significance.
- Give two differences between autogamy and geitonogamy.
- What is the function of tapetum in anther?
- State two adaptations for anemophilous pollination.
- Why is self-pollination disadvantageous for plants?
- Differentiate between true embryo sac and functional megaspore.
- Why is endosperm considered a post-fertilization product?
- State two reasons why seeds are important for plants.

Section B: 3-Marks Questions (6 Questions)

- Differentiate between cleistogamous and chasmogamous flowers with examples.
- How does pollen tube reach the egg apparatus? Explain the role of synergids.
- Write the significance of double fertilization.
- Describe the structure of a mature embryo sac.
- Explain the role of enzymes secreted by pollen tube during fertilization.
- Explain how apomixis and polyembryony are applied in seed industry.

Section C: 4-Marks Questions (4 Questions)

1. Describe the stages of microsporogenesis and megasporogenesis.
2. What is double fertilization? Explain the events with a labeled diagram.
3. Discuss the different modes of pollination in plants with one adaptation each.
4. Describe the role of pollen-pistil interaction in fertilization.