

May 2025
M.Sc.
Fourth Semester
CORE – 11
BOTANY
Course Code: MBOC 4.11
(Plant Development & Reproductive Biology)

Total Mark: 70

Pass Mark: 28

Time: 3 hours

Answer five questions, taking one from each unit.

UNIT-I

1. Discuss the organisation and structure of embryo sac. 6+8=14
2. Write a note each on the following: 7+7=14
 - (a) Ubisch bodies
 - (b) Types of ovules

UNIT-II

3. What is self-incompatibility? Discuss various methods to overcome incompatibility. 2+12=14
4. Write a note each on the following: 7+7=14
 - (a) Types of pollination with examples
 - (b) Double fertilization

UNIT-III

5. What is a seed? Discuss the development of seed coat. 2+12=14
6. Write a note each on the following: 7+7=14
 - (a) Apomixis
 - (b) Parthenogenesis

UNIT-IV

7. What is NPC? Explain the NPC-system with the help of proper diagram. 2+12=14

8. Write a note each on the following: 7+7=14
(a) Pollen units
(b) Sporoderm stratification

UNIT-V

9. Give an account on bee colony and foraging behaviour of bees. 4+10=14
10. Write a note each on the following: 7+7=14
(a) Pollen storage
(b) Pollen calendar
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