

**October 2025**  
**B.A./B.Sc.**  
**Fifth Semester**  
**CORE – 11**  
**BOTANY**  
*Course Code: BOC 5.11*  
(Reproductive Biology of Angiosperms)

*Total Mark: 70*  
*Time: 3 hours*

*Pass Mark: 28*

*Answer five questions, taking one from each unit.*

**UNIT-I**

1. (a) Enumerate on the scope of the studies of reproductive biology of plants. 7
- (b) Discuss the developmental stimulus in the development of a flower. 7
2. (a) What is induction and evocation in the process of development of flowers? 8
- (b) Explain why a flower is known as a modified determinate shoot. 6

**UNIT-II**

3. (a) Explain the process of development of male gametes in flowering plants with a detailed diagram. 10
- (b) Write a note on the importance of palynological studies. 4
4. Describe the classification of pollen grains according to NPC systems. 14

**UNIT-III**

5. Describe in detail the structure of a matured embryo sac with a detailed labelled diagram. 14
6. (a) Write a note on endothelium, a specialized structure of ovule. 7

- (b) Write the difference between monosporic embryo-sac and bisporic embryo sac with diagram.

7

#### UNIT-IV

7. Discuss the double fertilization and its significance. 9+5=14
8. Illustrate on the adaptational features of anemophily. Discuss the significance of pollination. 8+6=14

#### UNIT-V

9. Explain the embryo development in dicot. Support your answer with suitable diagram. 9+5=14
10. What is suspensor? Illustrate on the different types of suspensors found in the members of the family Orchidaceae. 4+10=14

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