

2021
B.A./B.Sc.
Fifth Semester
CORE – 11
BOTANY
Course Code: BOC 5.11
(Reproductive Biology of Angiosperms)

Total Mark: 70

Pass Mark: 28

Time: 3 hours

Answer five questions, taking one from each unit.

UNIT-I

1. (a) Discuss the role of developmental factors in the induction and development of flower. 10
- (b) Write a note on the scope of reproductive biology. 4
2. (a) Why is a flower considered as a determinate modified shoot? Support your answer with few examples. 4
- (b) Describe the understandings of molecular aspects in the development of flower. 10

UNIT-II

3. (a) Explain the process of development of male gametes in angiosperms with the help of diagram. 10
- (b) Write a note on the role of callose during the process of microsporogenesis. 4
4. What is a male germ unit? Describe in detail the structure of male germ unit. 2+12=14

UNIT-III

5. (a) Describe the structure of a typical ovule with the help a neat labelled diagram. 6
- (b) Discuss the difference between bisporic and tetrasporic mode of

- embryo development with examples. 8
6. (a) Describe in detail the structural organization of a mature embryo sac. 10
- (b) Write the functions of hypostase. 4

UNIT-IV

7. If incompatibility lies on the stigma or the style, what method should we use to overcome incompatibility? 7+7=14
8. Discuss on the entry of pollen tube into the ovule and embryo sac. 7+7=14

UNIT-V

9. Define apomixis. Mention the causes and application of apomixis. 2+6+6=14
10. Write a note on 7×2=14
- (i) Endosperm
- (ii) Suspensor
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