

Exam. Code : 103203

Subject Code : 1305

B.A./B.Sc. 3rd Semester

BOTANY

Paper—III(B)

(Structure, Development and Reproduction in
Flowering Plants—II)

Time Allowed—3 Hours]

[Maximum Marks—35

Note :— Question No. 1 is compulsory. Each part of Question No. 1 carries 1 mark and its answer should be covered in 3-4 lines. Attempt **four** questions from remaining **eight**, with each question carrying 7 marks.

1. Short Answer type questions (1 mark each) :—

- (i) In what ways stilt roots differ from prop roots ?
- (ii) Give important features of Quiescent Centre cells.
- (iii) Enlist various modifications of underground stem associated with natural vegetative propagation.
- (iv) How is caryophyllaceous corolla different from cruciform corolla ?
- (v) Define mesogamy and chasogamy.
- (vi) Give important differences in heteromorphic and homomorphic self-incompatibility.
- (vii) Describe in brief autochory.

2. Enumerate in detail structural modifications in roots for respiration and interaction with microbes. Also give examples of each kind.
3. Describe in brief different types of permanent tissues found in plants and functions performed by these.
4. Discuss in detail structural aspects of flower development.
5. What is grafting ? Describe different grafting techniques by giving appropriate diagrams and examples.
6. Give detailed account of various pollination mechanism prevalent in plants.
7. Draw transverse section of tetra-sporangiate anther to show its various tissues. Also mention the functions performed by different tissues.
8. Starting from pollination, describe various events leading to double fertilisation in angiosperms.
9. Give an account of fruit development and maturation in flowering plants.