

Exam. Code : 103204

Subject Code : 1338

B.A./B.Sc. Semester—IV

BOTANY

**(Structure, Development and Reproduction in
Flowering Plants-II)**

Paper—IV B

Time Allowed—3 Hours]

[Maximum Marks—35

Note :- Question No. 1 is compulsory and answer should be restricted to **four** lines. Attempt any **FOUR** questions from remaining **EIGHT** questions. All questions carry equal marks.

1. Define/explain the following :

- (i) Triple fusion
- (ii) Cellular endosperm
- (iii) Seed dormancy
- (iv) Bisporic embryo sac
- (v) Pneumatophores
- (vi) Quiescent zone
- (vii) Antipodals.

7×1=7

2. With the help of labelled diagrams compare apical cell and histogen theories of root apical meristem organisation.
3. With the help of labelled diagrams describe the structure and function of xylem.

4. Write explanatory notes on the following :

- (i) Modification of root for storage
- (ii) Interaction of roots with microbes.

5. Describe advantages and various methods of budding in detail.
6. With the help of labelled diagrams describe the types of tapetum. Describe the function of different wall layers of a typical anther.
7. Give an illustrated account of development and structure of most common type of embryo sac found in angiosperms.
8. What is self incompatibility ? Discuss its significance and methods to overcome self incompatibility.
9. Write a concise account of the following :
- (i) Strategies for dispersal of seeds
 - (ii) Seed Dormancy : its significance and physiology.

4×7=28