

Exam. Code : 103204

Subject Code : 1343

B.A./B.Sc. Semester—IV

BOTANY

Paper—IV-A

**(Structure, Development and Reproduction in
Flowering Plants—I)**

Time Allowed—3 Hours] [Maximum Marks—35

Note :— (1) Question no. 1 is compulsory. Attempt *all* its parts. Each carries 1 mark. Restrict your answer to 3-4 lines only.

(2) Attempt any *four* questions from the remaining *eight* questions (i.e. 2-9). Each carries 7 marks.

1. Attempt *all* parts. Each carries 1 mark :

- (a) What is abscission zone ?
- (b) What are 'lenticels' ?
- (c) Differentiate between Palisade and Spongy Mesophyll.
- (d) What are Bicollateral bundles ?
- (e) What are Leaf traces ?
- (f) What is Sympodial shoot system ?
- (g) What are Fusiform and Ray initials ?

2. Describe the structure, origin and role of Periderm.
3. Elaborate on the structure and role of Vascular cambium.
4. Elaborate on Canopy architecture in seed plants.
5. What are growth rings ? Describe their formation and role in brief.
6. Differentiate between annual, biennial and perennial plants. Cite two examples of each type.
7. Describe in detail various theories advanced to explain organisation of shoot apical meristem.
8. Give a general account of secondary growth in a dicot stem.
9. What do you understand by "Senescence" ? Write in detail various changes observed in an organ undergoing this process.