

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

**BOTANY-III A (Structure, Development and
Reproduction in Flowering Plants-I)**

Time Allowed—3 Hours] [Maximum Marks—35

SECTION—I

Note :— Attempt *all* parts of Question No. 1. Answer to each part should be of 3-4 lines. Each part carries 1 mark.

1. (i) Distinguish between biennials and perennials.
- (ii) Define canopy.
- (iii) Define periderm.
- (iv) How will distinguish between leaves of a monocot and dicot plants ?
- (v) Define Pycnoxylic wood.
- (vi) Distinguish between trachieds and vessels.
- (vii) What is girdling leaf trace ?

SECTION—II

Note :— Attempt any *four* questions from this section. Each question carries 7 marks.

2. Discuss in detail histological organization of shoot apical meristem.

3. Discuss how tissue of wood help in the conduction of water and minerals ?
4. Describe how secondary xylem and secondary phloem are formed.
5. Write notes on :
 - (i) Branching patterns in plants
 - (ii) Formation of growth rings.
6. Describe internal structure of monocot plant.
7. Discuss how does a plant cope up with water stress ? <http://www.gnduonline.com>
8. Write a detailed note on diversity in size, shape and arrangement of leaves in plants.
9. Write notes on :
 - (i) Origin of leaf
 - (ii) Structure of Cambium and its functions.