

(i) Printed Pages : 3 Roll No.

(ii) Questions : 9 Sub. Code :

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Exam. Code :

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B.A./B.Sc. (General) 4th Semester
(2054)

BOTANY

**Paper -B : Structure Development and Reproduction in
Flowering Plants-II**

Time Allowed : Three Hours]

[Maximum Marks : 36

Note :— Attempt five questions in all, Question No. I is compulsory and attempt four more questions, selecting one question from each unit. Draw Diagrams wherever necessary.

I. (A) Fill in the blanks :

- (i) Outer light coloured functional part of secondary xylem which helps in the conduction of water and dissolved substances is called _____.
- (ii) In stem of _____, the medullary bundles are arranged in definite rings with definite number of bundles in each ring.
- (iii) Mechanical device in flowers to prevent self-pollination and promote cross pollination is called _____.
- (iv) _____ endosperm is the most common type of endosperm in angiosperms.

4×1=4

(B) Multiple choice questions :

- (i) Tunica Corpus theory of shoot apex was proposed by :
(a) Hanstein (b) Schmidt
(c) Popham and Chan (d) Newman
- (ii) In *Eichhornia* and *Pistia* the vegetative propagation occurs with the help of one internode long runner known as :
(a) Offset (b) Turions
(c) Stolon (d) Bulbils
- (iii) Maturation of anthers earlier than stigma of flower to prevent self-pollination is :
(a) Homogamy (b) Protogyny
(c) Protandry (d) Prepotency
- (iv) Parachute like pappus in fruits for seed dispersal are modification of persistent :
(a) Style (b) Stigma
(c) Sepal (d) Petal

4×1=4

UNIT—I

- II. Differentiate between dicot root and monocot root. Support your answer with diagrams.

7

III. Discuss in brief the various secretory/special tissues in plants. 7

UNIT—II

IV. Explain the anomalous stem structure in *Dracaena* with diagrams. 7

V. What is vegetative propagation ? Explain briefly about layering and its types. 7

UNIT—III

VI. Describe the advantages and disadvantages of self and cross pollination. 7

VII. (a) Define entomophily. Discuss the characters of entomophilous flowers.

(b) Discuss in brief Autogamy with examples. 4,3

UNIT—IV

VIII. Write notes on any two of the following :

(a) Parthenocarpy

(b) Zoochory

(c) Significance of seed. $3.5 \times 2 = 7$

IX. What is meant by suspended animation ? Explain its various causes and methods of breaking it. 7