

(i) Printed Pages: 4

Roll No. ....

(ii) Questions : 9

Sub. Code : 

0	3	5	4
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Exam. Code : 

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**B.A./B.Sc. (General) 4<sup>th</sup> Semester**

**1048**

**BOTANY**

**Paper : B Structure Development and Reproduction in**

**Flowering Plants—II**

**Time Allowed : Three Hours]**

**[Maximum Marks : 36**

**Note :—** (1) Attempt **five** questions in all.

(2) Question No. 1 is compulsory.

(3) Attempt **four** more questions selecting **one** from each unit.

(4) Draw well labelled diagrams wherever necessary.

1. (A) Fill in the blanks :

(i) The rooted portion of a plant used in grafting is called \_\_\_\_\_.

(ii) Parenchyma cells with well developed air spaces are called \_\_\_\_\_.

(iii) In stem of \_\_\_\_\_ anomalous medullary bundles are arranged in definite rings with definite number of bundles in each ring.

(iv) \_\_\_\_\_ endosperm is the most common type of endosperm in angiosperms.

(v) In monocot stem the vascular bundles are conjoint, collateral, endarch and \_\_\_\_\_.

(vi) Branched star shaped sclereids are called \_\_\_\_\_.

6×1=6

(B) Multiple choice questions :

(i) Vascular bundle having the phloem strands on both outer and inner side of xylem is called :

- (a) Bicollateral
- (b) Collateral
- (c) Concentric
- (d) None of these

(ii) Histogen theory was given by :

- (a) Nageli
- (b) Hainstein
- (c) Schmidt
- (d) Popham

(iii) Mechanical barrier to prevent self pollination and promote cross pollination is :

- (a) Heterostyly
- (b) Dicliny
- (c) Herkogamy
- (d) Dichogamy



(iv) Special type of fleshy buds in aquatic plants for vegetative propagation are called :

(a) Turions

(b) Bulbils

(c) Runners

(d) Suckers

(v) Dispersal of seeds through water is called :

(a) Zoochory

(b) Hydrochory

(c) Autochory

(d) Anemochory

(vi) *Salvia* showing Lever mechanism is usually pollinated by :

(a) Bats

(b) Birds

(c) Insects

(d) Water

6×1=6

### UNIT—I

2. Describe the structure and function of phloem. 6

3. Write short notes on :

(a) Periderm

(b) Tunica Corpus Theory.

3,3

## UNIT—II

4. With the help of suitable diagram, describe the anomalous structure of *Nyctanthes* stem. 6
5. Explain briefly about micropropagation. 6

## UNIT—III

6. Define self pollination and its types. Give advantages and disadvantages of self pollination. 6
7. What is meant by Anemophily ? Give the characters of anemophilous flowers. 6

## UNIT—IV

8. Write notes on the following :
  - (a) Parthenocarpy
  - (b) Significance of seed. 3,3
9. Explain the process of embryo development in a typical dicot plant. 6