

(i) Printed Pages : 4]

Roll No. ....

(ii) Questions : 9]

Sub. Code : 

0	2	5	4
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Exam. Code : 

0	0	0	3
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**B.A./B.Sc. (General) 3rd Semester  
Examination**

**1127**

**BOTANY**

**(Structure Development and Reproduction in  
Flowering Plants-I)**

**Paper : B**

**Time : 3 Hours]**

**[Max. Marks : 36**

*Note :-* (i) Attempt *five* questions in all.

(ii) Question No. 1 is compulsory. Attempt *four*  
more questions, selecting *one* from each Unit.

(iii) Draw diagrams wherever necessary.

1. (A) Fill in the blanks :

(i) Plants which live only for few weeks are  
called .....

(ii) Stalk like structure which attaches the ovule  
to placenta is .....

(iii) Rolling and unrolling of grass leaves to regulate water loss is due to thin walled large ..... cells present in the upper epidermis.

(iv) *Rhizophora* exhibit ..... type of roots.

(v) ..... is the nutritive tissue for developing embryo in ovule.

(vi) *Polygonum* embryo sac is ..... nucleate and ..... celled.  $6 \times 1 = 6$

(B) Multiple choice questions :

(i) Reticulate multicostate divergent venation is seen in :

(a) *Cucurbita*

(b) *Smilax*

(c) *Zizyphus*

(d) *Mangifera*

(ii) Corm is not seen in :

(a) *Crocus*

(b) *Colocasia*

(c) *Amorphophallus*

(d) Potato

(iii) Which of the following is bisporic embryo sac ?

(a) *Polygonum*

(b) *Oenothera*

(c) *Adoxa*

(d) *Allium*

(iv) The filiform apparatus is present in :

(a) Synergids

(b) Egg cell

(c) Antipodals

(d) Central cell

(v) Phyllode represents modified :

(a) Leaf base

(b) Petiole

(c) Lamina

(d) Stem

(vi) Woody climber is :

(a) Twiner

(b) Creeper

(c) Trailer

(d) Lianas

6×1=6

### Unit-I

2. Write notes on any *two* of the following :

(i) Epiphytic roots

(ii) Prop roots

(iii) Pneumatophores

3,3

3. Define tap root system. Give structural modifications for storage in tap roots. 6

### Unit-II

4. Define Phyllotaxy. Explain the different types with diagrams giving suitable examples. 6
5. Write notes on any *two* of the following :
  - (i) Phylloclade
  - (ii) Bulb
  - (iii) Rhizome
  - (iv) Stem tuber 3,3

### Unit-III

6. Write notes on any *two* of the following :
  - (i) Functions of flower
  - (ii) Tapetum
  - (iii) T. S. of anther 3,3
7. Give an illustrated account of development of male gametophyte in angiosperms. 6

### Unit-IV

8. Define and describe double fertilization in an angiospermic plant and give its significance. 6
9. Describe with suitable illustrations the different forms of ovules in angiosperms. 6