

(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
(2055)

BOTANY

Paper-A : Diversity of Seed Plants and their Systematics-II

Time Allowed : Three Hours] [Maximum Marks : 36

Note :— (1) Attempt **FIVE** questions in all, selecting **ONE** question each from Units I, II, III, IV.

(2) Q. No. 1 is compulsory.

(3) Draw diagrams wherever necessary.

1. (A) Multiple choice questions. Pick up the correct choice :

(i) According to Bentham and Hooker's classification which is not a series of Gamopetalae ?

(a) Thalamiflorae (b) Bicarpellatae

(c) Heteromerae (d) Inferae

(ii) It is the specimen which is donated by workers where no holotype is assigned already or holotype is destroyed :

(a) Syntype (b) Holotype

(c) Topotype (d) Lectotype

(iii) Corolla is gland dotted in the flower of :

- | | |
|----------------|-------------|
| (a) Ranunculus | (b) Citrus |
| (c) Acacia | (d) Solanum |

(iv) Trimerous flowers occur in :

- | | |
|---------------|-----------------|
| (a) Asparagus | (b) Lathyrus |
| (c) Hibiscus | (d) Chenopodium |

(B) Fill in the blanks :

(v) A flower with bilateral symmetry is known as _____.

(vi) _____ is meant for secreting and storing nectar in *Calotropis*.

(vii) _____ is considered as the second largest of all the families of flowering plants.

(viii) Out of the four stamens in a flower, two are long and two are short, the condition is known as _____.

1×8=8

UNIT—I

2. (a) Write a note on of Bentham and Hooker's system of classification. Also discuss its merits and demerits.

(b) Define the terms Holotype and Paratype. 5,2

3. Discuss :

(a) Aims and objectives of Plant Taxonomy

(b) Taxonomic ranks. 4,3

UNIT—II

4. (a) Give an account of the flower of *Ranunculus*. Also write floral formula and draw floral diagram.
- (b) Compare Androecium of *Brassica* and *Asparagus*. 4,3
5. (a) Write floral formula and draw floral diagram of *Triticum* and *Delphinium*.
- (b) Discuss the following terms :
Acyclic flower, Diplostemonous, Gynandrous. 4,3

UNIT—III

6. (a) Describe the flower of *Lathyrus*. Also write floral formula and draw floral diagram.
- (b) Compare Androecium of *Amaltas* and *Dhania*. 4,3
7. (a) Write floral formula and draw floral diagram of *Citrus* and *Acacia*.
- (b) Discuss the Diagnostic features of Cotton family. 4,3

UNIT—IV

8. Give an account of :
- (a) Flower of *Calotropis* along with floral formula and floral diagram.
- (b) Diagnostic features of Lamiaceae Family. 4,3
9. (a) Write the floral formula and draw floral diagram of *Solanum* and *Ageratum*.
- (b) Discuss the terms with example :
Gynostegium, Gynobasic style and Antiphyllous. 4,3