

(i) Printed Pages : 4

Roll No.

(ii) Questions : 9

Sub. Code :

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Exam. Code :

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

(2053)

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 from each Unit-I, II, III and IV.

(2) Question No. 1 is compulsory.

(3) Draw diagrams where necessary.

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

(i) In Bentham and Hooker's classification, Monocotyledons were divided into how many series ?

(a) 5

(b) 7

(c) 9

(d) 11

(ii) Spirocyclic flowers are found in which of the following ?

(a) *Citrus*

(b) *Ocimum*

(c) *Ranunculus*

(d) *Lathyrus*

(iii) Goose Foot Family is the common name of which of the following family ?

(a) Solanaceae

(b) Liliaceae

(c) Asclepiadaceae

(d) Chenopodiaceae

(iv) Didynamous condition of stamens are found in which of the following plant ?

(a) *Ocimum*

(b) *Brassica*

(c) *Hibiscus*

(d) *Solanum*

(B) Fill in the blanks :

(v) The specimen selected from original material by any worker to serve as nomenclature type is known as _____.

(vi) _____ type of inflorescence is found in *Ocimum*.

(vii) In Bentham and Hooker's classification, in Polypetalae, between Thalamiflorae and Calcyflorae which series is placed _____.

(viii) The mode of arrangement of accessory floral parts in relation to one another in a floral bud is known as _____.

1 × 8 = 8

UNIT—I

2. (a) Discuss aims and objectives of plant taxonomy.

(b) Give a brief account of Bentham and Hooker's system of classification.

3,4

3. Write notes on :

- (a) General characters of Angiosperm.
- (b) Merits and demerits of Bentham and Hooker's system of classification. 3,4

UNIT—II

- 4. (a) Write floral formula of *Delphinium* and *Asphodelus*.
- (b) What do you mean by placentation ? Discuss various types of placentations. 3,4
- 5. (a) Compare Androecium of *Ranunculus* and *Brassica*.
- (b) Give an account of *Triticum*. Also write down the diagnostic features of the family it belongs to. 3,4

UNIT—III

- 6. (a) Write down the diagnostic features of family Malvaceae.
- (b) Discuss Gynoecium of *Coriandrum* and Androecium of *Acacia*. 3,4
- 7. (a) Compare the Androecium of *Citrus* and *Cassia*.
- (b) Write floral formula and draw floral diagram of *Lathyrus* and *Murraya*. 3,4

UNIT—IV

8. Discuss :

(a) Diagnostic features of family Lamiaceae.

(b) Androecium and Gynoecium of *Solanum*. 3,4

9. (a) Write down the diagnostic features of family Asclepiadaceae.

(b) Draw floral diagram and write floral formula of *Petunia* and *Ageratum*. 3,4