

Roll No.

Total Pages : 3

GSM/M-20

1625

BOTANY

(Biology and Diversity of Seed Plants–II)

Paper–I

Time Allowed : 3 Hours]

[Maximum Marks : 40

Note : Attempt **five** questions in all, selecting at least **one** question from each Unit. Question No. **1** is compulsory. All questions carry equal marks.

Compulsory Question

1. (a) What is Taximetrics ?
- (b) Define the Neosystematics.
- (c) Define the Karyotype.
- (d) Define the Placentation.
- (e) What is Spadix inflorescence ?
- (f) Name the Russian Botanist who proposed a phylogenetic system of classification in 1954.
- (g) Define the Beta-taxonomy.
- (h) What is the difference between an Isotype and Topotype ?

8×1=8

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P. T. O.

UNIT-I

2. Give the important rules for Plant Nomenclature and their Significance. 8
3. (a) Role of Cytology in relation to taxonomy. 4
- (b) Write notes on Indented and Bracketed key. 2,2

UNIT-II

4. Write notes on the following :
- (a) Verticillaster
- (b) Capitulum
- (c) Cyathium
- (d) Corymb. 2×4=8
5. Write notes on the following :
- (a) Principle of Priority. 4
- (b) Concept of Species. 4

UNIT-III

6. (a) Describe the different forms of Polypetalous Corolla. 4
- (b) Spikelet of Wheat. 4

7. (a) Write the diagnostic features of the family Brassicaceae and its economic importance.
- (b) Give the floral formula and floral diagram of any member of this family. 3,2,3

UNIT-IV

8. (a) Give the merits and demerits of Benthan and Hooker's system of classification of Angiosperms. 5
- (b) Briefly explain the economic importance of Apiaceae. 3
9. Write the botanical name, floral formula and floral diagram of :
- (a) Shoeflower. 4
- (b) Larkspur. 4