

Roll No. ....

(09/20-I)

**5224**

**B. Sc. EXAMINATION**

(For Re-appear Candidates Only)

(Fourth Semester)

**BOTANY**

First Paper

Biology and Diversity of Seed Plants–II

*Time : Three Hours*

*Maximum Marks : 40*

**Note :** Q. No. 1 is compulsory. Attempt *Four* others selecting *two* questions from each Unit. All questions carry equal marks.

1. Explain the following :

- (a) Father of taxonomy
- (b) Alpha phase ( $\alpha$ )
- (c) Name two Herbaria
- (d) ICBN

- (e) Placentation
- (f) Involucre
- (g) Epipetalous
- (h) Catkin.

1×8=8

### Unit I

2. (a) Define and describe the keys to identification in plants in detail.
- (b) Describe Binomial nomenclature. 6+2=8
3. What is Botanical garden ? Give its importance. Describe about some botanical gardens in India and abroad. 1+2+5=8
4. What is Taximetrics ? Describe its role in taxonomy along with its advantages and disadvantages. 2+6=8
5. Explain the following : 2×4=8
  - (a) Capitulum
  - (b) Verticillaster
  - (c) Parietal placentation
  - (d) Spadix.

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### Unit II

6. Describe the classification proposed by Engler and Prantl along with its merits and demerits. 8
7. Describe the following : 4+4=8
  - (a) Floral formulae and Floral diagrams of *Delphinium ajacis*.
  - (b) Diagnostic features and economic importance of family Brassicaceae.
8. Write notes on the following : 4+4=8
  - (a) Androecium in *Calotropis*
  - (b) Inflorescence in Umbelliferae.
9. Give diagnostic features and economic importance of family Poaceae. 4+4=8

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