

Exam. Code : 107402

Subject Code : 2212

**B.Sc. Bio-Technology Semester—II****BOTANY-B****Paper-BT-2**

Time Allowed—3 Hours] [Maximum Marks—40

**Note :** Attempt **ALL** questions from Section A, **FIVE** questions from Section B and **TWO** questions from Section C. Draw neatly labeled diagrams wherever required. Marks for each question are indicated in the paper.

**SECTION—A**

1. Write about a paragraph (upto 1/3 of a page) on each of the following :
- (i) Calyptra
  - (ii) Soredia
  - (iii) Syncarpous
  - (iv) Compound leaves
  - (v) Zygomorphic
  - (vi) Caryopsis
  - (vii) Nucleus seed
  - (viii) Seed viability. 1×8=8

**SECTION—B**

**Note :** Attempt **FIVE** of the following questions each in about 2 pages of the answer book.

2. Write in detail on Bentham and Hooker's system of classification.
  3. Describe general characters of Lichens.
  4. Explain morphological features of *Brassica campestris* L. with diagrams.
  5. Write general character of family Lamiaceae with example from your syllabus.
  6. Discuss evolutionary status of family Orchidaceae.
  7. Discuss morphological characters of *Cassia fistula* L. with diagrams.
  8. What is seed biology ? Differentiate between seed and grain.
  9. Briefly explain various operations followed during seed processing.
  10. Describe the procedure of seed production in India.
- 4×5=20

**SECTION—C**

**Note :** Attempt **TWO** questions from this Section, limiting your answer to about 5 pages.

11. Differentiate between Hutchinson's and Engler and Prantl's system of classification.
  12. Elucidate taxonomic description of family Asteraceae with *Helianthus* as a typical example.
  13. Give the general characters and diagnostic features of the family Orchidaceae with reference to the genus *Zeuxine*.
  14. Define seed quality. Explain different tests designed to determine quality of seed.
- 6×2=12