

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