

(b) Explain the technology for fruit storage.

SECTION - C (2 × 20 = 40)

Answer ALL questions.

Each answer should not exceed 1,200 words.

All questions carry equal marks.

15. (a) Write an account of the ultrastructure of cell wall.

(OR)

(b) Write an account of microsporogenesis and structure and organisation of male gametophytes.

16. (a) Discuss the various techniques of tissue culture.

(OR)

(b) Explain the ABC model of flower development.

Register Number :

Name of the Candidate :

5 7 0 2

M.Sc. DEGREE EXAMINATION, 2009

(BOTANY)

(FIRST YEAR)

(PAPER - IV)

**140. ANGIOSPERM ANATOMY,
EMBRYOLOGY, TISSUE CULTURE,
DEVELOPMENTAL BOTANY AND
APPLIED BOTANY**

December]

[Time : 3 Hours

Maximum : 100 Marks

SECTION - A (8 × 3 = 24)

Answer ALL questions.

Each answer should not exceed FIFTY words.

All questions carry equal marks.

1. Transition region.

2. Amphivasal bundle.

Turn Over

3. Stomatal index.
4. Hypostase.
5. Endothecium.
6. Polyembryony.
7. Seed certification.
8. Totipotency.

SECTION - B (6 × 6 = 36)

Answer ALL questions.

All questions carry equal marks.

9. (a) Explain the structure, functions and significance of transfer cells.
(OR)
- (b) Elucidate variations and phylogenetic trends in the specialization of xylem.
10. (a) Write an account of experimental studies in cambium.
(OR)
- (b) Discuss the role of anatomy in relation to ecology.

11. (a) With suitable example, explain the structure of monocot embryo.
(OR)
- (b) Explain the development of nuclear endosperm.
12. (a) Explain the significance of meristem culture.
(OR)
- (b) Explain the production of haploids through pollen culture.
13. (a) Explain carpel polymorphism.
(OR)
- (b) Explain nucleocytoplasmic interactions.
14. (a) Explain the terms :
(i) Seed certification.
(ii) Seed borne pathogens.
(iii) Seed law enforcement.
(OR)

Turn Over