

Total No. of Pages: 2

Register Number:

6401

Name of the Candidate:

M.Sc. DEGREE EXAMINATION December 2014

(BOTANY)

(FIRST YEAR)

**140: ANGIOSPERMS ANATOMY, EMBRYOLOGY TISSUE CULTURE
DEVELOPMENTAL BOTANY AND APPLIED BOTANY**

Time: Three hours

Maximum: 100 marks

SECTION-A

Answer ALL questions

(8 × 3 = 24)

Each answer not to exceed 50 words

Define the following:

1. Transfer cell
2. Nucellus
3. Totipotency
4. Morphogenesis
5. Seed moisture
6. Phellogen
7. Haploid
8. Halophytes

SECTION-B

Answer ALL questions

(6 × 6 = 36)

Each answer not to exceed 300 words

9. a) Describe the different types of Anatomy of nodes.
(OR)
b) Give a brief account of cambial activity.
10. a) Describe the process of pollen germination.
(OR)
b) Write short notes on polyembryony.

11. a) Define meristem. Discuss the role of meristem culture in disease elimination.
(OR)
b) Write the procedure for preparing explants for inoculation.
12. a) Write notes on nucleo-cytoplasmic interaction.
(OR)
b) Describe the classical concept of flower.
13. a) Describe the agrotechnology of Jasmine.
(OR)
b) Write an account on seed viability and seedling vigour.
14. a) Write notes on seed born pathogens.
(OR)
b) Describe the Tunica-carpus theory of apical meristem.

SECTION-C**Answer ALL questions****(2 × 20 = 40)****Each answer not to exceed 1200 words**

15. a) Explain the significance of anatomical structures in relation to ecology and taxonomy.
(OR)
b) Write an essay on ovules and its types.
16. a) Explain the preparation of various tissue culture media.
(OR)
b) Write an essay on legislation and seed law enforcement and seed certification.

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