

14. (a) How Jasmine is cultivated by a village farmer and what is your advice to improve using modern horticulture methods.

(OR)

- (b) What are the roles of seed enforcement agency ?

SECTION – C (2 × 20 = 40)

Answer ALL questions.

Each answer should not exceed 1,200 words.

All questions carry equal marks.

15. (a) Trade development of monocot embryo in *Ottelia*.

(OR)

- (b) What do you understand by high salt and low salt medium ? Explain the preparation of a normal low salt medium for tissue culture.

16. (a) Trace the development of female gametophyte.

(OR)

- (b) Describe about the theories of apical meristem.

Register Number :

Name of the Candidate :

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M.Sc. DEGREE EXAMINATION, 2008

(BOTANY)

(FIRST YEAR)

(PAPER - IV)

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

(Revised Regulations)

May]

[Time : 3 Hours

Maximum : 100 Marks

Answer sections A, B and C.

Draw diagrams wherever necessary.

Turn over

SECTION – A (8 × 3 = 24)*Answer ALL questions.**Each answer should not exceed 50 words.**All questions carry equal marks.**Explain the following :*

1. Histogen.
2. Trilocular node.
3. Endothelium.
4. Heterofertilization.
5. How to avoid browning of culture medium ?
6. Dihaploids.
7. Concept of flower.
8. Seed viability.

SECTION – B (6 × 6 = 36)*Answer ALL questions.**Each answer should not exceed 300 words.**All questions carry equal marks.*

9. (a) Describe the components of complex tissues.
(OR)
(b) Describe the ground tissues seen in plants.

10. (a) Describe types, origin and function of tapetum.

(OR)

(b) Describe the various types of ovules seen in angiosperms.

11. (a) Start from selection of explant, explain how callus is obtained in *invitro* condition.

(OR)

(b) Explain how a soft tissue like hypocotyl and hard tissue like seed coat are sterilized.

12. (a) What are the growth regulators affect the morphogenesis ?

(OR)

(b) Describe the vascularization of a typical flower.

13. (a) Name any four seed borne pathogens and how they are treated.

(OR)

(b) Write the standard value for seed moisture for different agro seeds.

Turn over