

D 72931

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Name.....

Reg. No.....

**FIRST SEMESTER M.A./M.Sc./M.Com. DEGREE EXAMINATION
DECEMBER 2019**

(CBCSS)

Botany

**BOT 1C 03—ANGIOSPERM ANATOMY, ANGIOSPERM EMBRYOLOGY PALYNOLOGY
AND LAB TECHNIQUE**

(2019 Admissions)

Time : Three Hours

Maximum : 30 Weightage

Part A

Answer any four questions.

Each question carries a weightage of 2.

1. Explain parthenocarpy and its significance.
2. Differentiate heterospory and heterospermy.
3. Explain melittopalynology.
4. Comment on pollen-pistil interaction.
5. Differentiate with examples eurypalynous and stenopalynous taxa.
6. Discuss any two histochemical tests to localise plant metabolites.
7. Write a note on the bidirectional activity of cambium.

(4 × 2 = 8 weightage) .

Part B

Answer any four questions.

Each question carries a weightage of 3.

8. Give an account on wood anatomy.
9. Explain the development of cork cambium and its activity in stem and root.
10. What is maceration ? Explain the various methods.
11. What is dehydration ? Explain the process using non-solvent of paraffin.
12. Describe the anomalous secondary growth in beet root.

Turn over

13. Enlist the contributions of Erdtman and Nair to palynology.
14. Explain the process of embedding using paraffin wax method.

(4 × 3 = 12 weightage)

Part C

Answer any two questions.

Each question carries a weightage of 5.

15. Write an essay on the recent advances in palynological studies.
16. Explain with examples the role of anatomy in relation to plant taxonomy.
17. Describe with diagrams the process of microsporogenesis and male gametophyte development in angiosperms.
18. What are stains? Give an account on principles and methods of staining techniques.

(2 × 5 = 10 weightage)