

D 52777

(Pages : 2)

Name.....

Reg. No.....

**FIRST SEMESTER M.Sc. DEGREE (REGULAR/SUPPLEMENTARY)  
EXAMINATION, NOVEMBER 2023**

(CBCSS)

Botany

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

(2019 Admission onwards)

Time : Three Hours

Maximum : 30 Weightage

**Part A***Answer any **four** questions.**Each question carries 2 weightage.*

1. What is plasmodesmata ? What is its function ?
2. Distinguish between hypocotyl and epicotyl. Which is the first part ?
3. Describe the phenomenon behind the production of seedless fruits.
4. What do you mean by heterosis ?
5. What is the principle of microscopy ?
6. Define melittopalynology.
7. Write a note on vital staining ?

(4 × 2 = 8 weightage)

**Part B***Answer any **four** questions.**Each question carries 3 weightage.*

8. Describe the characteristic features that distinguish primary and secondary cell wall.
9. Pollen pistil interaction has a specific role in fertilization. Explain.
10. Describe the structure of a monocot embryo.

**Turn over**

11. Describe the composition, method of preparation and uses of any *two* fixatives.
12. Briefly explain the different nodal patterns in angiosperms.
13. Based on the nature of nuclear division the endosperm formation is different. Comment.
14. Describe the structure of a dithecous anther with a labelled sketch.

(4 × 3 = 12 weightage)

### Part C

*Answer any two questions.*

*Each question carries 5 weightage.*

15. Do vascular cambium and cork cambium have any role in increasing the girth of a plant. Explain ?
16. Palynology has a significant role in taxonomy. Explain.
17. Explain the mode of fertilization and embryogenesis in angiosperms with suitable sketches.
18. Discuss the significance of anatomical characters in solving taxonomic problems.

(2 × 5 = 10 weightage)