

19P130

(Page: 1)

Name:

Reg. No.....

FIRST SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2019

(CUCSS PG)

**CC19P BOT1 C03 - ANGIOSPERM ANATOMY, ANGIOSPERM EMBRYOLOGY,
PALYNOLOGY AND LAB TECHNIQUES**

(Botany)

(2019 Admission Regular)

Time: Three Hours

Maximum: 30 Weightage

I. Answer any *four* questions. Each question carries 2 weightage.

1. How does anatomical differentiation occur in mesocotyl region of seedlings?
2. What are the sources of carmine and haematoxylin?
3. Explain the role of seasonal variations in cambial activity.
4. Differentiate between natural and synthetic dye with examples.
5. Comment on structure of pollen wall.
6. Differentiate between pro-ubisch bodies and prime exine.
7. Explain embryology in relation to taxonomy.

(4 × 2 = 8 Weightage)

II. Answer any *four* questions. Each question carries 3 weightage.

8. What is a micrometer? How do you use it?
9. Comment on the phylogenetic considerations of nodal anatomy.
10. List the common fixatives. Explain their formula and uses.
11. Explain anomalous secondary thickening in storage roots with the help of a diagram.
12. Elucidate the contributions of P. K. K. Nair to palynology.
13. Write an account of the structure and development of typical monocot embryo.
14. Differentiate between Aeropalynology and Mellitopalynology.

(4 × 3 = 12 Weightage)

III. Answer any *two* questions. Each question carries 5 weightage.

15. Explain the methods of embedding plant materials in paraffin wax using TBA method.
16. Write an essay on pollen and pistil interaction.
17. Write a general account on wood anatomy.
18. Evaluate the role of palynology in taxonomy.

(2 × 5 = 10 Weightage)
