

17P136

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Name: .....

Reg. No.....

**FIRST SEMESTER M.Sc. DEGREE EXAMINATION, DECEMBER 2017**

(Regular/Supplementary/Improvement)

(CUCSS-PG)

**CC15P BO1 C03 – ANGIOSPERM ANATOMY, EMBRYOLOGY,  
PALYNOLOGY & LAB TECHNIQUES (Botany)**

(2015 Admission Onwards)

Time: Three Hours

Maximum: 36 Weightage

**PART A**

Answer all questions briefly. Each question carries 1 weightage.

1. Write a note on plant cell wall.
2. Differentiate between phragmoplast & phragmosome.
3. Comment on the role of glandular trichomes.
4. Short note on leaf trace & branch trace.
5. Describe different types of nodes.
6. Define "X" bodies.
7. Explain the structure of stigmatic papillae.
8. Explain tristylly with example.
9. Describe pollenkit.
10. Distinguish eurypalynous and stenopalynous taxa.
11. Give importance of palynology in oil exploration.
12. Explain palynological taxonomy in Gymnosperms.
13. Define vital staining.
14. Differentiate killing from fixing of plant tissues.

(14 x 1 = 14 weightage)

**PART B**

Answer any seven questions. Each question carries 2 weightage.

15. Explain the role of cambium in wound healing
16. Describe the theory of cell wall growth
17. Explain ray porous & diffuse porous wood
18. Describe the ultra structure of xylem
19. Explain heterospority
20. Describe the functions of synergids
21. Give an account on the contribution of Erdtman.
22. Write note on Forensic Palynology
23. Short note on dry and wet stigma

**PART C**

Answer any two questions. Each question carries 4 weightage.

25. Describe the methods of embedding plant materials in paraffin wax through TBA method.
26. Describe different types of embryo sac development in dicot plants.
27. Explain different types of microtomes and its working.
28. Write an account of structure and development of typical monocotyledonous embryo. (2 x 4 = 8 weightage)

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(14 x 1 = 14 weightage)

**PART B**

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23. Short note on dry and wet stigma.