

**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**



**B.Sc. DEGREE EXAMINATION – PLANT BIOLOGY AND PLANT BIOTECHNOLOGY**

**SECOND SEMESTER – APRIL 2018**

**17/16UPB2MC02– PLANT ANATOMY AND EMBRYOLOGY**

Date: 26-04-2018

Dept. No.

Max. : 100 Marks

Time: 01:00-04:00

**PART - A**

**Answer the following, each within 50 words.**

**(10x2= 20marks)**

1. What is Parenchyma?
2. What are Companion Cells?
3. Define Unilocular node.
4. What are Subsidiary Cells?
5. Define Bulliform Cells.
6. What is Leaf Abscission?
7. Define Tapetum.
8. What are Pollinia.
9. Define Triple fusion.
10. Define Apomixis.

**PART - B**

**Answer the following, each within 500 words, Draw diagrams and flowcharts wherever necessary:**

**(5x7= 35marks)**

11. a) Write short notes on xylem tissues.

**(OR)**

b) Explain the theories on Apical meristem.

12. a) Describe the anomalous secondary growth in *Dracaena* stem.

**(OR)**

b) Write notes on Dermal Tissue system.

13. a) Explain the anatomical structure of Dicot Leaf.

**(OR)**

b) Explain the anatomy of storage Roots

14. a) Explain the types of ovules with suitable diagrams

**(OR)**

b) Discuss about the types of pollination found in Angiosperms.

15. a) Write about Polyembryony and its importance.

**(OR)**

b) Explain the structure of Dicot embryo.

### **PART – C**

***Answer any three of the following, each within 1200 words. Draw diagrams and flowcharts wherever necessary: (3 x15= 45marks)***

16. Explain the structure and function of different types of simple tissues.

17. Explain the secondary growth in Dicot stem

18. Write about the structure of stomata, their importance and the types of stomata found in Dicots and Monocots.

19. Describe the structure and development of Anther.

20. Write detailed notes on the types of Endosperms studied by you.

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