

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034



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

SECOND SEMESTER – APRIL 2023

16/17/18UPB2MC02 – PLANT ANATOMY AND EMBRYOLOGY

Date: 13-05-2023

Dept. No.

Max. : 100 Marks

Time: 09:00 AM - 12:00 NOON

PART A

Answer the following, each within 50 words.

(10 x 2 = 20 marks)

1. Mention the features of collenchyma.
2. What are cell inclusions?
3. Define anamocytic stomata.
4. What is pericycle?
5. Define exarch.
6. What is cambium?
7. Draw the structure of pollen grain.
8. Define anemophily.
9. What is parthenocarpy?
10. What is endosperm?

PART B

Answer the following, each within 500 words.

Draw diagrams / flowcharts wherever necessary.

(5 x 7 = 35 marks)

11. a. Give an account on sclerenchyma.
(or)
b. Write notes on the classification of meristematic tissues
12. a. Explain the types of vascular bundles.
(or)
b. Write notes on the internal structure of dicot root.
13. a. Explain the different types of stomata in dicots.
(or)
b. Write notes on the anatomy of *Dracaena* Stem.
14. a. What is pollination? What are the agents for pollination.
(or)
b. Explain about the contrivances for cross pollination.
15. a. Write notes on the structure of monocot embryo.
(or)
b. Give an account on the types of ovules.

PART C

Answer any three of the following, each within 1200 words.

Draw diagrams / flowcharts wherever necessary.

(3 x 15= 45 marks)

16. Explain in detail about complex tissues.
17. Describe the anatomy of dicot and monocot stem.
18. Explain the anatomy of dorsiventral and isobilateral leaves.
19. Explain in detail about the structure of a mature anther
20. Give an account on the structure of dicot embryo
