

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034



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

THIRD SEMESTER – NOVEMBER 2017

PB 3511 – PLANT ANATOMY

Date: 07-11-2017

Dept. No.

Max. : 100 Marks

Time: 09:00-12:00

PART – A

[10 X 2 = 20]

ANSWER THE FOLLOWING, EACH WITHIN 50 WORDS ONLY

1. Write about sclereids?
2. What are vessels?
3. What are open vascular bundles?
4. Distinguish between proto and meta xylem .
5. What is isobilateral leaf?
6. Write about lateral meristem.
7. What is periderm?
8. What is ray parenchyma?
9. What is anamocytic stomata?
10. Define cambium?

PART – B

[5 X 7 = 35]

**ANSWER THE FOLLOWING, EACH ANSWER WITHIN 500 WORDS,
DRAW DIAGRAMS WHEREVER NECESSARY**

- 11a. Describe the structure of primary cell wall.
(OR)
b. Write an account on secretary cells.
- 12a. Describe the properties of vascular cambium.
(OR)
b. Give an account on differentiation of leaf.
- 13a. Describe the types of meristem.
(OR)
b. Differentiate secondary meristem from primary meristem.
- 14a. Describe the secondary growth in normal dicot stem.
(OR)
b. Describe the types of nodes.

15a. Explain the types of stomata. in angiosperms.

(OR)

b. Describe the structure of dorsiventral leaf

PART – C

(3 X 15 = 45)

**ANSWER ANY THREE OF THE FOLLOWING, EACH WITHIN 1200 WORDS,
DRAW DIAGRAMS WHEREVER NECESSARY**

16. Write an essay on permanent tissues.

17. Describe the differentiation of stem and root.

18. Explain the theories on organization of meristem.

19. Explain the structure of dicot stem and dicot root.

20. Write an essay on anomalous secondary growth in *Bigonia* and *Aristolochia*.
