

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034



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

FIFTH SEMESTER – APRIL 2016

PB 5521/5515/5509/5500 – PLANT PHYSIOLOGY

Date: 26-04-2016

Dept. No.

Max. : 100 Marks

Time: 09:00-12:00

PART-A

Answer the following, each within 50 words only:

(10x2=20marks)

1. Define plasmolysis.
2. Define apoplast.
3. What are hydroponics?
4. Write any two symptoms of Fe deficiency.
5. What are quantosomes?
6. Define red drop.
7. Comment on leghaemoglobin.
8. Define Abscission.
9. Comment on apical dominance.
10. Comment on Florigen.

PART-B

Answer the following, each within 500 words only:

(5x7=35marks)

Draw diagrams wherever necessary:

11. a. List out the properties of water.
Or
b. Write short notes on antitranspirants.
12. a. Discuss the effect of deficiency of micronutrients in the physiology of plant.
Or
b. Write short notes on the active absorption of ions.
13. a. Describe the non-cyclic photophosphorylation.
Or
b. Give a brief account on CAM plants.
14. a. Explain the process of glycolysis.
Or
b. Write and explain photorespiration.
15. a. What is seed dormancy? What are its causes?
Or
b. Enumerate the physiological role of auxin in plants?

PART-C

**Answer any THREE of the following, each within 1200 words only:
Draw diagrams wherever necessary:**

(3x15=45marks)

16. Write an essay on transpiration.
17. What are essential elements Write the role of nitrogen, sulphur and phosphorous in plants and its deficiency symptoms.
18. Explain Calvin cycle.
19. Give an account on Krebs's cycle.
20. Explain photoperiodism for its types and mechanism.

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