

TB142050C

Reg. No :

Name :

**B. Sc. DEGREE (CBCSS) EXAMINATION, APRIL 2015
SECOND SEMESTER - COMPLEMENTARY COURSE (BOTANY)
BOT2 PP – PLANT PHYSIOLOGY**

Time: 3 Hours

Maximum: 60 Marks

Part A

Answer *all* questions. Each question carries 1 mark.

1. What are antitranspirants?
2. Explain DPD.
3. What is Solar spectrum?
4. Comment on Nitrogen cycle.
5. What are C4 plants?
6. What is a sigmoid curve?
7. Write about synthetic auxins.
8. Describe capillary theory.

(8x1=8Marks)

Part B

Answer any *six* questions. Each question carries 2 marks.

9. Briefly explain ringing experiment.
10. Explain the effects of water stress.
11. What is non-cyclic photophosphorylation?
12. Describe the structural peculiarities of CAM plants.
13. Differentiate diffusion and osmosis.
14. What is seed dormancy? Comment on its significance.
15. Describe two methods for measurement of growth.
16. What is electron transport system?
17. Comment on plant cell as an osmotic system.
18. Differentiate tropic and nastic movements.

(6x2=12Marks)

Part C

Answer any *four* questions. Each question carries 4 marks.

19. Describe the factors affecting photosynthesis.
20. Explain the mechanism of stomatal transpiration.

21. Differentiate active and passive absorption.
22. Describe the pigment systems involved in photosynthesis.
23. Explain geotropism with suitable examples.
24. What are the factors causing seed dormancy?

(4x4=16 Marks)

Part D

Answer any *two* questions. Each question carries 12 marks

25. Describe the various types of Nitrogen fixation.
26. Translocation of food takes place through phloem. Justify.
27. Transpiration is a necessary evil. Explain.
28. Explain the various reactions of Calvin cycle.

(2x12=24Marks)