

B. Sc. DEGREE (C.B.C.S.S.) EXAMINATION, APRIL 2018
(2017 Admission Regular, 2016 Admission Improvement/Supplementary &
2015 Admission Supplementary)

SEMESTER II - COMPLEMENTARY COURSE (BOTANY)
BO2C02TB – PLANT PHYSIOLOGY AND CROP PATHOLOGY
(For Zoology)

Time: Three Hours

Maximum Marks: 60

PART A

I. Answer all questions. Each question carries 1 mark

1. Define diffusion.
2. What are anti-transpirants?
3. Explain seed dormancy.
4. Name the causative organism of *Bacterial Blight of Rice*.
5. Define absorption spectrum.

(5x1=5)

PART B

II. Answer any five questions. Each question carries 2 marks

6. Differentiate between transpiration and guttation.
7. What is RUBISCO?
8. Explain Munch mass flow hypothesis.
9. What is symbiotic nitrogen fixation?
10. Differentiate between active and passive absorption.
11. What are the symptoms of *Nut Fall of Arecanut*?
12. Explain the role of auxin.
13. What is photorespiration?

(5x2=10)

PART C

III. Answer any five questions. Each question carries 5 marks

14. Illustrate nitrogen cycle with suitable diagram.
15. Explain the techniques to break seed dormancy.
16. What are the factors affecting photosynthesis?
17. Write a short note on Photosynthetic pigments
18. Transpiration is a “necessary evil”. Justify.
19. Write a short note on physiological aspects of water absorption
20. Explain the physiological changes involved in fruit ripening.
21. Write the causative organism, symptoms and control measures of *Leaf Mosaic of Tapioca*.

(5 x 5 = 25)

PART D

IV. Answer any two questions. Each question carries 10 marks

22. Classify plant diseases based on causative organisms & symptoms.
23. Write an essay on the mechanism of stomatal transpiration.
24. Describe the cyclic and non-cyclic photophosphorylation.
25. Write an essay on plant movements

(2 x 10=20)