



QP CODE: 20101163

Reg No :

Name : .....

# B.Sc. DEGREE (CBCS) EXAMINATION, NOVEMBER 2020 Second Semester

B.Sc Zoology Model I

## Complementary Course - BO2CMT02 - BOTANY-PLANT PHYSIOLOGY

2017 ADMISSION ONWARDS BB077097

Time: 3 Hours Max. Marks: 60

#### Part A

Answer any **ten** questions.

Each question carries **1** mark.

- 1. Write any one significance of osmosis in plants.
- 2. Mention any one practical application of plasmolysis.
- 3. What is apoplastic pathway?
- 4. What is the significance of anti-transpirants?
- 5. What is PAR?
- 6. What is grana?
- 7. What are the acessory photosyntheic pigments?
- 8. What is a reaction centre?
- 9. What is quantum requirement?
- 10. Why C4 cycle got that name?
- 11. Name the apparatus used to measure plant growth.
- 12. What is phytochrome?

 $(10 \times 1 = 10)$ 

### Part B

Answer any **six** questions.

Each question carries **5** marks.

- 13. With the help of suitable diagram explain the structure of hydathodes?
- 14. Transpiration is called a" necessary evil". Justify your answer?



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- 15. Give an account on the mechanism of stomatal opening?
- 16. Give a brief note on deficiency symptoms of mineral elemets N, P & K.
- 17. What are the basic rquirements of Photosynthesis.
- 18. Give the difference between phosphorescence and fluorescence.
- 19. Explain the Mass flow hypothesis of phloem translocation.
- 20. Write a short note on physiology of seed germination.
- 21. Comment on the physiological role of auxins in plants.

 $(6 \times 5 = 30)$ 

#### Part C

Answer any **two** questions.

Each question carries **10** marks.

- 22. Describe the mechanism of water absorption in terrestrial plants.
- 23. Explain the different steps of C3 cycle.
- 24. Explain the factors affecting photosynthesis.
- 25. Describe the factors affecting seed dormancy. Comment on the mechanisms to break seed dormancy in plants.

 $(2 \times 10 = 20)$ 

