22103163

**QP CODE: 22103163**

**Reg No :** .....

**Name :** .....

# B.Sc DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE EXAMINATIONS, OCTOBER 2022

## Second Semester

B.Sc Zoology Model I

## Complementary Course - BO2CMT02 - BOTANY-PLANT PHYSIOLOGY

2017 ADMISSION ONWARDS

5CC91946

Time: 3 Hours Max. Marks : 60

**Part A**

*Answer any **ten** questions.*

*Each question carries **1** mark.*

1. What is imbibition?
2. What is apoplastic pathway?
3. What are water stomata?
4. What are anti-transpirants?
5. Name any two Microelements.
6. Name the element present in Chlorophyll.
7. What do you mean by a photone?
8. Name the first CO2 acceptor of C3 cycle.
9. Define Kranz anatomy.
10. Define photorespiration.
11. What is a sigmoid curve?
12. Expand ABA.

(10×1=10)

## Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. Write short note on (1) Plasmolysis (2) DPD.
14. Define transpiration. What are the different types of transpiration?
15. Explain the theories on the mechanism of stomatal openig and closing.
16. Give a brief note on deficiency symptoms of mineral elemets N, P & K.
17. Explain the structure of Chloroplast.
18. Explain Red drop. What do you mean by Emersons enhancement effect?
19. Explain cyclic photophosphorylation.
20. List out the causes of seed dormancy.
21. Comment photoperiodism.

(6×5=30)

## Part C

*Answer any **two** questions.*

*Each question carries **10** marks.*

22. Explain the mechanism of active absorption of water.
23. Describe in detail the different fat soluble and watr soluble pigments present in plants.
24. Briefly describe the mechanism of translocation of organic solutes in green plants.
25. Give a detailed account of the physiological and biochemical changes accompanying seed germination.

(2×10=20)