



24019451

QP CODE: 24019451

Reg No :

Name :

**B.Sc DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE
EXAMINATIONS, MAY 2024**

Second Semester

B.Sc Zoology Model I

Complementary Course - BO2CMT02 - BOTANY-PLANT PHYSIOLOGY

2017 ADMISSION ONWARDS

8E8BBC4B

Time: 3 Hours

Max. Marks : 60

Part A

*Answer any **ten** questions.*

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

1. Define semipermeable membrane.
2. What is matric potential?
3. What are epithem cells?
4. What is the significance of anti-transpirants?
5. What is PAR?
6. What is quantum requirement?
7. Name the pigment system involved in cyclic photophosphorylation.
8. Name the substrates in the dark reaction of photosynthesis.
9. List out the organelles in which C2 cycle operates.
10. Name the path of translocation of organic solutes in green plants.
11. Name the apparatus used to measure plant growth.
12. What is Day Neutral Plants?

(10×1=10)

Part B

*Answer any **six** questions.*

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





13. Explain the movement of water towards xylem by apoplastic and symplastic pathway.
14. With the help of suitable diagram explain the structure of stomata.
15. Explain the theories on the mechanism of stomatal opening and closing.
16. Briefly explain the mineral nutrition in plants.
17. Differentiate between absorption spectrum and action spectrum.
18. Describe the physiological adaptations shown by CAM plants.
19. How the external atmospheric factors affect the rate of photosynthesis?
20. List out the causes of seed dormancy.
21. Write a short note on physiology of seed germination.

(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 about the photosynthetic apparatus in detail with suitable diagrams.
24. Explain the pigment chlorophyll in detail and differentiate between Chl-a & Chl-b.
25. Describe briefly on plant growth regulators.

(2×10=20)

