

QP CODE: 21100058



Reg No :

Name :

BSc DEGREE (CBCS) EXAMINATION, FEBRUARY 2021

Fifth Semester

Core Course - BO5CRT07 - PLANT PHYSIOLOGY & BIOCHEMISTRY

B.Sc Botany Model I ,B.Sc Botany Model II Environmental Monitoring And Management,B.Sc Botany Model II Food Microbiology ,B.Sc Botany Model II Horticulture and Nursery Management ,B.Sc Botany Model II Plant Biotechnology,B.Sc Botany and Biotechnology Model III Double Main

2017 Admission Onwards

B6B25129

Time: 3 Hours

Max. Marks : 60

Part A

*Answer any **ten** questions.*

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

1. What is suction pressure?
2. What are antitranspirants?
3. Name the first metabolic product of C4 Pathway.
4. Define Blackman's Law of limiting factors.
5. In what form organic food is translocated through phloem?
6. Define Cellular respiration.
7. Name the microorganism from which Gibberellic acid was first isolated.
8. Which hormone is involved in Vernalization?
9. What is Arrhenius concept of acids and bases?
10. Name a Disaccharide.
11. Name two amino acids having Sulfur atoms.
12. Write an example of Competitive inhibition.

(10×1=10)

Part B

*Answer any **six** questions.*

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



13. Briefly describe the mechanism of active water absorption in plants.
14. Explain the structure of Chloroplast with diagram.
15. Enlist the difference between photorespiration and true respiration.
16. Write short note on Alcoholic fermentation.
17. Explain the biochemical functions of Krebs Cycle.
18. Comment on allelopathy and allelochemicals.
19. Explain Primary and secondary structures of Protein.
20. Briefly explain simple lipids.
21. Explain lock and key hypothesis of enzyme action with diagram.

(6×5=30)

Part C

*Answer any **two** questions.*

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

22. Explain the specific roles of mineral nutrients in plants.
23. Explain the major events in the light reaction of photosynthesis.
24. Explain the terminal oxidation of reduced coenzymes through electron transport chain in mitochondrial membrane.
25. Explain the naming and classification of enzymes.

(2×10=20)

