



QP CODE: 25022402



Reg No :

Name :

M.Sc DEGREE (CSS) SPECIAL REAPPEARANCE EXAMINATION, APRIL 2025

Third Semester

M.Sc BIOCHEMISTRY

CORE - BC010302 - PLANT BIOCHEMISTRY

2019 ADMISSION ONWARDS

283CA378

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

*Weight **1** each.*

1. Give the structure of Ribulose - 5 -Phosphate.
2. Write a note on CAM plants.
3. What is biological nitrogen fixation?
4. What is FeMo cofactor?
5. Explain the role of auxins in apical dominance.
6. What is zeatin? Give its structure.
7. Interpret the role of ethylene.
8. What are tannins? Distinguish between hydrolyzable and condensed tannins.
9. Explain acetylenes and give its importance.
10. List few applications of plant lectins in the purification of Glycans.

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

*Weight **2** each.*

11. Explain compensation point.
12. Explain the nitrate assimilation and regulation of enzymes involved.
13. Summarize water balance in plants.
14. Analyze the physiological roles of gibberellins.
15. To exhibit auxin activity, a chemical compound should possess some structural characteristics- Justify.





16. Give an account on salt stress and salt resistance in higher land plants.
17. Relate primary metabolites with secondary metabolites.
18. Describe the applications of plant resins.

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

Weight 5 each.

19. Differentiate between Calvin cycle and Hatch Slack Pathway.
20. What is ammonia assimilation? Analyze the enzymes involved in it and its regulation.
21. what are phyto hormones? Discuss on abscisic acid and its significance in plant life.
22. Discuss the followings as secondary metabolites in plants, (1) Gums (2) Mucilages (3) Resins

(2×5=10 weightage)

