24P329 (Pages: 2) Name: .....

Reg.No: .....

THIRD SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2025

(CBCSS - PG)

(Regular/Supplementary/Improvement)

CC19PBOT3C07 - PLANT PHYSIOLOGY, METABOLISM AND BIOCHEMISTRY

(Botany)

(2019 Admission onwards)

Time : 3 Hours Maximum : 30 Weightage

Part-A

Answer any ***four*** questions. Each question carries 2 weightage.

1. Explain photolysis of water.
2. Explain chromoproteins.
3. Provide a note on glycosides.
4. Provide a note on the significance of PRPP.
5. Explain the β pleated structure of proteins.
6. Living matter has several characteristics. Discuss.
7. Explain the molecular structure of amino acids.

(4 × 2 = 8 Weightage)

Part-B

Answer any ***four*** questions. Each question carries 3 weightage.

8. Describe the translocation in plants.
9. Represent the classification of amino acids.
10. Explain the phloem loading and unloading.
11. Provide a note on the mechanism of enzyme action.
12. Fatty acid synthase complex is an organized complex. Respond.
13. Reactions of secondary metabolism are not necessarily vital. Respond.
14. Explain secondary metabolites in plants.

(4 × 3 = 12 Weightage)

Part-C

Answer any ***two*** questions. Each question carries 5 weightage.

15. Explain stress physiology. Give a detailed account of salt stress and biotic stress in plants.

16. Activation, entry of fatty acids are necessary for β oxidation of fattyacids, Respond.
17. Chemiosmotic theory explains the coupling of electron transport and synthesis of ATP electron transport, Respond.
18. How proteins are classified based on their biological functions? Add a note on the levels of architecture of proteins.

(2 × 5 = 10 Weightage)

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