

21P329

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Name:

Reg.No:

THIRD SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2022

(CBCSS - PG)

(Regular/Supplementary/Improvement)

CC19P BOT3 C07 - 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. Describe how transpirations pull causes ascent of sap in tall plants.
2. Explain the role of gibberellins in plants.
3. Provide a note on allosteric enzymes.
4. Terpenes take their origin from two intermediates in the primary metabolism, respond.
5. All living organisms have the same kinds of monomeric subunits. Discuss.
6. Describe Carbohydrates.
7. Explain terpenes.

(4 × 2 = 8 Weightage)

Part-B

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

8. Explain briefly nitrogen fixation in leguminous plants.
9. Illustrate the schematic representation of cyclic and non-cyclic photophosphorylation.
10. Describe the photomorphogenesis.
11. Pentose phosphate pathway is multifunctional pathway, respond.
12. Draw the sequence of reactions involved in the synthesis of Mitoxyl coA.
13. Provide an account of PRPP and its significance.
14. Illustrate the ultramolecular architecture of membranes.

(4 × 3 = 12 Weightage)

Part-C

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

15. Explain the different type of 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. Describe the fitness of aqueous environment for living organisms.

(2 × 5 = 10 Weightage)
