

M.Sc. (Botany) Semester - 3 (CBCS) Examination
OCT/NOV-2024 (AS PER SYLLABUS YEAR JUNE-2024)
Plant Physiology (Core (New-23))

Time: 2:30 Hours**Marks: 70****Instructions:**

1. All questions are compulsory.
 2. Figures to the right indicate marks.
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Q. 1 Answer the following (any seven) (14)

- 1) Explain relationship of soil-water
- 2) Explain the importance of proteins in Plants cells.
- 3) Define the term PS-I and PS-II
- 4) State the difference between adsorption and absorption.
- 5) What is saline stress in physiology?
- 6) State the significance of cytokinin hormone in plants
- 7) What are growth regulators in plants?
- 8) Define the term vernalization.

Q. 2 Write notes on the following: (any two) (14)

- 1) Significance of Micronutrients and Macronutrients
- 2) Types of Carbohydrates
- 3) Water potential.

Q. 3 Answer the following (any two) (14)

- 1) Write a detailed note on C3 and C4 plants
- 2) Which are the factors affecting rate of photosynthesis
- 3) Explain Cyclic and Non-Cyclic photophosphorylation

Q. 4 Write short note on the following (any two) (14)

- 1) Methods to break seed dormancy
- 2) Application of hormone Ethylene
- 3) Cytokinin plant hormone

Q. 5 Answer the following (any two) (14)

- 1) Explain the mechanism of Pr and Pfr
- 2) Describe the features to overcome salt stress in plants
- 3) Photoperiodism.
