



**B.Sc. VI Semester Degree Examination, Sept./Oct. - 2024**

**BOTANY**

**DSC15-6.1 : Plant Physiology and Plant Biochemistry**

**(NEP)**

Time : 3 Hours

Maximum Marks : 60

**SECTION - A**

Answer **all** the following question.

**10x1=10**

1. (a) Define Transpiration.
- (b) Define Osmotic Pressure.
- (c) Write the Empirical formula of Chlorophyll - a.
- (d) What are C<sub>3</sub> plants ?
- (e) Which is known as Gaseous Plant Hormone ?
- (f) Define the term Growth.
- (g) What is PCD [Programmed Cell Death] ?
- (h) Define Photoperiodism.
- (i) What are amino acids ?
- (j) What are Lipids ?

**SECTION - B**

Answer **any four** of the following questions.

**4x5=20**

2. Explain Cyclic Photophosphorylation.
3. Explain Mass Flow Hypothesis.
4. What are Auxins ? Write their application.
5. Explain about Biological clocks in plants.
6. What are Vitamins ? Mention their types with their function.
7. Explain Biological Nitrogen fixation.



**P.T.O.**

**SECTION - C**

Answer **any three** of the following questions.

**3x10=30**

8. What is Ascent of Sap ? Explain Vital theory of Ascent of Sap.
9. Explain TCA Cycle and describe the steps in it.
10. Explain practical utility of Growth regulators in Agriculture and Horticulture.
11. Comment on :
  - (a) Hydrotropism
  - (b) Phototropism
12. What are Enzymes ? Explain their mechanism of action.

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