

Time : 2-00 Hours]

[Max. Marks : 50

Instructions:

All questions in Section I & II carry equal marks
Illustrate your answers with neat diagrams wherever necessary.

Section- I Answer in detail (Any six)

[42]

- 1 What is Plant Breeding? Describe its Objectives.
- 2 Explain different types of vacuoles with its functions and characteristics.
- 3 Write a Short note on Biotic Factors
- 4 What is the importance of plant hormones? Define plant growth regulators and plant growth inhibitors with an example. Give the name of precursor molecule for all plant hormones.
- 5 Describe the structural composition of a plant cell wall.
- 6 Write the detail Applications of Plant Tissue Culture.
- 7 Give a significant difference between Ecology and Environment.
- 8 Draw a labelled diagram of Green House Effect.
- 9 Which factors are affecting on plant growth?
- 10 Describe the Sterilization Techniques in Plant Tissue Culture.
- 11 Write a Short note on Biotic Factors
- 12 Describe: Laboratory Organization of Plant Tissue Culture

Section -II Answer in short (Any eight)

[08]

- 1 What is an Explant?
- 2 Name any two sterilizing agents used in tissue culture.
- 3 Define: Plant Tissue Culture.

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- 4 Define: Hybrid Vigor.
- 5 Component of Ecosystem
- 6 _____ can be described as the pores, or channels, between plant cell walls which allows molecules and communication signals to pass between individual plant cells.
- 7 What is the importance of plant hormones? Define plant growth regulators and plant growth inhibitors with an example. Give the name of precursor molecule for all plant hormones.
- 8 The plant organells, chloroplasts and mitochondria have small circular chromosomes known as _____.
- 9 In which Ecosystem Ecological pyramid is inverted?
- 10 Why melting glacier is concern?
- 11 Which inhibitors are responsible for Auxin transport?
- 12 Write the function of Auxin as a hormone in plant.
- 13 Difference between weather and Climate
- 14 Give any 4 natural causes of Climate Change.

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