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VI Semester B.Sc. Examination, September/October 2022  
(CBCS Scheme)

BIOTECHNOLOGY – VII  
Plant Biotechnology

Time : 3 Hours

Max. Marks : 70

**Instruction :** Draw neat labelled diagrams **wherever** necessary.

SECTION – A

I. Write short notes on the following :

(5×2=10)

- 1) Totipotency
- 2) Heterokaryon
- 3) Microprojectile
- 4) Haploid
- 5) Trade secret.



SECTION – B

II. Write **any four** of the following :

(4×5=20)

- 6) What are growth regulators ? Add a note on Auxin.
- 7) Discuss the importance of Plant Tissue Culture in Forestry.
- 8) Describe the production of Vaccines in Banana.
- 9) Define Somoclonal Variation. Add a note on its significance.
- 10) Briefly explain the types of organogenesis and its application.

P.T.O.



## SECTION – C

III. Answer **any three** of the following :

(3×10=30)

- 11) What is protoplast ? Add a note on its regeneration and Viability test.
- 12) Explain the technique and the factors influencing clonal propagation.
- 13) Give an account on Agrobacterium mediated gene transfer.
- 14) Define Somatic embryogenesis. Comment on the stages and factor affecting Somatic embryogenesis.
- 15) Write short note on :
  - a) Phytoalexins
  - b) PGR

## SECTION – D

IV. Write the following in **one** word or **a** sentence **each** :

(10×1=10)

- 16) Tapetum
- 17) Vir genes
- 18) Encapsulation
- 19) IAA
- 20) Dedifferentiation
- 21) Pomato
- 22) Adventitious buds
- 23) Tween 20
- 24) Apical dominance
- 25) Expand FDA.

