

2103001106020005
EXAMINATION FEBRUARY-MARCH 2024
BACHELOR OF SCIENCE (SIXTH SEMESTER)
PLANT BIOTECHNOLOGY - LEVEL 2

[Time: As Per Schedule]

[Max. Marks: 50]

Instructions:

1. Fill up strictly the following details on your answer book
 - a. Name of the Examination : **BACHELOR OF SCIENCE (SIXTH SEMESTER)**
 - b. Name of the Subject : **PLANT BIOTECHNOLOGY**
 - c. Subject Code No : **2103001106020005**
2. Sketch neat and labelled diagram wherever necessary.
3. Figures to the right indicate full marks of the question.
4. All questions are compulsory.

Seat No:

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Student's Signature

Q.1 Define Any Four:

8

- a) Dedifferentiation and Redifferentiation
- b) Cryopreservation
- c) Sterilization
- d) Macro & Micro elements
- e) Auxins & Cytokinins
- f) Androgenesis

Q.2 Attempt Any Two:

14

- a) What is Plant tissue culture? Discuss major historical events in plant tissue culture.
- b) Give the basic layout of standard plant tissue culture laboratory.
- c) Describe Cytodifferentiation and Organogenic differentiation

Q.3 Explain in detail Any Two:

14

- a) Elaborate the advantages, disadvantages and applications of synthetic seeds.
- b) Describe the factors affecting in vitro stages of Micropropagation.
- c) What is totipotency? What are the practical applications of totipotency?

Q.4 Attempt Any Two of the following:

14

- a) Give the details of the factors affecting isolation of protoplast.
- b) Explain Single cell culture.
- c) Short note on: Germplasm conservation.
