2303080403030003
EXAMINATION MARCH 2025
MASTER OF SCIENCE (BOTANY) (THIRD SEMESTER)
PLANT TISSUE CULTURE

[**Time: As Per Schedule]** **[Max. Marks: 70]**

Instructions:
1. Fill up strictly the following details on your answer book
   a. Name of the Examination : **MASTER OF SCIENCE (BOTANY) (THIRD SEMESTER)**
   b. Name of the Subject : **PLANT TISSUE CULTURE**
   c. Subject Code No : **2303080403030003**
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:

Student's Signature

Q.1 Write a note on (Any two) **16**

a) Arrangement for aseptic manipulation in plant tissue culture laboratory
b) A succinct explanation of the mechanisms underlying cytodifferentiation.
c) Orbital shaker: It's working principle, application and maintenance.

Q.2 Write a note on (Any Two) **18**

a) Surface sterilization: Process and its significance.
b) Culture media preparation.
c) Application of auxins and cytokinins in tissue culture.

Q.3 Write a note on (Any Two) **18**

a) Give an account of leaf culture and its significance.

b) Applications of micro propagation.

c) Principal and protocol for another culture.

Q.4 Write a note on (Any Two) **18**

a) Batch/continuous culture technique.

b) Artificial seed production and its importance.

c) Importance of somaclonal variation.

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