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Total No. of Pages: 02

Total No. of Questions: 11

M.Sc (BT) (Sem. – 2)

PLANT TISSUE CULTURE

Subject Code: MBT-211

M Code: 76250

Date of Examination : 21-12-2022

Time: 3 Hrs.

Max. Marks: 70

INSTRUCTIONS TO CANDIDATES:

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains SEVEN questions carrying SIX marks each and students have to attempt any FIVE questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

1. Give a brief account of the following:

- a) Totipotency
- b) Macronutrients
- c) Green house
- d) Axillary bud stimulation
- e) Secondary metabolites
- f) Pollen embryogenesis
- g) Aneuploidy
- h) Somaclonal variation
- i) Browning
- j) Binary vector system

SECTION-B

2. Describe the basic steps involved in micro propagation.
3. Give the methods of protoplast fusion.
4. What are the basis of somaclonal variations?
5. What do you understand by chromosome elimination in crosses?
6. Give the method of Thawing a cryopreserved germplasm and determination of its viability by TTC method.
7. What is the role of cytokinins in Plant growth regulation?
8. In reactions of Biotransformations for the synthesis of various compounds, describe the Glycosylation and esterification reactions.

SECTION-C

9. Describe the method of embryo culture and applications of embryo culture.
10. Enlist and describe the vectorless Direct DNA transfer physical methods.
11. How to produce (*in vitro*) secondary metabolites?

NOTE : Disclosure of Identity by writing Mobile No. or Marking of passing request on any paper of Answer Sheet will lead to UMC against the Student.