

Roll No. Total No. of Pages: 02

Total No. of Questions: 09

M.Sc.(BT) (2011 & Onwards) (Sem.-3) PLANT TISSUE CULTURE

Subject Code: MSBT-207 Paper ID: [F0264]

Max. Marks: 60 Time: 3 Hrs.

INSTRUCTION TO CANDIDATES:

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

SECTION-A

1. **Answer briefly:**

- a. Explain Cryopreservation.
- b. Differentiate cybrids from hybrids.
- c. What do you mean by organogenesis'
- d. What is meant by Embryo rescue?
- e. Define nucleocapsid gene.
- f. Explain Ri plasmid
- g. Explain in brief the role of BT gene in crop plants.
- h. Explain biodegradable plastic.
- i. Define bar and barnase system.
- j. Define Transgenic plants.



SECTION-B

- 2. Give a brief account on composition of plant tissue culture medium.
- 3. Write a detailed account on suspension culture.
- 4. Discuss chloroplast gene transfer, vectors and success in tobacco.
- 5. Discuss the role plant tissue culture in production of abiotic resistant crop plants.
- 6. Describe in detail the chloroplast gene transfer in potato.

SECTION-C

- 7. Give a detailed account on methods of gene transfer in crop plants.
- 8. Discuss in detail the role of plant tissue culture in production of secondary metabolites.
- 9. Explain in detail:
- MMM/FirstRanker.com a. Molecular farming.
 - b. Gene Silencing.

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