



M.Sc. IV Semester Degree Examination, Sept./Oct. - 2024

BIOTECHNOLOGY

Plant Biotechnology

(NEP)

Time : 3 Hours

Maximum Marks : 70

- Note :**
- (i) Answer **any five** of the following questions with Question No.1 (Q1) **compulsory**, each question carries **equal** marks.
 - (ii) Draw neat diagrams wherever necessary.

1. Explain in detail on plant tissue culture media ingredients and their role. **14**
2. With a neat labelled diagram describe in detail the direct micropropagation process. **14**
3. Discuss in detail on Ti Plasmid vector theory used in plant biotechnology. **14**
4. Explain the principle, procedure and biotechnological applications of PCR. **14**
5. Describe the protocol for the production of herbicide resistance plants. **14**
6. Write in detail on the biosynthesis of secondary metabolites and mention their biotechnological importance. **14**
7. Write in detail on rice genome project. **14**
8. Write a short note on the following :
 - (a) Cytokinin **5**
 - (b) Transposons **5**
 - (c) RFLP **4**

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