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Total Number of Pages : 01

M.TECH

AR-19

M.TECH 1ST SEMESTER EXAMINATIONS NOV/DEC 2019

BIOTECHNOLOGY, MPEBT1041

PLANT BIOTECHNOLOGY

Time: 3 Hours

Max Marks : 70

The figures in the right hand margin indicate marks.

PART-A

(10 X 2=20 MARKS)

1. Answer the following questions.

- a) Define gene?
- b) Define mutation of genes?
- c) What is metabolomics?
- d) What do you mean positional effects?
- e) What is RAPD?
- f) Write the four types of molecular markers used in plant breeding?
- g) Define Ti plasmid?
- h) Define vir region?
- i) What are the advantages of plastid engineering?
- j) What is herbicide resistance crop?

PART-B

(5 X 10=50 MARKS)

Answer any five questions from the following.

- 2. What is metabolomics? Describe details about metabolomics?
- 3. What is RFLP? Describe in detail its process and application?
- 4. Write the details process of particle bombardment methods of gene transfer and its significances?
- 5. Describe the techniques of chloroplast transformation and its advantages?
- 6. What is biotic stress? Give an account of production of Bt cotton?
- 7. Describe the carbohydrate and lipid farming of plants?
- 8. Write short notes
 - a) Importance of Micro algae
 - b) Agro-waste utilization