

Code: 9A23505

**R9**

B.Tech III Year I Semester (R09) Supplementary Examinations, May 2012

**PLANT BIOTECHNOLOGY****(Biotechnology)**

Time: 3 hours

Max Marks: 70

Answer any FIVE questions

All questions carry equal marks

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- 1 Explain plant tissue culture media preparation and add a note on proto plastculture.
- 2 Describe:
  - (a) Germ plasm conservation
  - (b) Somaclonal variations.
- 3 Explain technology of plant cell culture for production of chemicals with suitable examples.
- 4 Write about:
  - (a) Electro poration
  - (b) Agrobacterium based vectors.
- 5 Write about methods and advantages involved in herbicide resistance and insect resistance.
- 6 Describe:
  - (a) Draught stress
  - (b) Salt stress tolerance.
- 7 Explain applications of plant biotechnology in industrial enzymes and edible vaccine production.
- 8 What are secondary metabolites? Write about metabolic engineering of secondary metabolites.

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