

Code: 9A23505

**R9**

B.Tech III Year I Semester (R09) Supplementary Examinations, May 2013

**PLANT BIOTECHNOLOGY**  
(Biotechnology)

Time: 3 hours

Max Marks: 70

Answer any FIVE questions  
All questions carry equal marks

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- 1 Write short note on:
  - (a) Protoplast Isolation.
  - (b) Suspension culture.
  
- 2 Write short notes on:
  - (a) Somaclonal variation.
  - (b) Cryopreservation.
  
- 3 Explain different bioreactor systems for mass cultivation of plant cells.
  
- 4 What is Ti plasmid? Discuss on Agro bacterium gene transfer?
  
- 5 What is biotic stress? Explain the production of herbicide resistance plants.
  
- 6 Write short notes on:
  - (a) Salt tolerance plants.
  - (b) Temperature tolerant plants.
  
- 7 What is molecular farming and explain about improving the production of quality oil?
  
- 8 Explain metabolic regulation with reference to plant primary metabolites.

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