

**R09****Code: 9A23505**

B.Tech III Year I Semester (R09) Supplementary Examinations December 2015

**PLANT BIOTECHNOLOGY**

(Biotechnology)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions  
All questions carry equal marks

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- 1 Write the following:
  - (a) Callus culture.
  - (b) Organogenesis.
- 2 Discuss in detail about the Somaclonal variations and their applications.
- 3 Write an account on the models used for the mass cultivation of plant cells.
- 4 Answer the following:
  - (a) Viral vectors.
  - (b) Chemical methods of gene transfer methods.
- 5 Describe the strategies used for the development of Glyphosate resistant plants.
- 6 Discuss the mechanisms used for the development of transgenic plants overcoming temperature stress.
- 7 Answer the following:
  - (a) Industrial enzymes.
  - (b) Edible vaccines.
- 8 Write an account on the metabolic engineering of secondary metabolites.

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