Code :R7312305

## III B.Tech I Semester(R07) Supplementary Examinations, May 2011 PLANT BIOTECHNOLOGY

(Biotechnology)

Time: 3 hours Max Marks: 80

## Answer any FIVE questions All questions carry equal marks

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- 1. What are secondary metabolites? What is the biosynthetic origin of secondary metabolites? Why is it synthesized and how it is regulated in plants?
- 2. Write in detail how herbicide resistant plants can be produced for Triazines and Phosphinothricine.
- 3. What are somaclonal variations? Discuss their application with suitable examples.
- 4. Discuss the global status of abiotic stress resistant transgenic crops.
- 5. Give an example of the first metabolic engineering of secondary metabolism in plants and discuss in detail.
- 6. What do you mean by surface sterilization of explants? Discuss the procedure for establishment of in vitro culture.
- 7. Describe about the method for the expression of foreign proteins in transgenic plants.
- 8. Give a detailed outline of plant transformation technology and describe different methods.

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