R09

Code No: D0306

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
M.TECH II - SEMESTER EXAMINATIONS, APRIL/MAY-2012
PLANT BIOTECHNOLOGY
(BIOTECHNOLOGY)

Time: 3hours **Max. Marks: 60**

Answer any five questions
All questions carry equal marks
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1. What do you understand by clonal propagation? Discuss different stages of clonal propagation.

2. Discuss Gene Gun mediated gene transfer justifying its importance over other methods.

3. Discuss various approaches for production of somatic hybrids.

4. Give a detailed strategy for production of haploids also mentioning their applications.

5. Elucidate why *Agrobacterium* is called a natural genetic engineer. Discuss how it transfers genes from bacteria to plants.

6. Write detailed notes on the following:
   a) Somaclonal Variations
   b) Cryopreservation.

7. Give an overview of production of herbicide resistance plants for different groups of herbicides.

8. What are secondary metabolites? Discuss how plant biotechnology can help for production of secondary metabolites.

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