

# Rajiv Gandhiwwnfivenviewer Healthy Scienceson First Year M.Pharm Degree Examination - Nov 2011

[Time: 3 Hours] [Max. Marks: 100]

## **MEDICINAL PLANT BIOTECHNOLOGY**

#### **PAPER II**

Q.P. CODE: 9214

Your answers should be specific to the questions asked. Draw neat labeled diagrams wherever necessary. Answer all questions

## LONG ESSAY (Answer any TWO)

2 X 20 = 40 Marks

- 1. Explain the different methods in plant genetics to improve the quality of medicinal plants
- 2. Describe the various methods of gene transfer techniques
- 3. Explain germplasm conservation in detail

### **SHORT ESSAY (Answer any FIVE)**

5 X 10 = 50 Marks

- 4. Discuss the role of electrophoresis in the genetically modified plants
- 5. Write note on protoplast culture and protoplast fusion
- 6. Explain the different methods of isolating and purifying the plant enzymes
- 7. Explain the production of shikonin in detail
- 8. Explain the Principle and Applications involved in biotransformation
- 9. Write briefly about the structure and molecular organization of cell

SHORT NOTES 2 X 5 = 10 Marks

- 10. Immobilization of enzymes and its applications
- 11. Edible vaccine

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