

# kajiv Gandhiwwnfivsensokeycon Healthy Sciencesom First Year M.Pharm Degree Examination - October 2010

[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. Write a note on micro-propagation and its application.
- 2. Describe molecular maps-RFLP, RAPD and plant chromosome analysis.
- 3. Explain in detail the methods of Polyploidy and Chemodemes

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

5 X 10 = 50 Marks

- 4. Give the uses of radio isotopes and molecular markers in localization of transferred genes
- 5. Explain the uses of PCR in gene mapping
- 6. Write a detailed note on the in-vitro methods of conservation of germplasm.
- 7. Give the structural and molecular organization of cell and explain the regulation of gene expression.
- Explain the methods of immobilization techniques of enzymes in detail. 8.
- 9. Explain the following.
  - a) Electroporation
  - b) Auto radiography

.e. **SHORT NOTES** 2 X 5 = 10 Marks

- 10. Micro Injection
- 11. Purification of enzymes