

Kajiv Gandhiwwnfivenzokeyconf Healthy Sciencesom First Year M. Pharm Degree Examination - May 2013

[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

- What is plant tissue culture? Give the application of different types of plant tissue culture techniques with suitable examples
- 2. What are secondary metabolites? Discuss the role of plant growth regulators in the production of secondary metabolites
- 3. a) Write the use of PCR in gene maping
 - b) Explain chemical mediated gene transfer in plant

SHORT ESSAY (Answer any FIVE)

 $5 \times 10 = 50 \text{ Marks}$

- 4. Explain in detail the applications of DNA recombinant technology
- 5. The use of radioactive isotopes in the production of genetically modified plant
- 6. In-vitro methods of conservation of germplasm and its applications
- Explain in detail about an immobilization of enzymes and its applications 7.
- Write a note on polyploidy & mutation 8.
- Discuss in detail about the multiple shoot culture and their applications 9.

WWW.FilestR. **SHORT NOTES** 2 X 5 = 10 Marks

- 10. Chemodemes
- 11. Papain production