

Rajiv Gandhiwwnfirsenaskey conf Healthy Scirencesom First Year M.Pharm Degree Examination - May 2011

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

MOLECULAR BIOLOGY

PAPER IV

(RS 2 & RS 3)

Q.P. CODE: 9244

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

LONG ESSAY (Answer any TWO)

 $2 \times 20 = 40 \text{ Marks}$

- Explain briefly about principles, applications and process of recombinant DNA technology
- 2. a) DNA based diagnosis of genetic diseases
 - b) Human genome project
- a) Principles and process of gene cloning 3.
 - b) Application of cloning vectors

SHORT ESSAY (Answer any FIVE)

5 X 10 = 50 Marks

- 4. Animal cell culture
- 5. Bio sensors
- Role of DNA technologyin monoclonal antibodies 6.
- 7. Explain the organization of signal transduction
- Principle and applications of polymerase chain reaction 8.
- Nuclegleic acid technology 9.

NAMERICAL **SHORT NOTES** 2 X 5 = 10 Marks

- 10. Glycobiology
- 11. Gene expression