

Rajiv Gandhiw Mniverskey of Health Sciences First Year M. Pharm Degree Examination – Nov 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 X 20 = 40 Marks

- 1. Describe DNA sequencing, mapping and cloning of human genes
- 2. Discuss the various steps involved in the production of a recombinant protein using recombinant technology with neat labeled diagrams
- 3. Define cell culture. Discuss the various culture mediums, culture conditions to be followed to culture the mammalian cells with suitable examples

SHORT ESSAY (Answer any FIVE)

5 X 10 = 50 Marks

- 4. Gene therapy for cancer
- 5. Human genome project
- 6. Various forces involved in the protein-protein interaction and protein-ligand binding
- 7. Catalytic antibodies and its therapeutic application
- 8. Structural features and functions of plasma membranes
- 9. Apoptosis

SHORT NOTES 2 X 5 = 10 Marks

- 10. LCR
- 11. Anti sense Technology

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