

# FirstRanker.com Firstranker!s choice Rajiv Gandhiw Infivensity of Health Scienceson First Year M. Pharm Degree Examination - May 2011

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

## MEDICINAL CHEMISTRY I (DRUG DESIGN)

#### PAPER III

(RS 2 & RS 3)

Q.P. CODE: 9233

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

- a) Explain the historical development of QSAR.
  - b) Explain the design of stereo and geometric isomers.
- 2. What is protein engineering and site directed mutagenesis? Give it's development as therapeutic agent.
- a) Explain the role of proton pump inhibitors in therapeutic use. 3.
  - b) Explain the applications of Hansch analysis.

### SHORT ESSAY (Answer any FIVE)

5 X 10 = 50 Marks

- Explain the role of Bioisosteric replacements and rigid analogs in drug design. 4.
- 5. Explain various practical aspects of microbial transformation.
- Give various approaches to rational drug design of non-covalently binding enzyme inhibitors. 6.
- Discuss about immunosuppressive and immounostimulative agents. 7.
- Write about the development and uses of pro drug design.
- 9. Write about the theoretical aspects of drug action.

SHORT NOTES 2 X 5 = 10 Marks

- Add a note on recombinant DNA technology
- Write a note on the importance of ACE inhibitors.

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