Rajiv Gandhi University of Health Sciences

First Year M.Pharm Degree Examination - October 2010

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

MEDICINAL CHEMISTRY I (DRUG DESIGN)

PAPER III

(Revised Scheme 2)

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**

1. a) Explain the development of t-PA as therapeutic agent.
   b) Write about microbial transformation.
2. Explain various mathematical methods for the analysis of QSAR.
3. a) Give the chemistry and uses of irreversible gastric proton pump inhibitors.
   b) Explain the role of quantum mechanics in drug design

SHORT ESSAY (Answer any FIVE) **5 X 10 = 50 Marks**

4. Write various approaches of enzyme inhibitors in rational drug design.
5. How microbial conversions are useful as tools in the preparation of drugs.
6. Enumerate the different methods in the calculation of partition co-efficients.
7. Explain about Epitope mapping and human growth hormone in Recombinan-DNA technology.
8. Write various drug receptor interactions in quantitative analysis of SAR.
9. Classify immune respone agents with examples and write their SAR.

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

10. Add a note on Hansch analysis.
11. Hydrogen bonding with respect to biological activity

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