

[LH 345]

OCTOBER 2015

Sub. Code: 2906

**M.PHARM. DEGREE EXAMINATION  
FIRST YEAR  
BRANCH II – PHARMACEUTICAL CHEMISTRY  
PAPER III – ADVANCED MEDICINAL CHEMISTRY**

*Q.P. Code : 262906*

**Time : Three hours**

**Maximum : 100 marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. Enumerate briefly various approaches for the design of enzyme inhibitors in medicine.
2. Discuss in detail the types of receptors and various forces involved in drug receptor interactions.

**II. Write notes on:**

**(10 x 6 = 60)**

1. Write a note on the role of chirality in medicinal agents.
2. Explain in detail about the bioisosteric approach of analog design with examples.
3. Briefly explain the concept of quantum mechanics in molecular modeling.
4. Write a note on irreversible proton pump inhibitors.
5. Explain briefly the industrial method of manufacture of Indomethacin.
6. Give a brief account on Hansch analysis and Free Wilson analysis.
7. Give the medicinal chemistry aspects on clinically approved prostaglandins.
8. Brief out the pharmacokinetic and biopharmaceutical aspects involved in prodrug designing.
9. Write a note on immune response.
10. Explain in detail about the development of anti HIV agents with examples.

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