APRIL 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

I. Elaborate on:

- 1. Explain in detail various strategies utilized in analog design.
- 2. Briefly explain the medicinal chemistry aspects of antihypertensive agents with special emphasis to classification, mechanism of action, structure and synthesis of any one drug from each class.

II. Write notes on:

- 1. Briefly account on molecular mechanics in molecular modeling.
- 2. Write a note on steric factors in a QSAR study.
- 3. Write a brief note on pharmacophore models.
- 4. Briefly explain the manufacture of Paracetamol.
- 5. Describe in detail about the biosynthesis of prostaglandins.
- 6. Outline various approaches in prodrug design.
- 7. Write a note on antineoplastic antimetabolites.
- 8. Describe various theories involved in drug receptor interactions.
- 9. Outline the aspects of enantioselectivity in drug absorption and elimination.
- 10. Briefly explain with examples on noncovalent enzyme inhibitors.

[LG 345]

 $(2 \times 20 = 40)$

Maximum : 100 marks

$(10 \ge 6 = 60)$