



(LI 4262)

FEBRUARY 2016

Sub. Code: 4262

**THIRD YEAR B.PHARM. EXAMINATION
PAPER II – MEDICINAL CHEMISTRY -I***Q.P. Code: 564262***Time: Three hours****Maximum: 100 Marks****I. Essay:****(2 x 20 = 40)**

1. a) Derive the synthesis for (i) Diazepam (ii) Triclofos sodium.
b) Explain the structure activity relationship of Barbiturate.
c) Define antipsychotics and classify with example.
2. Explain the following physiochemical parameters related to biological activity with example.
a) Drug distribution and pKa Values b) Hydrogen bonding
c) Geometrical isomerism d) Drug-receptor interaction.

II. Short notes:**(8 x 5 = 40)**

1. Give the synthesis and uses of Mephentyoin.
2. Give the structure activity relationship of Local Anaesthetics.
3. Give the Structure Activity Relationship of Thiazides.
4. Describe the different types of reaction in Phase -I.
5. Classify antihistaminic agents with at-least one structure for each class.
6. Draw the structure and give the uses of Morphine, Codeine, Meperidine and Nalorphine.
7. Outline the synthesis of Promethazine HCl and Diphenhydramine HCl.
8. Describe the biosynthesis of Eicosanoids.

III. Short answers:**(10 x 2 = 20)**

1. Draw the structure and medicinal uses of Doxapram HCl.
2. Define the term Neuromuscular blockers.
3. Sketch the structure and medicinal uses of Oxyphenbutazone.
4. Add a note on Prodrugs.
5. Outline the structure and medicinal uses of Tropicamide.
6. Give two examples as Anti-asthmatic drugs.
7. Draw the structure and medicinal uses of Propranolol.
8. Give any two structures of General Anaesthetics.
9. Sketch the structure and medicinal uses of Pyridostigmine.
10. Define Bioisosterism and give one example.
