

(LK 4262)

FEBRUARY 2017

Sub. Code: 4262

**B.PHARM. EXAMINATION
THIRD YEAR
PAPER II – MEDICINAL CHEMISTRY - I**

Q.P. Code: 564262

Time: Three hours**Maximum: 100 Marks****I. Elaborate on:****(2 x 20 = 40)**

1. Explain the following physiochemical parameters related to biological activity with example.
a) Isosterism b) Hydrogen bonding c) Ionization d) Redox potential.
2. a) Sketch the synthesis for i) Imipramine ii) Nikethamide.
b) Give detailed account of structure activity relationship of Phenothiazine.
c) Define general anaesthetics and classify with example.

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

1. Give the route of synthesis and mechanism of action of Clonazepam.
2. Classify diuretics with at-least one structure for each class.
3. Give the structure, synthesis and uses of Dibucaine.
4. Describe the factors affecting metabolism of drugs.
5. Illustrate the structure, synthesis and uses of Chlorcyclizine HCl.
6. Draw any four structures from NSAID's.
7. Describe the chemistry of Eicosanoids.
8. Describe the structure activity relationship of Morphine.

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

1. Draw two structures of adrenergic neurotransmitters.
2. Give two examples for neuromuscular blockers and mention their uses.
3. Sketch the structure and medicinal uses of Salbutamol and Terbutaline.
4. Give two examples for Prodrugs.
5. Outline the structure and medicinal uses of Atenolol and Prazosin.
6. Add a note on neurochemistry of cholinergics.
7. Give the reaction product of malonic ester and urea.
8. Give any two structures of drugs used as anti-ulcer.
9. Sketch the structure and medicinal uses of Homatropine HBr.
10. Outline the structure and uses of Noscaphine.
