



(LM 4262)

FEBRUARY 2018

Sub. Code: 4262

**B.PHARM. DEGREE EXAMINATION
0THIRD 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) Chelation b) Steric effect c) Optical isomerism d) Surface activity
2. a) Define Sedative and Hypnotics? Classify with example.
b) Give detailed account of structure activity relationship of Sympathomimetics.
c) Outline the synthesis for: (i) Prochlorperazine Maleate ii) Ketamine HCl.

II. Write notes on:

(8 x 5 = 40)

1. Describe the metabolism of adrenergic neurotransmitters.
2. Relate the structural features of Acetylcholine, Carbachol, Bethanechol and Methacholine.
3. Give four structures of Neuromuscular blockers.
4. Outline the synthesis of Naproxen and Ibuprofen.
5. Give the route of synthesis of Amiloride and Frusemide.
6. Draw any four structures of anti-histamines.
7. Give the synthesis and mechanism of action of Doxapram HCl.
8. Classify anti-convulsants with at-least one structure for each class.

III. Short answers on:

(10 x 2 = 20)

1. Draw the structure and medicinal uses of Meperidine HCl.
2. Define the term Eicosanoids.
3. Sketch the structure and medicinal uses of Morphine analogues.
4. Write a note on Omeprazole and Lansoprazole.
5. Outline the structures of Mephentoin and Trimethadione.
6. Explain about Prodrugs.
7. Draw two structures of Cholinergic blocking agents.
8. Define the term Local anaesthetics with two examples.
9. Sketch two structures of anti-hypertensive.
10. Give two reactions of Phase-I Metabolism.

