

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

(LN 4262)

AUGUST 2018

Sub. Code: 4262

**B.PHARM. DEGREE 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. Discuss the various types of Phase-I biotransformation pathways and the role of Cytochrome P450 enzyme system in Phase-I biotransformation.
2. a) Classify local anaesthetic agents and discuss the SAR of Local anaesthetic agents.
b) Illustrate the structure, synthesis, and uses of Atenolol and Acetazolamide.

II. Write notes on:

(8 x 5 = 40)

1. Discuss the drug-receptor theory.
2. Write the structure, synthesis and uses of Carbamazepine.
3. Classify Diuretics with examples.
4. Illustrate the synthesis of Cyclizine hydrochloride and SAR of Piperazine derivatives.
5. Illustrate the structure, synthesis and uses of Fentanyl citrate.
6. Discuss biosynthesis and metabolism of Adrenergic Neurotransmitters.
7. Write the structure, synthesis and uses of Cimetidine.
8. Illustrate the structure, synthesis, and uses of Dextroamphetamine.

III. Short answers on:

(10 x 2 = 20)

1. Give the structure and uses of Halothane.
2. Structure and uses of Methyldopa.
3. Write structure, and uses of Pheniramine maleate.
4. Eicosanoids.
5. Structure and uses of Noscapine.
6. General Anaesthetics.
7. Structure and uses of Piroxicam.
8. Define Antipsychotics agents with examples.
9. Cholinergic Blocking agents.
10. Catechol derivatives.
