

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

[BPHARM 1022]

OCTOBER 2022
(MARCH 2022 EXAM SESSION)

Sub. Code: 2051

B.PHARMACY DEGREE COURSE (SEMESTER EXAMINATIONS)

**PCI Regulation 2017 – SEMESTER V
PAPER I – MEDICINAL CHEMISTRY II**

Q.P. Code: 562051

**Time: Three hours
Marks**

Maximum: 75

I. Elaborate on: Answer any TWO questions.

(2 x 10 = 20)

1. a) Discuss the Structural Activity Relationship of H-1 receptor antagonist drugs.
b) Discuss the structure, synthesis and uses of Cimetidine.
2. a) Give the classification of Local Anesthetics with example. Explain the SAR of Local Anesthetics.
b) Outline the synthesis and uses of Benzocaine.
3. a) Classify Anticancer drugs with atleast one structure in each class.
b) Illustrate the synthesis, mechanism and uses of Methotrexate.

II. Write notes on: Answer any SEVEN questions.

(7 x 5 = 35)

1. Outline the mechanism and synthesis of any one loop diuretic.
2. Classify oral anti diabetic agents with its structure.
3. Describe the Mechanism and uses of Organic nitrates as Anti-anginal agents.
4. Illustrate the synthesis, mechanism and uses of Disopyramide phosphate.
5. Demonstrate mechanism and uses of Sulfonyl ureas.
6. Describe the medicinal chemistry of aspect of Corticosteroids.
7. Demonstrate the structure, Mechanism and uses of Methimazole.
8. Classify anti-hyperlipidemic agents with its structures.
9. Discuss biosynthesis of sex hormones and its roles.

III. Short answers on: Answer ALL questions.

(10 x 2 = 20)

1. Note on Proton pump inhibitors.
2. Draw the structure and mention the uses of Cyclophosphamide.
3. Recall the structure and uses of Verapamil.
4. Mechanism of action of Biguanides.
5. Sketch the structure and mention the uses of Hydralazine.
6. Mention Mechanism of Menadione.
7. Define Congestive Heart Failure.
8. Recall the structure and uses of Dexamethasone.
9. Sketch the structure and mention the uses of Propylthiouracil.
10. Draw the structure and mention the uses of Cocaine.
