

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

[BPHARM 0122]

JANUARY 2022
(MARCH 2021 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

Maximum: 75 Marks

I. Elaborate on: Answer any TWO questions.

(2 x 10 = 20)

1. a) Classify Anti-hypertensive drugs with suitable examples. Explain the mechanism of action and therapeutic uses of ACE inhibitors.
b) Write the synthesis and uses of Methyl Dopa.
2. Write the classification of diuretics. Explain the chemistry of thiazide diuretics. Write synthesis of Chlorthiazide.
3. Explain the mechanism of action of organic nitrates and nitrites as antianginal drugs. Give the synthesis and uses of Isosorbide dinitrate and Nitroglycerin.

II. Write notes on: Answer any SEVEN questions.

(7 x 5 = 35)

1. Write a note on anticancer antibiotics. Explain chemistry and MOA of any one drug.
2. Classify antiarrhythmic drugs. Write the structure and MOA of Lidocaine hydrochloride.
3. Write a note on physiological role of histamine, types of histamine receptors in human body.
4. Explain the clinical uses of H₁-receptor antagonists. Give the structure of Chlorpheniramine and Cetrizine.
5. Explain the synthesis and uses of Promethazine hydrochloride.
6. Write a note on the drugs used in congestive heart failure.
7. Write the structure, mechanism of action and medicinal uses of Tadalafil.
8. Write the synthesis of Procaine. Mention its therapeutic applications.
9. Write a note on Insulin and its preparations.

III. Short answers on: Answer ALL questions.

(10 x 2 = 20)

1. Classification of steroids.
2. What are oral contraceptives? Give the structure and uses of Levonorgestrel.
3. Give the structure and medicinal uses of Prednisolone.
4. Write the clinical importance of thyroid hormones.
5. Write the structure and uses of Cisplatin.
6. Write the structure and uses of Verapamil.
7. Give the structure and uses of Bosentan and Digitoxin.
8. What are the clinical uses of Clofibrate. Explain its mechanism of action.
9. Give two examples of proton pump inhibitors.
10. Write the structure and uses of Thioguanine and Busulfan.
