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

[BPHARM 0522]

MAY 2022 (SEPTEMBER 2021 EXAM SESSION)

B.PHARM. DEGREE EXAMINATION PCI Regulation 2017 – SEMESTER V

PAPER I – MEDICINAL CHEMISTRY – II

O.P. Code: 562051

Time: Three hours Maximum: 75 Marks

I. Elaborate on: Answer any TWO questions.

 $(2 \times 10 = 20)$

Sub. Code: 2051

- 1. a) Define and Classify Anti-neoplastics.
 - b) Explain the mechanism of action of any four major classes of anti-cancer drugs.
 - c) Give the syntheses and uses of Tolbutamide and Mechlorethamine.
- 2. a) Classify Local-anaesthetics.
 - b) Enumerate the structures (any three), mechanism of action and SAR of Local anesthetics.
 - c) Give the synthesis of Procaine.
- 3. a) Give an account on Thyroid and anti-thyroid drugs.
 - b) Classify Anti-hypertensive agents.
 - c) Discuss on MOA of Anti-hypertensive & synthesis of Methyldopate HCl.

II. Write notes on: Answer any SEVEN questions.

 $(7 \times 5 = 35)$

- 1. Give the syntheses and uses of Dibucaine and Triprolidine HCl.
- 2. Give any two structures of Thiazide class of Diuretics and discuss its mechanism of action.
- 3. Account on ACE inhibitor, with example structures of drugs.
- 4. Write the syntheses and uses of Dibucaine and Disopyramide Phospahte.
- 5. Classification of Diuretics.
- 6. Give the structures & uses of any two 1,4-dihydropyridine and Piperazine based drugs.
- 7. Discuss on Biosynthesis & Preparations of Insulin.
- 8. Illustrate the classification of Anti-histamines and Anti-coagulants.
- 9. Mechanism of action of Anti-arrhythmic drugs.

III. Short answers on: Answer ALL questions.

 $(10 \times 2 = 20)$

- 1. Give the structure and uses of Diethyl stilbosterol.
- 2. What do you mean by Repolarisation elongators? Give examples
- 3. Write the structure and use of Lovastatin
- 4. Define and give example for Vasodilators.
- 5. Mention the examples for Cardiac smooth muscle relaxants. Give any one structure.
- 6. Enumerate the lists of AT1-antagonists, Give the structure of any one drug.
- 7. Give the synthesis and use of Mercaptopurine.
- 8. Exemplify ganglionic blockers with one structure.
- 9. Write the general pharmacophore for Beta blockers, add examples.
- 10. Structure and use of Isosorbide dinitrite.
