QP Code: 521006 **Reg. No……..**

Fifth Semester B. Pharm Degree Supplementary Examinations
December 2023
Medicinal Chemistry II
(2017 Scheme)

Time: 3 Hours **Max. Marks: 75**

- ***Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space***
- ***Answer all parts of a single question together • Leave sufficient space between answers***
- ***Draw diagrams wherever necessary***

Essays **(2x10=20)**

1. Explain the classification, chemistry and mechanism of action of antiarrhythmic agents giving one structure from each class. Write the synthesis of Disopyramide
2. Classify antineoplastic agents giving the structure of one agent from each class and discuss the mechanism of action of antimetabolites and outline the synthesis of mercaptopurine

Short Notes **(7x5=35)**

3. Chemistry of loop diuretics; synthesis of furosemide
4. Explain the SAR of anilide derivatives as local anesthetics and write the synthesis of benzocaine
5. Write note on various insulin preparations
6. Chemistry of H_2 receptor antagonist, synthesis of cimetidine
7. Write the structure and uses of the following drugs
   a) Norgestrel b) Methimazole c) Hydrocortisone d) Diethyl stilbesterol
8. Write a note on drugs used in congestive heart failure
9. Classify calcium channel blockers giving one structure from each class and discuss the specific uses of 1,4 dihydropyridine class of calcium channel blockers

Answer Briefly **(10x2=20)**

10. Structure of mifepristone and its uses
11. Why chlorpropamide is more potent antidiabetic agent than tolbuamide. Explain with structures
12. Outline the synthesis of acetazolamide
13. Outline the method of synthesis of promethazine
14. Give the structure of any two gastric proton pump inhibitors
15. What are alpha-glucosidase inhibitors. Give its mechanism of action and uses
16. Write the synthesis and uses of isosorbide dinitrite
17. Give the structure and uses of any one HMG-CoA reductase inhibitors
18. Mechanism of action and uses of potassium sparing diuretics
19. Write the structure, uses of any one thiazolidinedione class of drug

****