Roll No……..….. **Total No. of Printed Pages: [1]**

Total No. of Questions: [09]

B. Pharmacy (Semester – 5th)

MEDICINAL CHEMISTRY-II

Subject Code: BPHA1538

Paper ID: [170124]

Time: 03 Hours **Maximum Marks: 60**

Instruction for candidates:

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 5 questions of 5 marks each. The student has to attempt any 4 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A **(2 marks each)**

Q1. Attempt the following:

a) Give structure and uses of diphenhydramine hydrochloride.

b) Give structure and uses of cimetidine.

c) Classify diuretics with example of each.

d) Write synthesis of nitroglycerine.

e) Describe uses of phenytoin sodium and its side effects.

f) Give structure and uses of warfarin.

g) Draw structure of testosterone.

h) What are functions of progesterone?

i) Classify antidiabetic agents with example.

j) Draw structure and give uses of lignocaine.

Section – B **(5 marks each)**

Q2. Mention various types of histamine receptors along with their distribution and functions in human body.

Q3. Define calcium channel blockers? What are their uses? Draw structures of amlodipine and felodipine.

Q4. Discuss the SAR of digitoxin class of drugs. Give synthesis of disopyramide phosphate.

Q5. Give classification of thyroid drugs along with SAR of any one category.

Q6. Write a note on SAR of local anesthetics.

Section – C **(10 marks each)**

Q7. What are alkylating agents? Discuss SAR of alkylating agents along with synthesis of meclorethamine.

Q8. Give a detailed discussion on antihypertensive drugs along with SAR studies of any one class.

Q9. Elaborate nomenclature, stereochemistry and metabolism of steroids. Give structures of tolbutamide and dibucaine.