Roll No.

Total No. of Questions : 13

## B.Pharma (Sem.-5) MEDICINAL CHEMISTRY II THEORY Subject Code : BP501T M.Code : 76786 Date of Examination : 13-12-22

Time: 3 Hrs.

Max. Marks: 75

Total No. of Pages : 02

### INSTRUCTIONS TO CANDIDATES :

- 1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
- 2. SECTION-B contains THREE questions carrying TEN marks each and student has to attempt any TWO questions.
- 3. SECTION-C contains NINE questions carrying FIVE marks each and student has to attempt any SEVEN questions.

### **SECTION-A**

### 1. Write briefly :

- a) Draw structure give IUPAC name and uses of Cetrizine.
- b) What are typical structural features of H<sub>2</sub>-receptor antagonist?
- c) Draw structures and give IUPAC names of any two pyrimidine based antimetabolite class of anticancer agents.
- d) What is the importance of calcium channel blockers in the cardiovascular disorder?
- e) What are loop diuretics?
- f) Draw structures and give IUPAC names of any two selective ( $\beta_2$ -blockers.
- g) What are anticoagulants?
- h) Define oral contraceptive by citing suitable examples.
- i) What are mineralocorticoids?
- j) Give name and structures of any two selective phosphodiesterase enzyme -5 (PDE5) inhibitors?

#### **SECTION-B**

- 2. Classify H<sub>1</sub> receptor antagonists citing suitable example of each class. Give synthesis of Promethazine.
- 3. Classify Local anaesthetic by citing suitable examples. Give detailed SAR of these drugs.
- 4. Describe various classes of alkylating agents, which are used in the treatments of cancer. Give synthesis and mechanism of action of methotrexate.

### **SECTION-C**

- 5. Write short note on potassium pump inhibitors.
- 6. Give synthesis and mechanism of chlorthiazide.
- 7. What are anti-arrhythmic drugs? Classify these drugs with suitable examples.
- 8. Discuss conformational analysis of 1,2-cyclopentenoperhydrophenanthrene nucleus present in steroids.
- 9. Give the structure of important thyroid hormones. Comment on physiological importance of these.
- 10. Describe the structures and therapeutic importance of drugs used in erectile dysfunction.
- 11. Write short note on anti-hyerlipidemic drugs.
- 12. Discuss the structure and preparation of insulin.
- 13. Write a short note on antibiotics which are used in cancer therapy.

# NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.