Ex/ BP501T/2023(S)

B. Pharm 3rd Year First Semester Supplementary Examination-2023

Medicinal Chemistry-II

FM-75 **Time-3hrs**

Answer any five questions taking atleast one from each group

Group-A

1) a. Define and classify classic anti histamines with examples.

b. Outline the mode of action and SAR of Histamine H1 receptor antagonist.

c. What are the pathophysiological roles of histamine?

d. How is histamine biosynthesized? (3+7+2+3=15)

2) Outline the synthesis and chemical names of the following:

a. Diphenhydramine HCl

b. Tripellamine HCl

c. Pheniramine Maleate

d. Cyclizine HCl

e. Promethazine HCl (3+3+3+3+3=15)

3) a. What are the therapeutic applications of Histamine H2 receptor antagonist?

b. Draw the structure and uses of Ranitidine and Famotidine.

c. Discuss the SAR of proton pump inhibitors. (3+6+6=15)

Group – B

4. Discuss the nomenclature of steroids. What are the different Phase 1 and Phase 2 metabolism procedures of steroids? [5+10]
5. Describe the structure, mechanism of action, structure activity relationships, metabolism, uses and side effects in case of testosterone. [1+2+6+2+2+2]
6. Write the structure, mechanism, and therapeutic uses of the following drugs (a) Nandralone (b) Estradiol (c) Tadalafil (d) Prednisolone (e) Progesterone [5x3]

Group – C

Answer at least *one* question

7. Write a short note on osmotic diuretics. 15
8. a) Classify renal tubular transport inhibitors.

   b) How do you prepare:

   i) Dichlorophenamide

   ii) Disulphamide

   Discuss the synthesis with chemical equations. $5 + 2 \times 5 = 15$