Ref. No.: EX/PHARM/T/313/2017(S)

B.PHARM 3rd YR. 1ST SEM. SUPPLEMENTARY EXAM- 2017

MEDICINAL CHEMISTRY – I

Time – 3 hrs Full Marks: 100

Answer any ***five*** questions taking atleast ***one*** from each group.

GROUP - A

1. (a). What is the pathophysiology of inflammation? Mention the cardinal symptoms of inflammation?

   (b). Define and Classify Non-Steroidal anti-inflammatory drugs with examples.

   (c). Outline the synthesis of Indomethacin, Fluphenamic acid, Methyl salicylate and Phenyl butazone.

   $4+4+3\times4 = 20$

2. (a). Discuss the biochemical role of histamine.

   (b). Define and Classify antihistaminic drugs with examples.

   (c).Outline the synthesis and chemical names of the following, Diphenyhydramine HCl, Meclizine, Promethazine and Pheniramine maleate.

   $4+4+3\times4 = 20$

3. (a). Discuss the mode of action and SAR of Histamine H1 receptor antagonists, Pyrazolones and Aryl acetic/propionic acid derivatives.

   $8+6+6 = 20$

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Name of the Examinations: B.PHARMACY 3RD YEAR IST SEM SUPPLEMENTARY EXAM-2017

Subject: MEDICINAL CHEMISTRY-I Time: 3 Hours Full Marks: 100

Group-B

Answer at least one question from this group

Q.4.a) What are the differences between quarternary and tertiary anti muscarinics? Outline the synthesis of Dicyclomine and mention the clinical use. 5+5=10

b)Classify alpha and beta adrenergic antagonists.Outline the synthesis of Xylometazoline and mention the clinical use. 5+5=10

Q.5.a) Outline the synthesis of a drug used for organo- phosphate poisoning. Discuss SAR of cholinergic drugs. 5+5=10

b)Outline the synthesis of Carbidopa. Why Carbidopa and L-Dopa are co – administered? 5+5=10

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B. PHARMACY 3RD YEAR 1ST SEM SUPPLYMENTARY EXAM - 2017

MEDICINAL CHEMISTRY -1 Time : 3 Hours Full Marks : 100

Group - C

Answer five questions taking at least one from EACH GROUP

Q. 6. Discuss on the following topics in the light of drug design.

a) Water solubility vs. lipid solubility

b) Impact of partition coefficient on drug action

c)Overton - Meyer Hypothesis and Fergusion principle

d) Electronic effect of substituents

e) stereochemistry and drug action.

4 x 5 = 20

Q. 7. Write short notes (any two) 10 x 2 = 20

a) Pharmacodynamics to explain drug action

b) Ergot alkaloids

c) Role of Eicosanoids

EX/PHARM/T/313/2017 (S)

B. Pharm. 3rd Year 1st Sem Supple. Exam., 2017

Medicinal Chemistry – I | Time: 3 hr | Full Marks: 100

Group 'D'

Answer at least *one* question from this group:

8. How do you prepare:

a) β-N,N-Diisopropylamino ethyl chloride

b) Sodium xanthine-9-carboxylate

c) Tridihexethyl and

d) α-Cyclohexylphenyl glycolic acid 5 X 4 = 20

9. a) Discuss the synthetic steps with chemical equations for the preparation of methyl benzylate.

b) How do you prepare scopolamine? Discuss synthetic steps with chemical reactions.

7 + 13 = 20