

FACULTY**B. Pharmacy 3/4 I Semester (Suppl.) Examination, April 2017****Subject : Medicinal Chemistry I****Time : 3 Hrs****Max. Marks: 70****Note: Answer all questions. All questions carry equal marks.**

- 1 (a) Explain the importance of Bioisosterism in drug design. (7)
(b) Write about phase I reactions of drug metabolism. (7)
OR
(c) Explain the importance of prodrug and soft drug approach in drug design. (7)
(d) How does plasma protein binding affect biological activity. Give appropriate examples. (7)
- 2 (a) Classify Anticholinergic drugs with one example each with structure and chemical name. (5)
(b) Give the structure and synthesis of following : (3x3)
(i) Salbutamol (ii) Dicyclomine (iii) Carbachol
OR
(c) Write the pharmacological actions of Adrenaline and discuss the SAR of Adrenomimetics. (10)
(d) Write a note on skeletal muscle relaxants. (4)
- 3 (a) Write a note on digitalis glycosides. (4)
(b) Classify Anti hyperlipidemic agents with examples. (2)
(c) Give the structure, synthesis and MOA of clonidine and verapamil. (4+4)
OR
(d) Add a note on vasodilators. (5)
(e) Write the structure, synthesis and MOA of following: (3x3)
(i) Clofibrate (ii) Captopril (iii) Isosorbide
- 4 (a) Add a note on immune modulators. (5)
(b) Give the classification of oral hypoglycemic agents. Discuss the MoA and SAR of Biguanides. Give the synthesis of Tolbutamide and Amrinone. (1+4+2+2)
OR
(c) Write about Anti thyroidal agents. (7)
(d) Give a short note on positive inotropic agents. (7)
- 5 (a) Give the SAR of any two classes of H₁ – Antihistamines. (5)
(b) Write the synthesis and MoA of following : (3x3)
(i) Warfarin (ii) Ranitidine (iii) Citalopram
OR
(c) Add a note on proton pump inhibitors. (5)
(d) Write the synthesis and MoA of following: (3x3)
(i) Omeprazole (ii) Diphenhydramine (iii) Chlorpheniramine
