

Code No. 6048

FACULTY OF PHARMACY**B. Pharmacy 3/4 I – Semester (Main) Examination, November 2015****Subject: Medicinal Chemistry – I****Time: 3 Hours****Max.Marks: 70****Note: Answer All questions. All questions carry equal marks.**

- 1 a) Explain with examples the importance of bioisosterism in relation to biological activity. 7
b) What do you mean by soft drug approach in drug design? How is it achieved? 7
OR
c) Discuss with suitable examples the influence of protein binding on biological activity. 7
d) Explain with examples the factors affecting the drug metabolism. 7
- 2 a) Classify adrenergic drugs with examples, write the mode of action, SAR and outline the synthesis of Atenolol. 2+3+5+4
OR
b) What are cholinergic drugs? Classify them with examples, discuss the mode of action, therapeutic uses and outline the synthesis of dicyclomine. 2+3+3+2+5
- 3 a) What are antihypertensive agents? Classify them with examples, discuss the mode of action and SAR of ACE inhibitors. 2+3+3+3
b) Write the synthesis and specific uses of clonidine. 3
OR
c) What are anti-hyperlipidemic agents? Classify them with examples, write the mode of action and their SAR. 2+2+3
d) Write the synthesis and uses of Clofibrate and Diltiazem. 3+4
- 4 a) What are diuretics? Classify them with examples, discuss the mode of action and SAR of thiazide diuretics. Outline the synthesis of Acetazolamide and Hydrochlorothiazide. 1+2+2+3+3+3
OR
b) Classify oral hypoglycemic agents with examples, write their mode of action, SAR and add a note on the current status of the management of NIDDM. Write the synthesis and uses of Glyclizide. 2+3+3+3+3
- 5 a) Classify H₁-receptor antagonists with examples, write the mode of action and SAR. Outline the synthesis and uses of Chlorpheniramine and Cetirizine. 3+2+3+3+3
OR
b) Write a note on:
i) Anticoagulants 7
ii) Proton-pump inhibitors. 7
