

FACULTY OF PHARMACY**B. Pharmacy II – Year I – Semester (Main) Examination, November 2013****Subject : Pharmaceutical Organic Chemistry - I****Time : 3 hours****Max. Marks : 70****Note: Answer all questions. All questions carry equal marks.**

- 1.a) i) Define and give the significances of Hydrogen bonding. 5
ii) Explain Isomerism with examples. 6
iii) Define with example dipole moment. 3
OR
- b) i) Give a note on polarity of molecules. 5
ii) Describe the progress of a reaction with energy diagram. 6
iii) Write the significance of resonance effect. 3
- 2.a) i) Write any four methods of synthesis of alkanes. 7
ii) Give the mechanism of free radical reactions. 7
OR
- b) i) Explain the stability of cycloalkanes by different theories. 10
ii) Write the Anti Markonikov's addition. 4
- 3.a) i) How will you distinguish between primary, secondary and tertiary alcohols. 8
ii) Write any four methods of preparation of alkyl halides. 6
OR
- b) i) Explain the elimination reaction with mechanism. 7
ii) Give different methods of synthesis of ethers. 7
- 4.a) Give any four methods for the synthesis of carboxylic acids. 8
b) Write the synthetic applications of malonic ester. 6
OR
- b) i) Give any four methods for synthesis of ketones. 8
ii) Write the synthetic applications of aceto-acetic ester. 6
- 5.a) i) How do you differentiate between primary, secondary and tertiary amines with chemical reactions? 8
ii) Write the applications of Aryl diazonium salt. 6
OR
- b) i) Discuss any four methods for synthesis of secondary aromatic amines. 8
ii) Give any three chemical reactions of aryl diazonium salt. 6
