

Code No. 4038

FACULTY**B. Pharmacy 2/4 I – Semester (Main) Examination, October 2016****Subject: Pharmaceutical Organic Chemistry – I****Time: 3 Hrs****Max. Marks: 70****Note: Answer all questions. All questions carry equal marks.**

- 1 a) Explain the energy diagrams of reactants and products during the course of reaction. 5
b) Write a note on following: 9
i) Hybridization ii) Melting point iii) Boiling point
OR
c) Add a note on polarity of molecules. 5
d) Define the terms with examples 9
i) Inductive effect ii) Cis trans isomerism iii) Resonance
- 2 a) Discuss the free radical mechanism for the chlorination of methane. 7
b) Write any four methods of preparation of alkanes. 7
OR
c) Discuss the importance of Bayer's strain theory. 7
d) Explain the reactions of alkenes. 7
- 3 a) How do you prepare ethers by Williamson's synthesis? 7
b) Write a note on Saytzeff's rule. 7
OR
c) Discuss about mechanism of nucleophilic substitution reactions. 7
d) Write any two methods for synthesis of alcohols. 7
- 4 a) Write the general reactions of carbonyl compounds. 7
b) Write any two methods of preparation of aldehydes. 7
OR
c) Discuss the reactivity and applications of malonic acid ester. 7
d) Write any two methods of synthesis of carboxylic acids. 7
- 5 a) Write any two methods for synthesis of nitroalkanes. 7
b) Write a note on aryl diazonium salts. 7
OR
c) Write a note on basicity of amines. 6
d) How do you differentiate between primary, secondary and tertiary amines with chemical reactions? 8
