Subject Code: B13106/R13

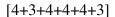
I B. Pharmacy I Semester Regular/Supplementary Examinations Feb. - 2015 PHARMACEUTICAL ORGANIC CHEMISTRY-I

Time: 3 hours Max. Marks: 70

Question Paper Consists of **Part-A** and **Part-B**Answering the question in **Part-A** is Compulsory,
Three Questions should be answered from **Part-B*******

PART-A

- 1. (a) Write a note on stability of carbocations.
 - (b) Why alkynes are acidic than alkenes and alkanes.
 - (c) Explain the chain and conformational isomerisms.
 - (d) Write any two important methods for the preparations of alkenes.
 - (e) Define the terms chirality and recemic mixture.
 - (f) Describe Industrial synthesis of Ethanol.



PART-B

- 2. Write a detail note on following
 - (a) Inductive effect and Mesomeric effect.
 - (b) Peroxide effect
 - (c) Elimination reaction by E1 mechanism

[6+5+5]

- 3. (a) Explain the relative stability cycloalkanes with special emphasis on Bayer's stain theory and Sachse Mohr theory.
 - (b) Describe the reaction of 1,3-Butadiene with Hydrobromic acid.

[10+6]

- 4. (a) Why alkenes will undergo electrophilic addition reactions. Explain the reactivity and orientation of electrophilic addition reactions of alkenes.
 - (b) Complete the following reaction with the help of its mechanism.

[10+6]

- 5. (a) Explain the S_N1 and S_N2 reactions in detail including their mechanisms and add a note on stereochemistry of S_N1 and S_N2 reactions.
 - (b) Williamson's synthesis of ethers

[10+6]

- 6. Explain the following on detail
 - (a) Absolute configuration
 - (b) E and Z isomerism
 - (c) Optical isomerism

[5+5+6]

- 7. (a) What is Grignard reagent? Discuss the nucleophilic addition and substitution reactions of Grignard reagent in detail.
 - (b) How can we distinguish the 1^0 , 2^0 and 3^0 alcohols. Explain with the help of reaction.

[10+6]

