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Code No. **4407****FACULTY OF PHARMACY****B. Pharm. II Year I Semester Main Examination, November/December 2010  
PHARMACEUTICAL ORGANIC CHEMISTRY — I****Time : 3 Hours]****[Max. Marks : 70***Note : Answer all questions. All questions carry equal marks.*

1. a) What are the different type of bonds you have studied ? Describe in detail about covalent bond and polarity of covalent bond. **10**
- 131 Write a note on solubility. **4**
- OR**
- c) Write in detail about acidity and basicity of organic molecules. **8**
- d) What is isomerism ? Explain with suitable example. **6**
2. a) Define Electrophilic addition reaction of alkenes and explain with suitable examples. **14**
- OR**
- b) What are cycloalkanes ? Write any 3 methods of preparation and stability of cycloalkanes with reference to Bayer's strain theory. **14**
3. a) What is the type of chemical reaction takes place when alcoholic potassium hydroxide and aqueous potassium hydroxide are reacted with alkyl halide ? **4**
- b) Explain the mechanism of
- i)  $SN_1$  and  $SN_2$  reaction
  - ii)  $E_1$  and  $E_2$  reaction. **5+5=10**

**OR***(This paper contains 2 pages)***1****P.T.O.**

**MENU**

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- c) Write in brief about the preparations and reactions of Ethers. 10
- d) Write a note on oxidation of alcohols. 4
4. a) Write the various Nucleophilic addition reactions of carbonyl compounds with mechanism. 8
- b) Write any two methods of preparation of carbonyl compounds. 6

**OR**

- c) Write the synthetic applications of Acetoacetic ester and malonic ester. 8
- d) Write any two methods of preparation of acid derivatives. 6
5. a) Write the Nomenclature and acidity of Nitro alkanes. 7
- b) Write the methods of preparation of Nitro alkanes. 7

**OR**

- c) Write the synthetic applications of Diazonium salts. 7
- d) Write in brief about the reactions of amines. 7