

**I B. Pharmacy I Semester Supplementary Examinations, May/June - 2019**  
**PHARMACEUTICAL ORGANIC CHEMISTRY-I**

Time: 3 hours

Max. Marks: 70

- Note: 1. Question paper consists of two parts (**Part-A** and **Part-B**)  
2. Answering the question in **Part-A** is Compulsory  
3. Answer any **FOUR** Questions from **Part-B**

**PART -A**

1. a) What is a hydrogen bond? Give examples. (2M)  
b) Write tests for identification of -OH group. (2M)  
c) What is Bayer's test? (2M)  
d) Write structures of (i) 2-butyne (ii) 2-ethoxypropane (2M)  
e) What is a diastereomer? Give example. (2M)  
f) What is absolute alcohol? (2M)  
g) What is Cis-Trans isomerism? (2M)

**PART -B**

2. Write in detail on (14M)  
a) Rearrangement of carbocations    b) Reactivity of free radicals
3. a) Write factors influencing polarity of a covalent bond. (6M)  
b) Write in detail on hyperconjugation and mesomeric effect. (8M)
4. a) Write in detail on ozonolysis. (6M)  
b) Explain the significance of Bayer's strain theory. (8M)
5. a) Write methods used for preparation of alkenes. Add a note on their acidity. (8M)  
b) Write the mechanism and significance of SN1 reactions. (6M)
6. a) Explain the methods used for hydrolysis of ethers. (6M)  
b) Write in detail on methods used for synthesis of alcohols. (8M)
7. a) Write in detail on optical activity in organic compounds and specific rotation. (7M)  
b) Explain the synthetic applications of Grignard reagent. (7M)