

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)