

Code No: B13106

R13
SET - 1
I B. Pharmacy I Semester Supplementary Examinations, Jan/Feb - 2018
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 questions in **Part-A** is Compulsory
 3. Answer any **THREE** Questions from **Part-B**

PART -A

1. a) Write in brief on hyperconjugation. (4M)
- b) Write short notes on Sachse-Mohr theory. (4M)
- c) Alkynes are acidic. Why? (3M)
- d) What is Saytzeff's rule? (3M)
- e) Write in brief on racemic mixture. (4M)
- f) Write all possible stereoisomers for tartaric acid. (4M)

PART -B

2. a) Write in detail on inductive effect and resonance. (8M)
- b) Write short notes on formation and stability of carbocations. (8M)
3. a) What are cycloalkanes? Write three methods for preparation of cycloalkanes. Add a note on conformations of cyclohexane. (8M)
- b) Explain the mechanism and synthetic applications of ozonolysis. (8M)
4. a) What are nucleophiles? Write in brief on factors influencing ability of a nucleophile to undergo substitution. (8M)
- b) Write in detail on stereo-chemical implications of SN2 reactions. (8M)
5. a) Write three methods of preparation and reactions of ethers. (10M)
- b) Write in detail on methods used for qualitative and quantitative analysis of alcohols. (6M)
6. a) What is stereoisomerism? Differentiate optical and geometric isomerism. Add a note on significance of optical isomerism in pharmaceutical chemistry. (10M)
- b) Write short notes on Fisher projection formula. (6M)
7. How can you achieve the following synthetic conversions?
 - a) Propylene to acetone. (5M)
 - b) Chloroform to chlorobutanol. (5M)
 - c) Acetaldehyde to hexane-3-ol. (6M)