

Code No: PHR16116

**R16****SET - 1****I B. Pharmacy I Semester Supplementary Examinations, February - 2020****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**
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**PART -A**

1. a) What is a carbocation? (2M)
- b) Write structures of (2M)  
(i) (E)-2-methylhex-3-ene (ii) 1-chloro-3-methylcyclopentane
- c) What is a nucleophile? (2M)
- d) Write Lucas test. (2M)
- e) What is specific rotation? (2M)
- f) Why methanol is water soluble? (2M)
- g) What is center of symmetry? (2M)

**PART -B**

2. a) Write in detail on inductive effect and hyperconjugation. (6M)
- b) Write methods used for formation and stability of free radicals. (8M)
3. Write reasons for the following (14M)
  - (a) Hydroxy is considered as an electron donating group
  - (b) Alkenes decolorize Bayer's reagent
  - (c) Alkynes are acidic
  - (d) Levo and dextro isomers of drugs shows different bioactivity
4. a) Write mechanism, and factors influencing  $SN^1$  reaction. (8M)
- b) Write in detail on Saytzeff's rule. (6M)
5. a) Write methods used for industrial production of ethanol. (6M)
- b) Write methods used for preparation and hydrolysis of ethers. (8M)
6. a) Write methods used for resolution of racemic mixture. (10M)
- b) Write in brief on D, L configuration. (4M)
7. Write in detail on method of preparation of Grignard reagent and its synthetic applications. (14M)