

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)