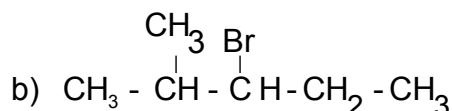
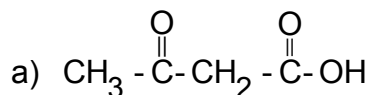


FACULTY
Pharm D (6–YDC) I – Year (Main / Backlog) Examination, July 2018
Subject: Pharmaceutical Organic Chemistry
Time: 3 Hours
Max.Marks: 70
Note: Answer all questions from Part – A. Any Five questions from Part – B.
PART – A (10x2 = 20 Marks)

1 Write the IUPAC name of the following:



2 Give the structural formula of:

a) But-1-en-3-yne

b) 1-Bromo-2-chloro ethane

3 Define the term acidity and basicity.

4 Explain polarity of molecules with example.

5 Explain activating and deactivating groups with example.

 6 Arrange the following in decreasing order of their reactivity.
 Benzene, Toluene and Nitrobenzene.

7 What is resonance? Give any two example.

8 Write any one method of preparation of lactic acid.

9 Explain hydrogen bonding with example.

10 Explain the acidity of phenol.

PART – B (5x10 = 50 Marks)

 11 a) Explain in detail the mechanism, stereochemistry and rearrangement reaction of SN^1 with suitable example. 6

b) Explain the mechanism of free radical reaction of methane. 4

12 a) Explain the nucleophilic addition reactions of aldehyde. 5

b) Describe the methods of preparation of acid derivatives. 5

13 Write short notes on the following:

a) Reimer – Tieman's reaction 5

b) Williamson's synthesis 5

- 14 Write the mechanism of:
- a) Benzoin condensation 5
 - b) Reformatsky reaction 5
- 15 Write the "test for purity" and uses for tartaric acid and glyceryl trinitrate. 10
- 16 a) Give 3 methods for the preparation of cyclopropane. 5
- b) Explain in detail about bimolecular displacement mechanism. 5
- 17 a) Explain the mechanism of sulphonation reaction of benzene. 5
- b) Explain in detail the effect of halogen on electrophilic aromatic substitution in alkyl benzene. 5
- 18 a) Write the preparation and assay method of vanillin and dimercaprol. 5
- b) Write the principle involved in the assay of aspirin. 5
