

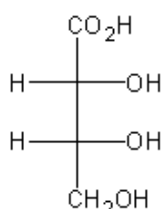
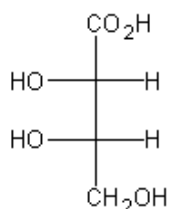
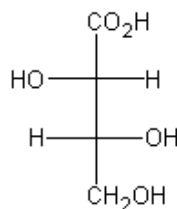
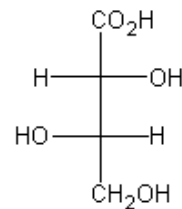
GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER- III (New) EXAMINATION – WINTER 2019

Subject Code: 2133501
Date: 28/11/2019
Subject Name: Organic Chemistry
Time: 02:30 PM TO 05:00 PM
Total Marks: 70
Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

		MARKS
Q.1	(a) Why fluoro acetic acid is more stronger acid than acetic acid.	03
	(b) Write a short note on mesomeric effect.	04
	(c) Explain generation, stability and reactions of carbocation.	07
Q.2	(a) Explain the importance of knowing mechanism of any chemical reaction.	03
	(b) What is essential difference between E^1 and E^2 mechanism.	04
	(c) Explain mechanism of diazotization reaction.	07
OR		
	(c) Explain SN^1 and SN^2 reaction with mechanism.	07
Q.3	(a) Explain the importance of Hydrogenation reaction in organic synthesis.	03
	(b) How does aniline react with;	04
	1. Aldehyde	
	2. Bromine	
	3. Chloroform and alc. KOH	
	4. $NaNO_2$ at 0 to $5^\circ C$	
	(c) Explain cannizaro reaction with its mechanism.	07
OR		
Q.3	(a) Give use & synthesis of DDT.	03
	(b) Explain conformers of butane.	04
	(c) Explain Hoffman reaction with mechanism.	07
Q.4	(a) Explain Stereoisomerism in Tartaric acid.	03
	(b) Explain generation and stability of carbanion.	04
	(c) Define the terms: enantiomers & diastereomers. Identify enantiomeric and diastereomeric pairs from following	07


I

II

III

IV
OR

Q.4	(a) Explain Conformers of Ethane.	03
	(b) How will you convert Aniline \rightarrow p-Nitro aniline?	04
	(c) Write note on (i) Diastereomers (ii) Different methods of resolution	07

- Q.5 (a) Write a short note on ozonolysis. **03**
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(b) Explain Pincol-Pinacolone reaction with mechanism.. **04**
(c) What products are obtained by reduction of nitrobenzene under different conditions? **07**

OR

- Q.5 (a) Write the mechanism of Benzidine rearrangement. **03**
(b) Write a note on NGP. **04**
(c) Draw a detailed flowsheet for chemical reactions of sulfonic acids. **07**

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