Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

B. E. - SEMESTER – III • EXAMINATION – WINTER 2012

Subj	ject	code: 130404 Date: 04-01-2013	
_		Name: Organic Chemistry & Unit Processes	
		0.30 am – 01.00 pm Total Marks: 70	
Inst		ions:	
	1. 2. 3.	Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	
Q.1	(a) (b)	Give details of SN ¹ & SN ² reactions with mechanism. Explain preparation of acetic acid by fermentation process.	07 07
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Q.2	(a)	Discuss Killiani-Fischer's synthesis of Glucose.	07
	(b)	Write a note on various processes to concentrate ore. OR	07
	(b)	Explain with suitable example E1 & E2 reactions.	07
Q.3	(a)	Discuss optical activity & optical isomerism.	07
	(b)	Give classification of carbohydrates with examples. OR	07
Q.3	(a)	Explain Geometrical isomerism with examples.	07
	(b)	What are isomers? Explain Enantiomers & Diastreomers in detail	07
Q.4	(a)	Define:Electrophile & Nucleophile. Write a note on Sulphonation of benzene.	
	(b)	Explain 1,2 & 1,4 Addition reactions. OR	07
Q.4	(a)	Explain hybridization in methane & ammonia.	07
	(b)	Prepare m-dinitrobenzene from benzene. Draw resonating structures involved in the reaction.	07
Q.5	(a)	Explain covalent bond formation in detail.	07
		Write reaction & mechanism of Ester -formation from carboxylic acid.	07
		OR	
Q.5	(a)	Discuss Halogenation in toluene in presence of light & in presence of a catalyst.	07
	(b)	<u> </u>	07
