Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY M. PHARM. - SEMESTER - I • EXAMINATION - WINTER 2012

•	e: 910101 Date: 09/01/me: Advance Organic Chemistry-I	ate: 09/01/2013		
Time: 10.30 am - 01.30pm Total Marl			ks: 80	
Instr	2. Ma	ns: tempt any five questions. nke suitable assumptions wherever necessary. gures to the right indicate full marks.		
Q.1	(a)	Write a brief on Nitrogen and Sulphur Y-lide. Discuss their	10	
	(b)	generation and application in chemistry. Describe Hoffman and Saytzeff's rule for elimination with suitable examples.	06	
Q.2	(a)	Write a short note on Claisen condensation and Hofmann rearrangement.	08	
	(b)	What are Rearrangement reactions? Write a note on Pinacol and pinacolone rearrangements.	08	
Q.3	(a)	What is antimarkonikov's addition? Discuss with suitable example and mechanism.	06	
	(b)	What is Free Radical Reaction? Discuss rearrangements of free radicals.	05	
	(c)	Write a note on "No Bond resonance".	05	
Q.4	(a)	Enumerate the mechanism for ester hydrolysis. Discuss the mechanism of AAc2 and BAC2.	06	
	(b)	What is beta elimination reaction? Explain the mechanism and orientation for E1cb mechanism.	05	
	(c)	Write a short note on Beckman rearrangement with mechanism.	05	
Q.5	(a)	Write in detail about Orientation and reactivity of aromatic electrophilic substitution in benzene.	06	
	(b) (c)	Explain Hydride transfer reaction and Cram's rule with examples. Write in detail about photoreaction.	05 05	
Q. 6	(a)	What are the different reactive forms of carbon? Discuss the fate of	10	
	(b)	generation and stability of each. Discuss the importance of inductive effect, electrostatic effect on reactivity.	06	
Q.7		Differentiate the following with examples.	16	
	(a)	SN_1 and SN_2 .		
	(b) (c)	E ₁ and E ₂ Hyperconjugation and Resonance		
	(0)	11) porconjugation and resonance		
