GUJARAT TECHNOLOGICAL UNIVERSITY

M. Pharm. - SEMESTER - I • EXAMINATION - WINTER • 2015 Date: 31-12-2015

Subject Code: 910101

Subject Name: Advance Organic Chemistry - I

Time: 10:30 am - 01:30 pm **Total Marks: 80**

Instructions:

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

Q.1	(a)	What are elimination reactions? Write a note on E1cb mechanism with suitable examples.	06
	(b) (c)	Write a note on pinacol pinacolone rearrangement. Explain hyperconjugation and resonance.	05 05
Q.2	(a) (b) (c)	Write a note on Molecular Orbital theory. Write a note on Beckmann rearrangement. Explain Antimarkovnikov,s addition with suitable examples.	06 05 05
Q.3	(a) (b) (c)	Write a detailed note on acid base theories. Write a note on SN1 reaction. Write a note on Saytzeff and Hoffmann rule with examples.	06 05 05
Q.4	(a) (b) (c)	Write a note on nucleophilic aromatic substitution reaction Write a note on Claisen condensation. Write a note on generation of carbenes.	06 05 05
Q.5	(a) (b) (c)	Write a note on phosphorus and sulphur Y-lides. Write a note on Transannular rearrangements. Write a note on hydride transfer reaction.	06 05 05
Q. 6	(a) (b) (c)	What is free radical? Write a note on formation of free radicals. Write a note on neighbouring group participation in nucleophilic substitution. Write a note on various factors influencing the reactivity of molecule.	06 05 05
Q.7	(a) (b) (c)	Write a note on reactivity and orientation in electrophilic substitutions. Write a note on photochemical reactions. Write a note on chemical bonds and bond energies.	06 05 05
