Seat No.:	Enrolment No.
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## GUJARAT TECHNOLOGICAL UNIVERSITY M. Pharm - SEMESTER-I • EXAMINATION - SUMMER-2017

Subject Code: 910101 Date: 29/04/2017

**Subject Name: Advanced Organic Chemistry-I** 

Time: 10:30 AM to 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) (b) (c)	Write a note on Walden inversion and give the differences between SN1 and SN2 reactions with examples What is Free radical? Write a note on Free radical stability and reactivity Write a note on sulphur and nitrogen Y-lides	06 05 05
Q.2	(a) (b) (c)	Explain Hoffman and saytzeff's rule for elimination with examples Write a note on Beckman rearrangement Write a note on carbanion and carbene	06 05 05
Q.3	(a) (b) (c)	Write in detail Claisen condensation with example Write a note on electrophilic addition reaction Write a note on Nucleophilic addition reaction with example	06 05 05
Q.4	(a) (b) (c)	Explain in detail theory, energy transfer and characteristics of photoreactions Write a note on Hoffmann rearrangement Explain Resonance and Hyperconjugation	06 05 05
Q.5	(a) (b) (c)	Write a note on AAc2 and BAc2 with suitable example Write a short note on Transannular rearrangement. What is polarity? Explain how it affects the physical properties of a molecule with examples?	06 05 05
Q. 6	(a) (b) (c)	Write a note on Aromaticity. Explain with example Nucleophilic aromatic substitution reaction. Write a short note on addition and rearrangements of free radicals Explain various factors affecting the reactivity of reaction	06 05 05
Q.7	(a) (b) (c)	Explain briefly the mechanism and reactivity of E2 reaction with example Write a note on Electrophilic substitution in Aromatic systems.  Write a note on Keto-enol tautomerism with example	06 05 05

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