SHREE H. N. SHUKLA GROUP OF COLLEGES

(AFFILIATED TO SAURASHTRA UNIVERSITY & GTU)

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Near amrapali railway crossing,
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Behind marketing yard,
Near Lalpari lake, Between
Amargadh-Bhichri,
Rajkot- 360 002.
Ph.No. 90990 63150

M.Sc. Chemistry Semester II (CBSE)

C-202 Organic chemistry

Question bank

Prepared by,

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1. Answer the following (1 marks of each)

Q 1. Explain the fundamental of photochemistry.

Q 2. What is singlet and triplet states obtain in photochemistry.

Q 3. Explain properties and nomenclature of excited states in photochemistry.

Q 4. Explain molecular orbital theory for ethylene molecule.

Q 5. Give classification of pericyclic reactions.

Q 6. Explain recent reactions in photochemistry.

2. Answer the following (3 marks of each)

Q 1. Explain Sigmatropic reactions, suprafacial and antarafacial rearrangements.

Q 2. Explain aromaticity, non aromaticity and anti aromaticitywith proper examples.

Q 3. Write down Huckel's rule and its applications.

Q 4. Explain Huckel's rule for azulene.

Q 5. Exaplin photo chemistry of carbonyl compounds with proper examples.

3. Answer the following (5 marks of each)

Q 1. Explain of selection rules through construction of correlation diagrams for cyclo-addition reactions and for electrocyclic reactions with 4n and 4n+2 electrons.

Q 2. Explain Woodward-Hoffman selection rules for cycloaddition and electrocyclic reactions.

Q 3. Explain Huckel's rule for hetero annulenes, and fullerenes (C60).

Q 4. Briefly explain Jablonskii diagram.

Q 5. Explain The Cope and the Claisen rearrangements.