



# SHREE H. N. SHUKLA GROUP OF COLLEGES

(AFFILIATED TO SAURASHTRA UNIVERSITY & GTU)

2-Vaishali nagar,  
Near amrapali railway crossing,  
Raiya road, Rajkot- 360 001.  
Ph.No.-(0281) 2440478, 2472590

3-Vaishali nagar, Near  
amrapali railway crossing,  
Raiya road, Rajkot- 360 001.  
Ph.No.-(0281) 2224362

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

## M.Sc. Chemistry Semester I (CBSE)

### C-102 Organic chemistry

Question bank

Prepared by,  
**Rahul Talaviya**



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## 1. Answer the following (1 marks of each)

- Q 1. Define hemolytic cleavage
- Q 2. Define heterolytic cleavage
- Q 3. Give the name of any two functional groups having +R effect
- Q 4. Give the name of any two functional groups having -R effect
- Q 5. Give the structure of and full form of DCC
- Q 6. Give the formula and name of Wilkinson catalyst
- Q 7. Give the structure of [18] crown 6
- Q 8. Give the name of reagents used in Vielsmeier Haack reaction

## 2. Answer the following (3 marks of each)

- Q 1. What is phase transfer catalyst? Give its application and examples of phase transfer catalyst. Or Explain Birch reduction with mechanisms and application
- Q 2. Explain Vielsmeier haack reaction with mechanisms and application
- Q 3. Explain Ugi multi-component reaction with mechanisms and application
- Q 4. Explain Barton reaction with mechanisms and application Or Explain the reagent TMS-I

## 3. Answer the following (5 marks of each)

- Q 1. Explain Fries rearrangement with mechanism and application
- Q 2. Explain Benzil-Benzilic acid rearrangement with mechanisms and application
- Q 3. Explain wood ward –prevost reagent
- Q 4. Explain Baeyer Villiger oxidation with mechanisms and application