



**Shree H.N. Shukla College of Science Rajkot**  
**B.Sc. (Sem- 3) (CBCS)**  
**CHEMISTRY: [301]**  
**Question bank**

**Q.1: Answer the following question in short:**

- 1) Write the structure of sodium acetate
- 2) Write the structure of pinacol.
- 3) Give only one reaction of fries rearrangement.
- 4) Phenol react with chloroform in presence of alcohol.
- 5) Write Reaction of ethers with hot HI.
- 6) Write the list of factor affecting on acidity of phenol.
- 7) Write reaction DIOLS with periodic acid..
- 8) Write reaction of formaldehyde with Grignard reagent.

**Q-2: Answer the following question**

- 1) Conversation of benzene to salicylic acid.
- 2) Write only reaction and application of amine.
- 3) Explain nitration of phenol in various condition.
- 4) Explain chlorination of phenol in various condition.

**Q-3: Answer the following question**

- 1) Kolbe's Schmitt reaction with mechanism.
- 2) Claisen rearrangement with mechanism.
- 3) Explain sulphonation in presence of fuming olium .
- 4) Synthesis of ether.

**Q-4: Answer the following question**

- 1) Write reaction, mechanism and application of hoffman.
- 2) Write reaction, mechanism and application of claisen rearrangement.
- 3) Give method of preparation of 1,2 and 3 alcohol from Grignard reagent .
- 4) Explain oxidation of ketone and aldehyde .

