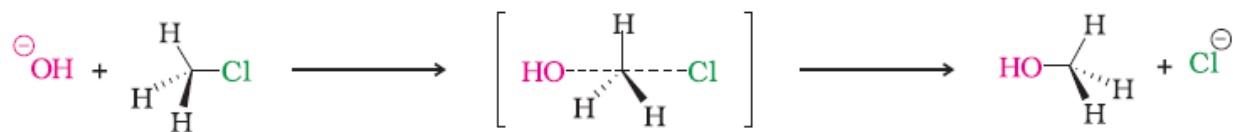
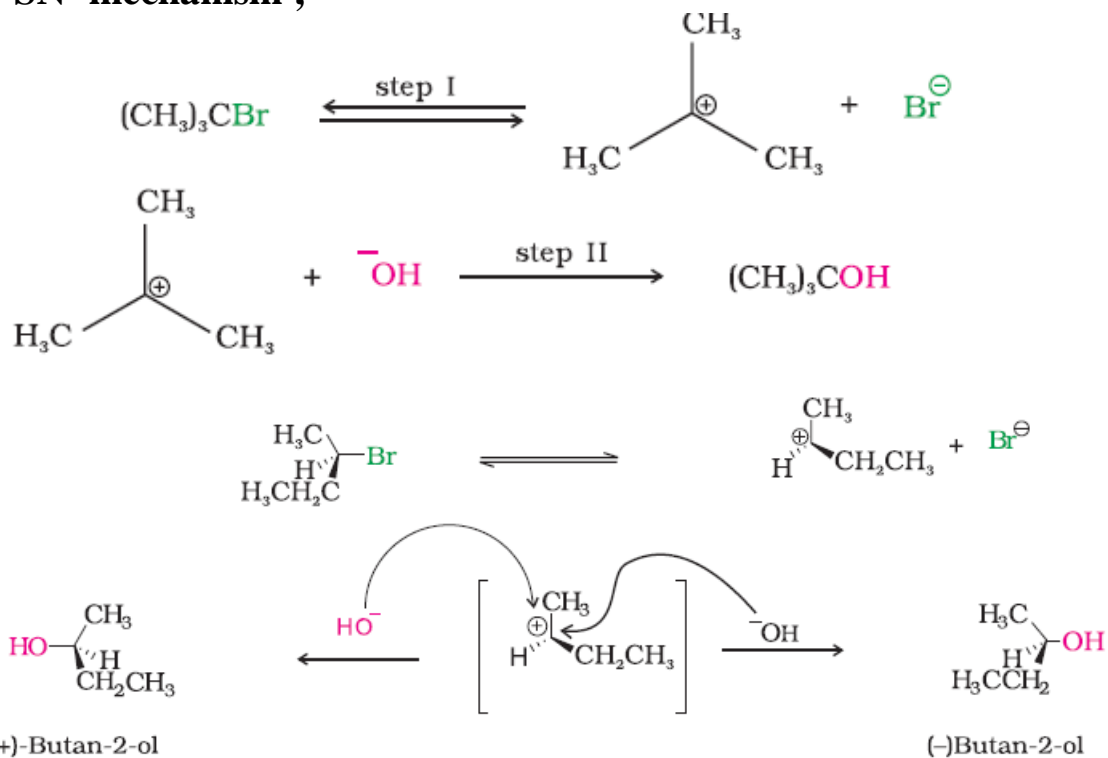


Mechanism in Organic Chemistry

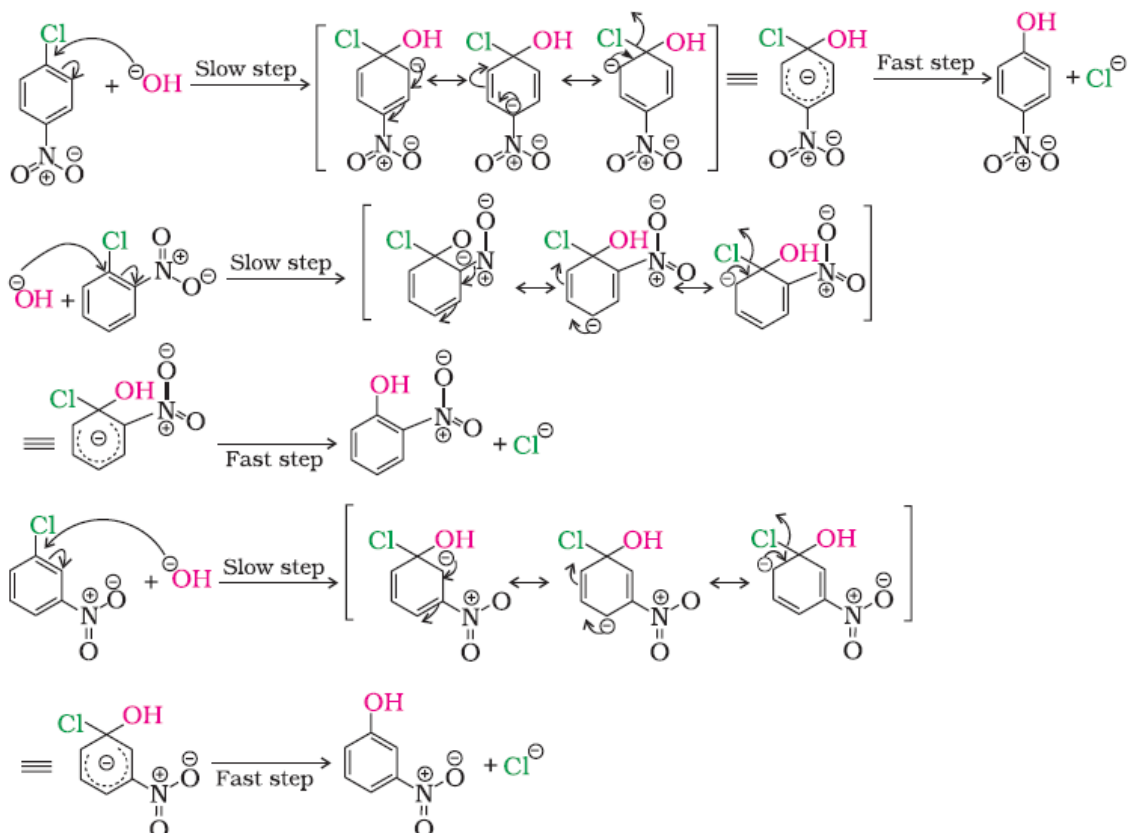
1. SN² Mechanism:



2. SN¹ mechanism ;



3. Effect of substituent on nucleophilic substitution on aryl halides

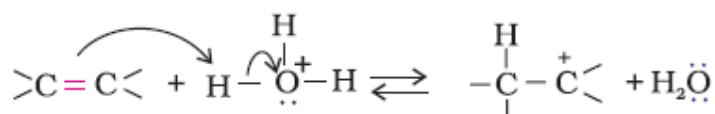


4. Hydration of Alkenes:

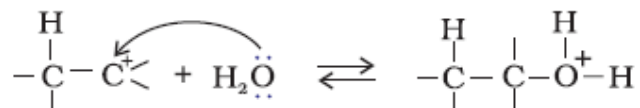
Mechanism

The mechanism of the reaction involves the following three steps:

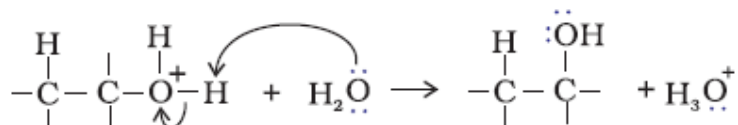
Step 1: Protonation of alkene to form carbocation by electrophilic attack of H_3O^+ .



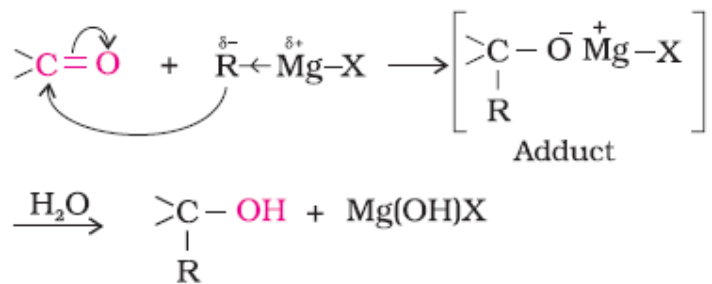
Step 2: Nucleophilic attack of water on carbocation.



Step 3: Deprotonation to form an alcohol.



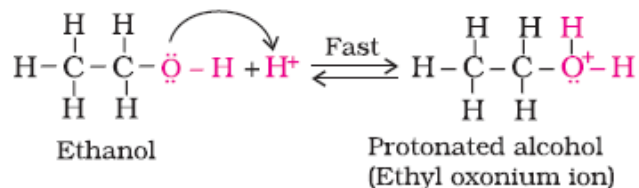
5. Addition of Grignard Reagent to Aldehydes & Ketones:



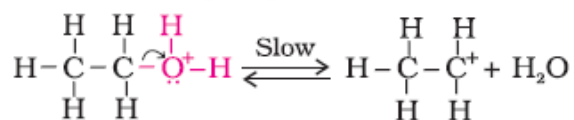
6. Dehydration of alcohols:

Mechanism

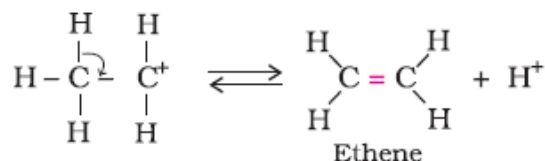
Step 1: Formation of protonated alcohol.



Step 2: Formation of carbocation: It is the slowest step and hence, the rate determining step of the reaction.

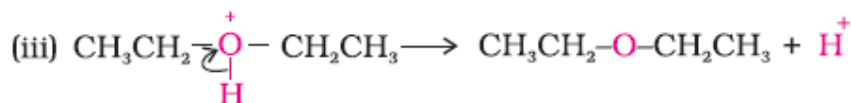
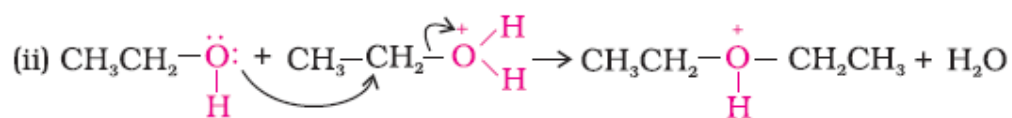
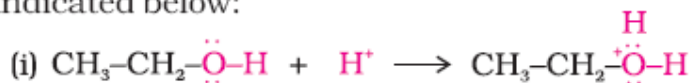


Step 3: Formation of ethene by elimination of a proton.



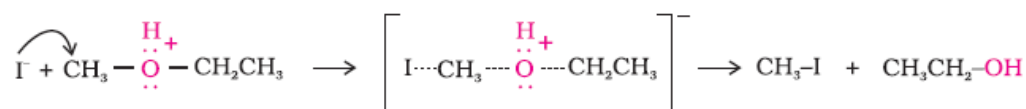
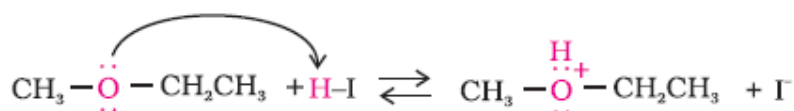
7. Dehydration of alcohols to give Ethers:

indicated below:

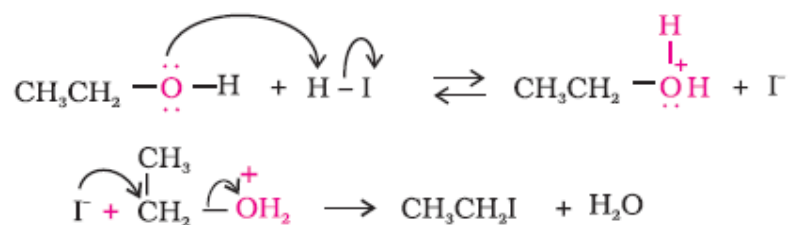


8. Reaction of ether with HI

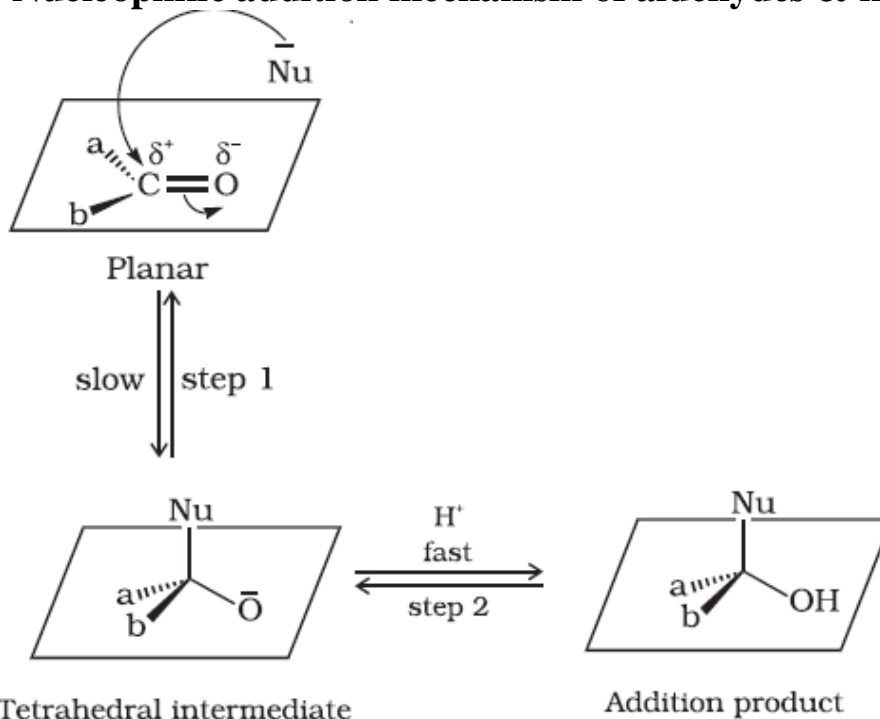
Step 1:



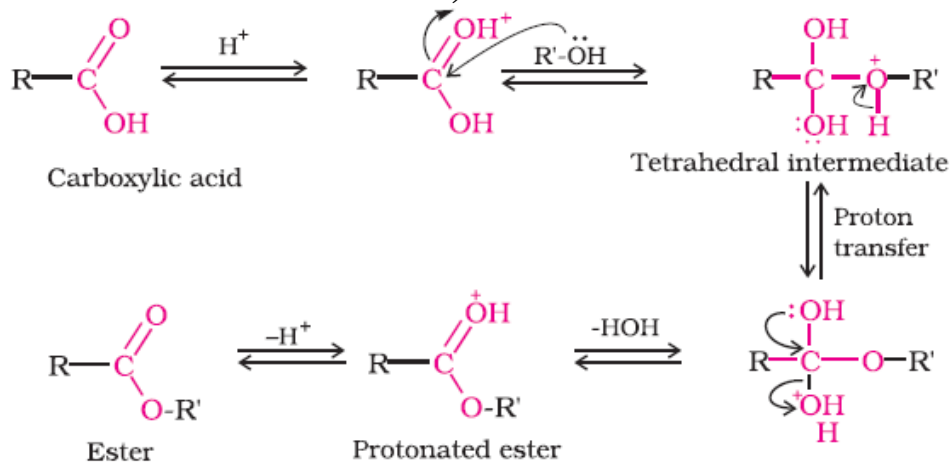
Step 3:



9. Nucleophilic addition mechanism of aldehydes & ketones.



10. Esterification mechanism;



11. Acylation of amines:

