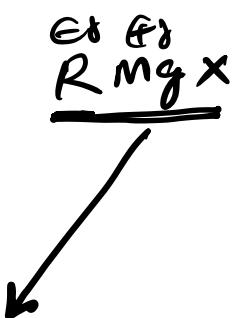


Grignard Reagent

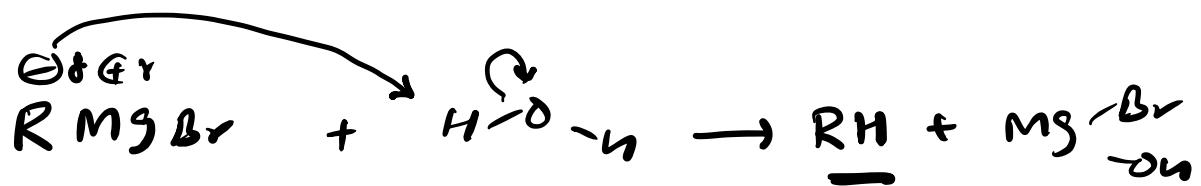


52% ionic character
48% covalent character

GR act as base (In Acid Base reaction)

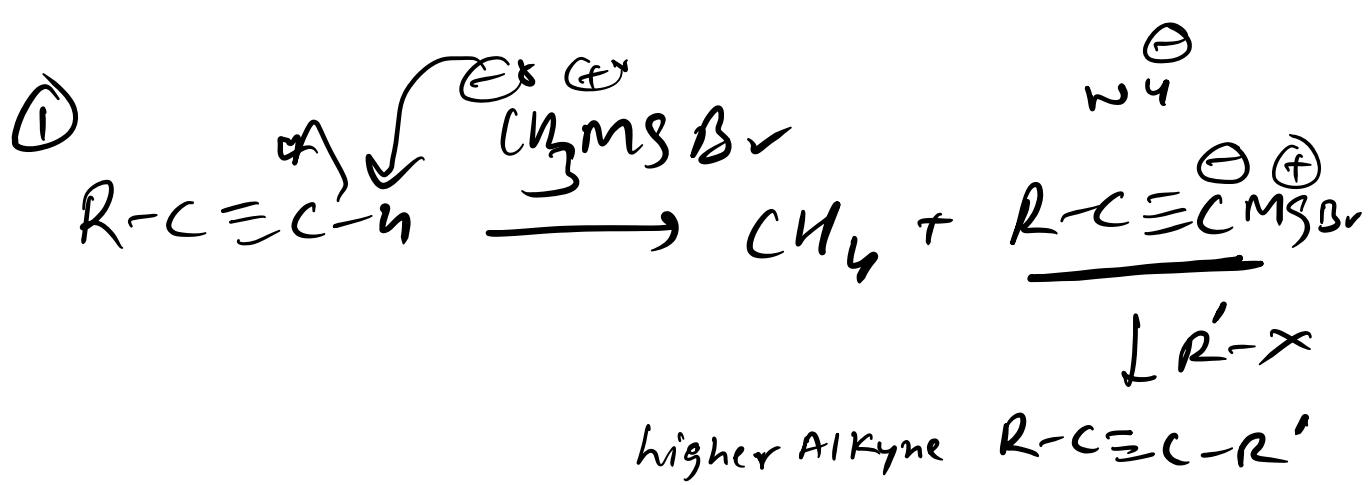
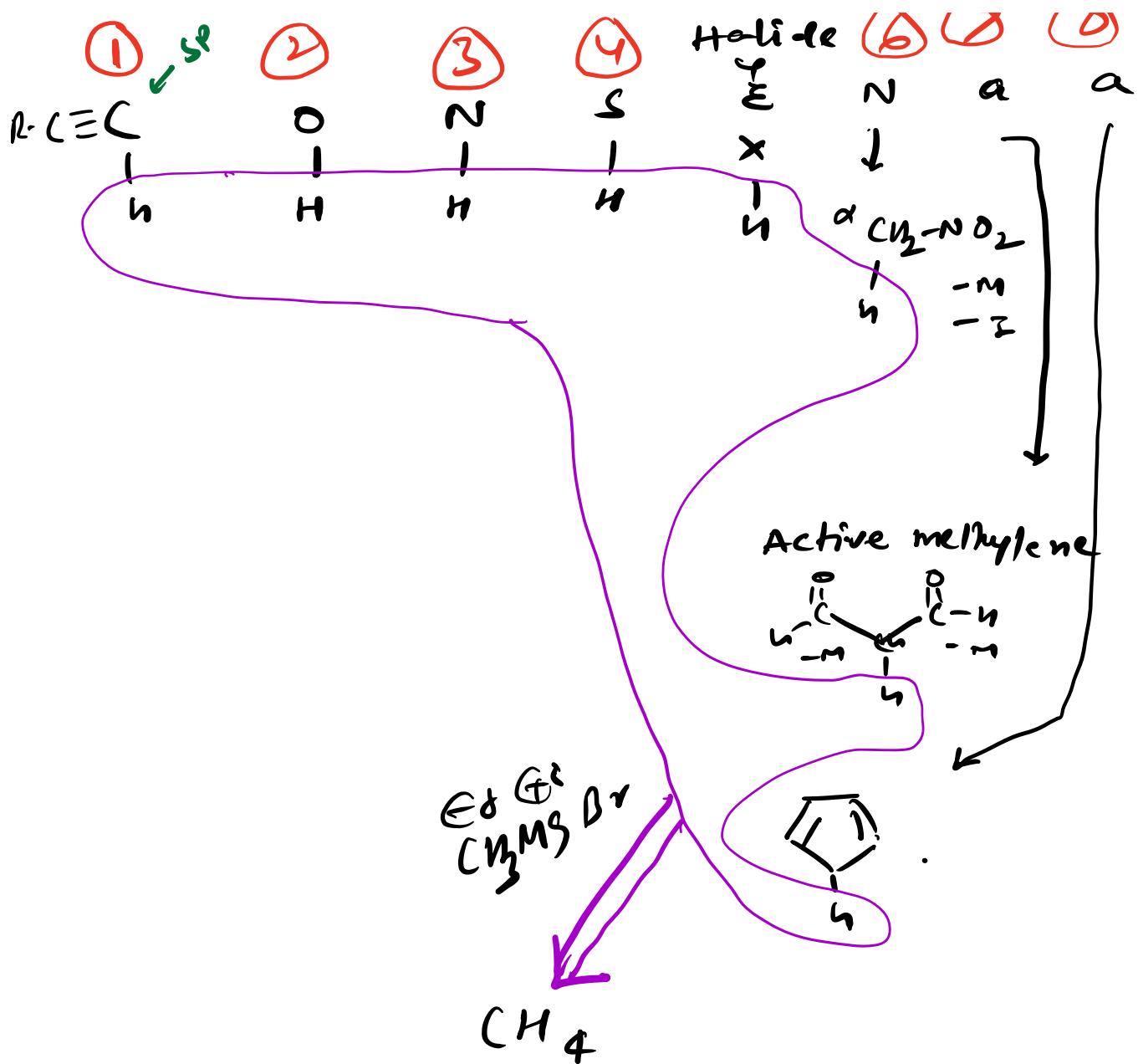
or GR act as Nu^- (In $\text{E}^\oplus/\text{Nu}^-$ reaction)

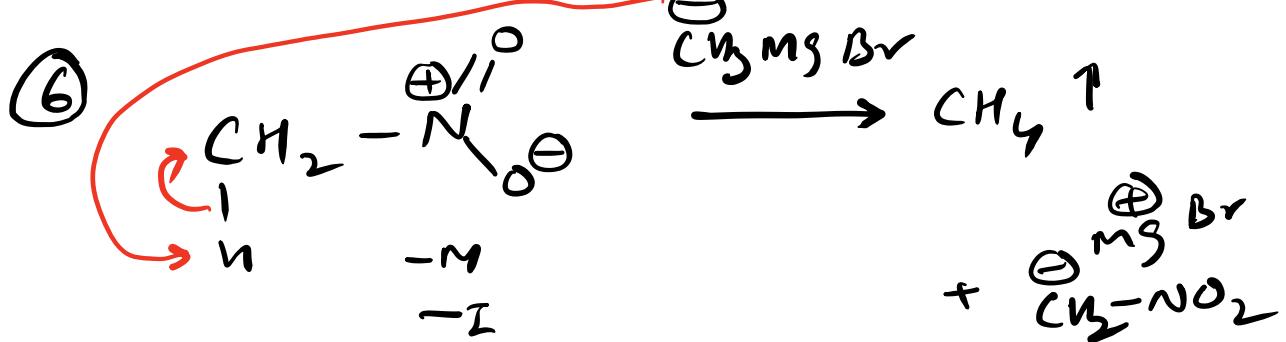
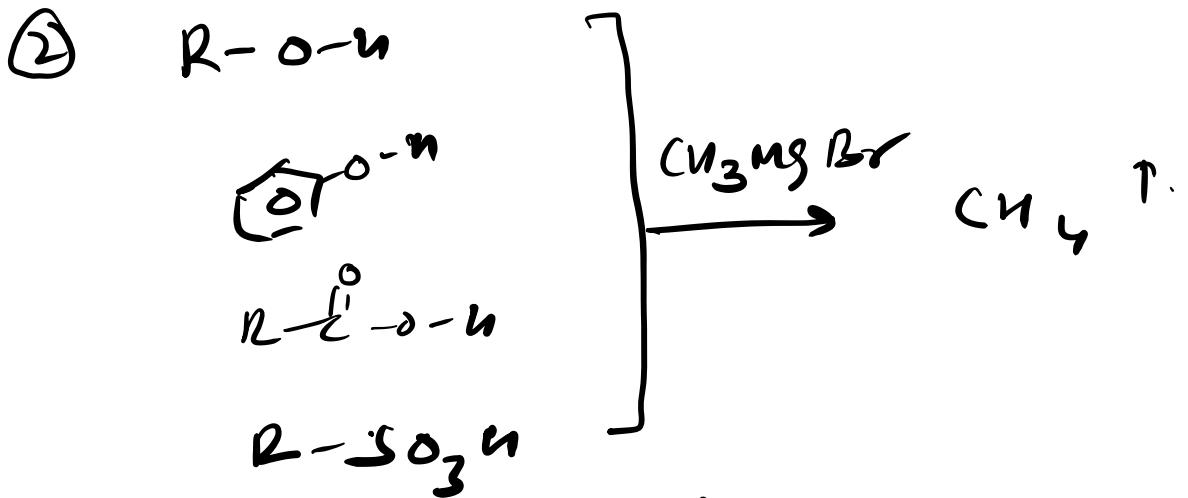
Note Generally acid base reaction of GR is faster than $\text{E}^\oplus/\text{Nu}^-$.



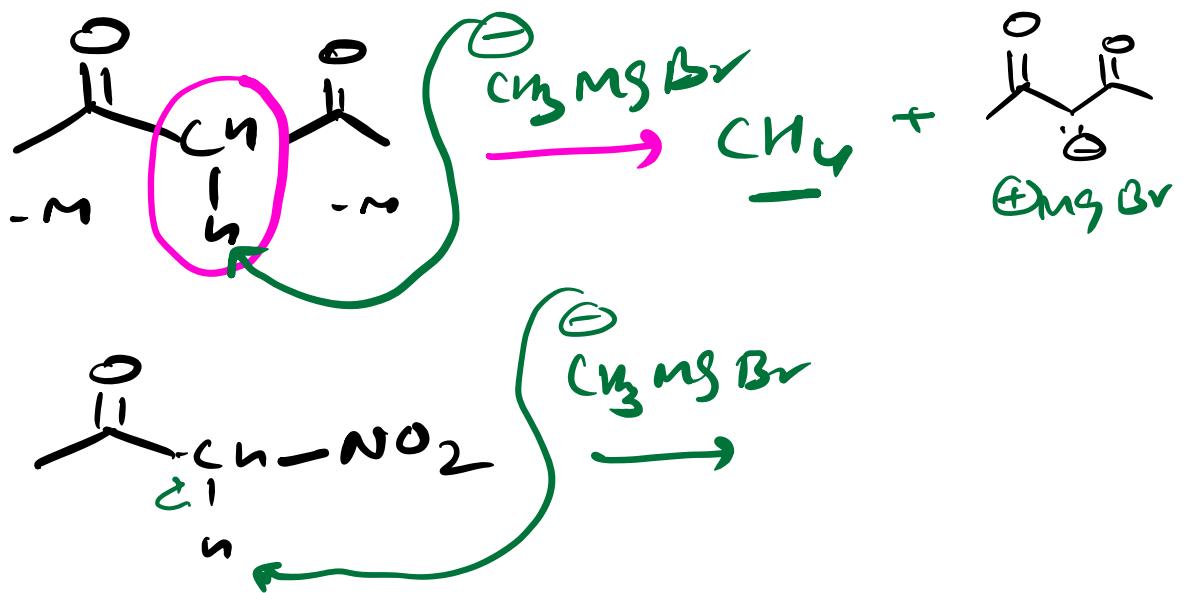
(5)

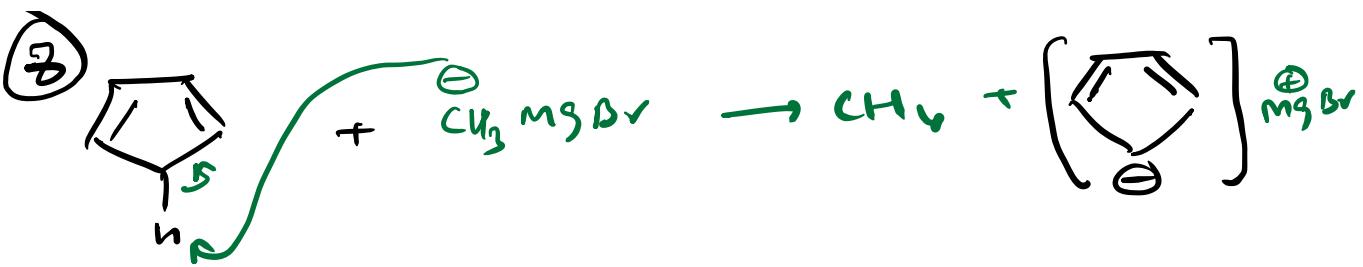
~ ~ ~



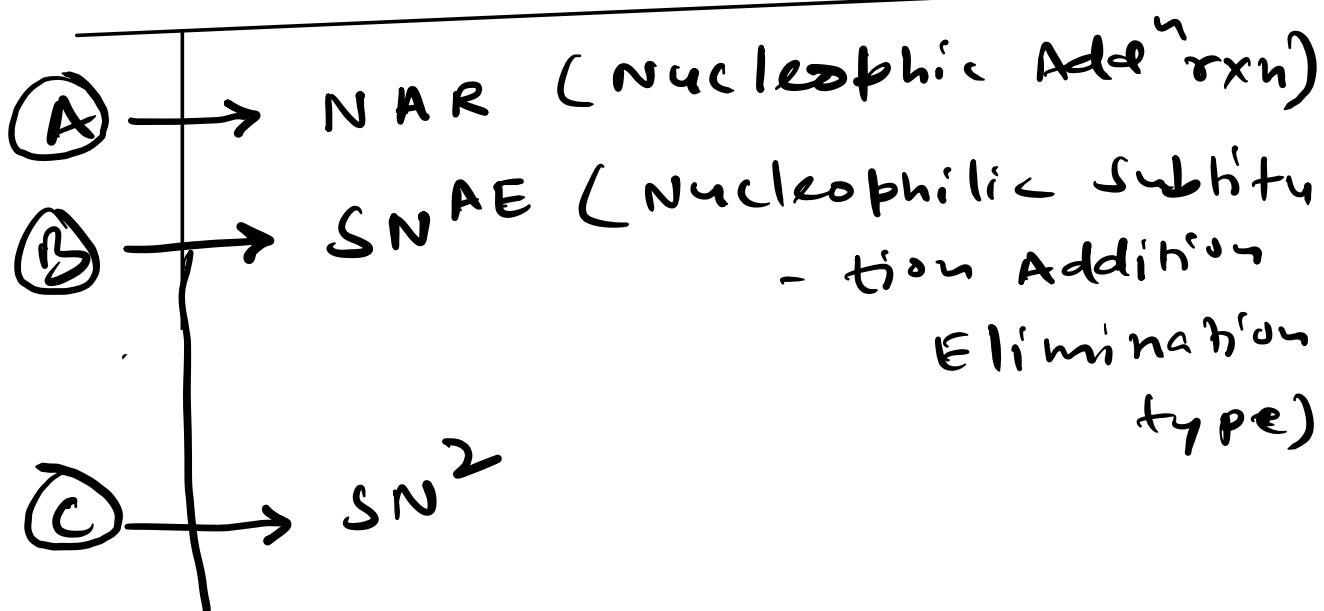


⑦ Active methylene





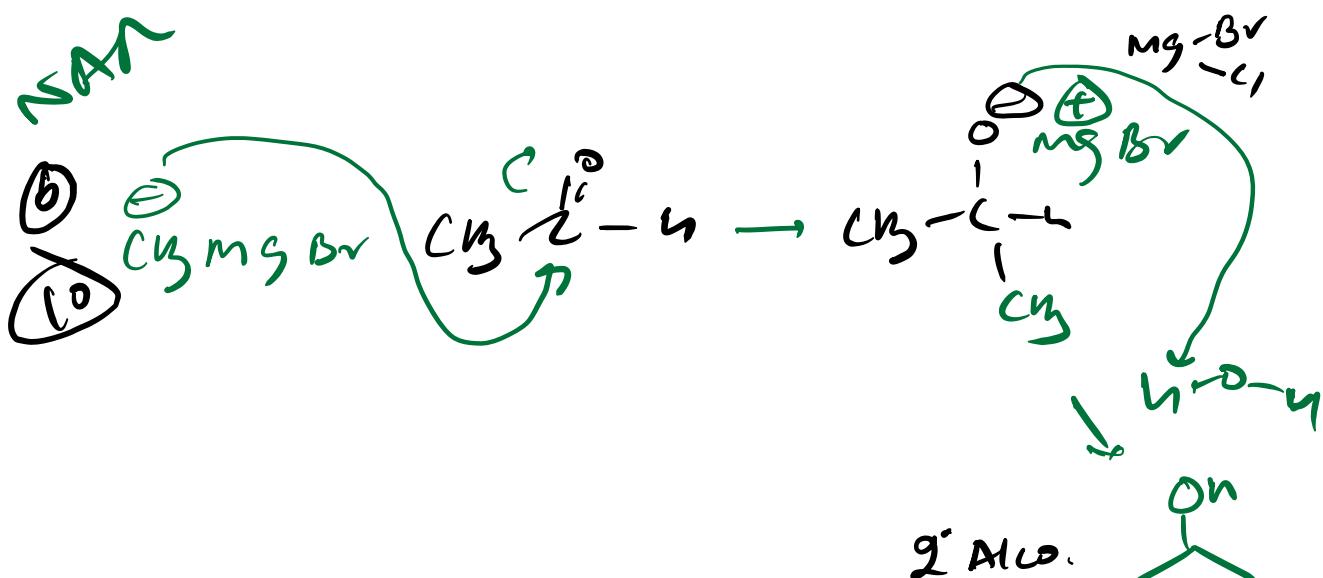
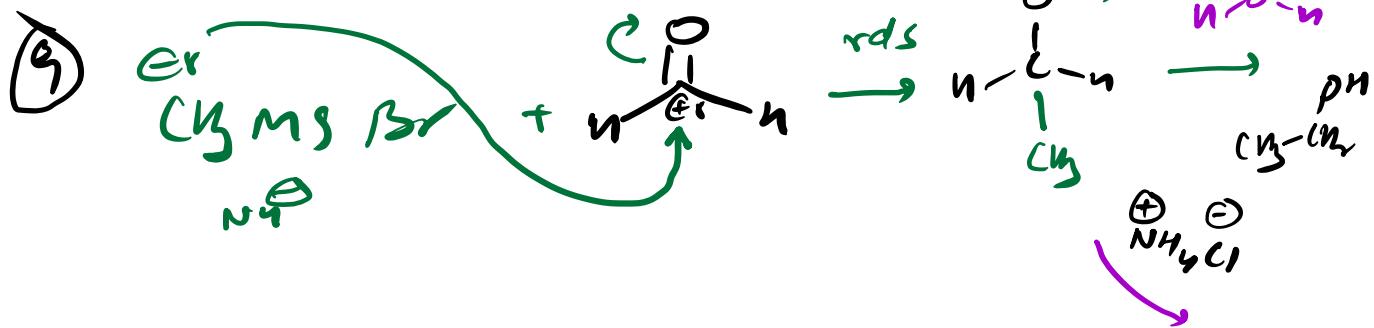
E^\ominus/Nu^\ominus Reactions of GR
 (in which GR Act as Base)

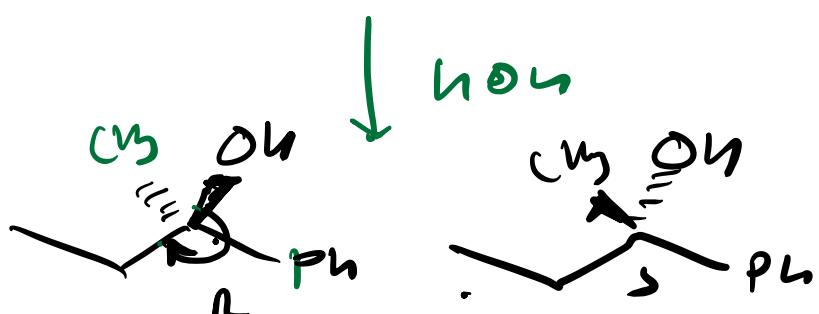
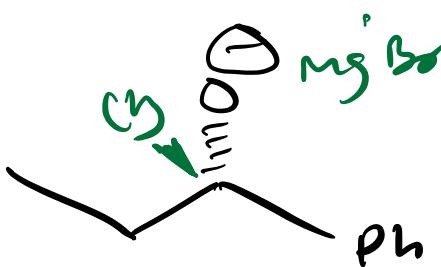
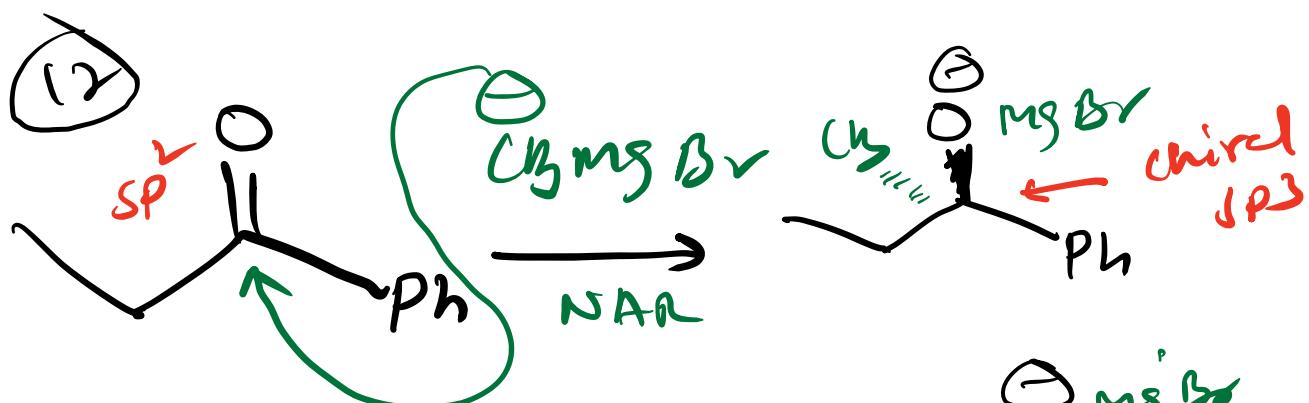
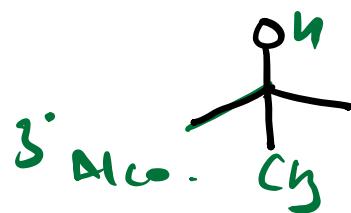
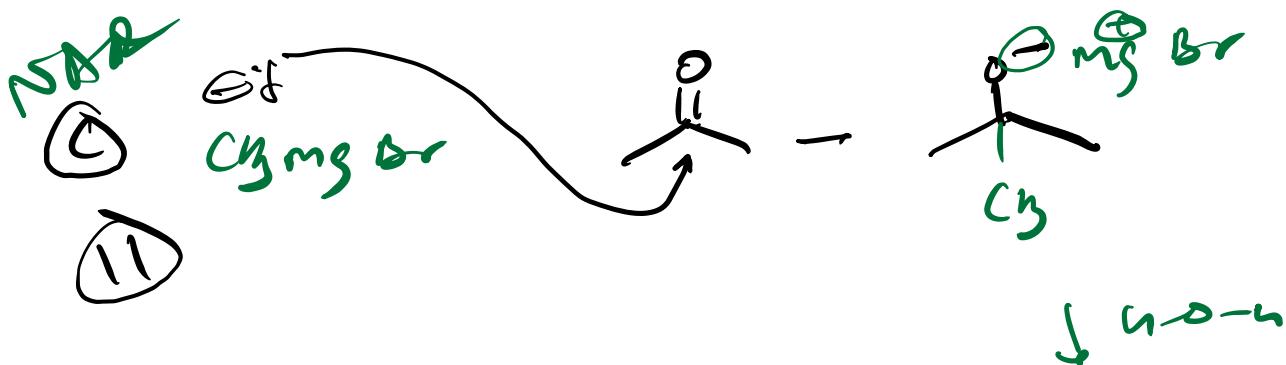


(A) NAR (Nucleophilic Addⁿ Reaction)

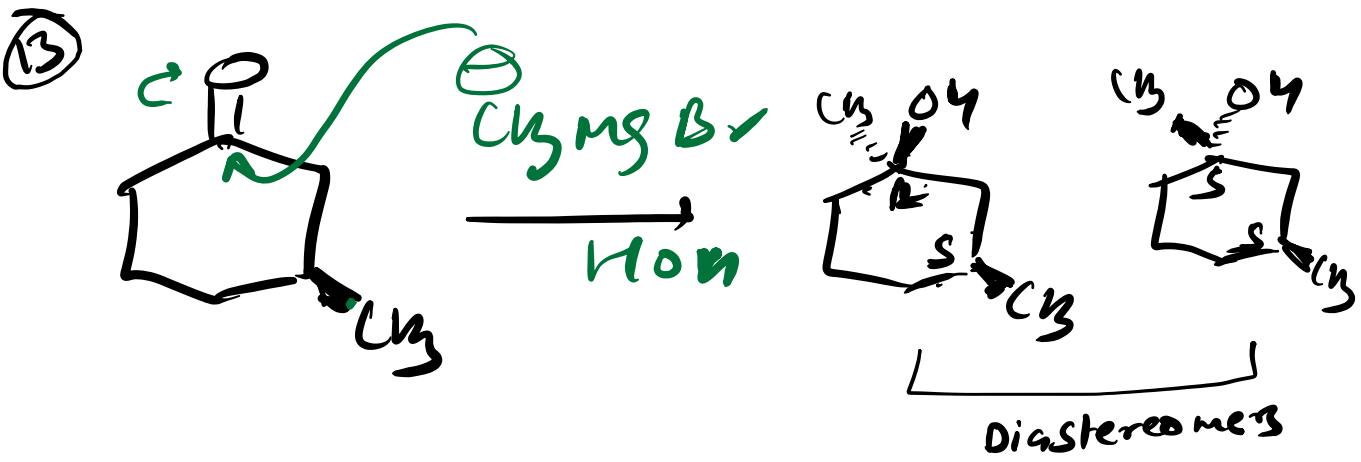
① Reaction with carbonyl compounds

NAM with $\text{H}-\overset{\text{O}}{\underset{\text{C}}{\text{C}}}-\text{n}$



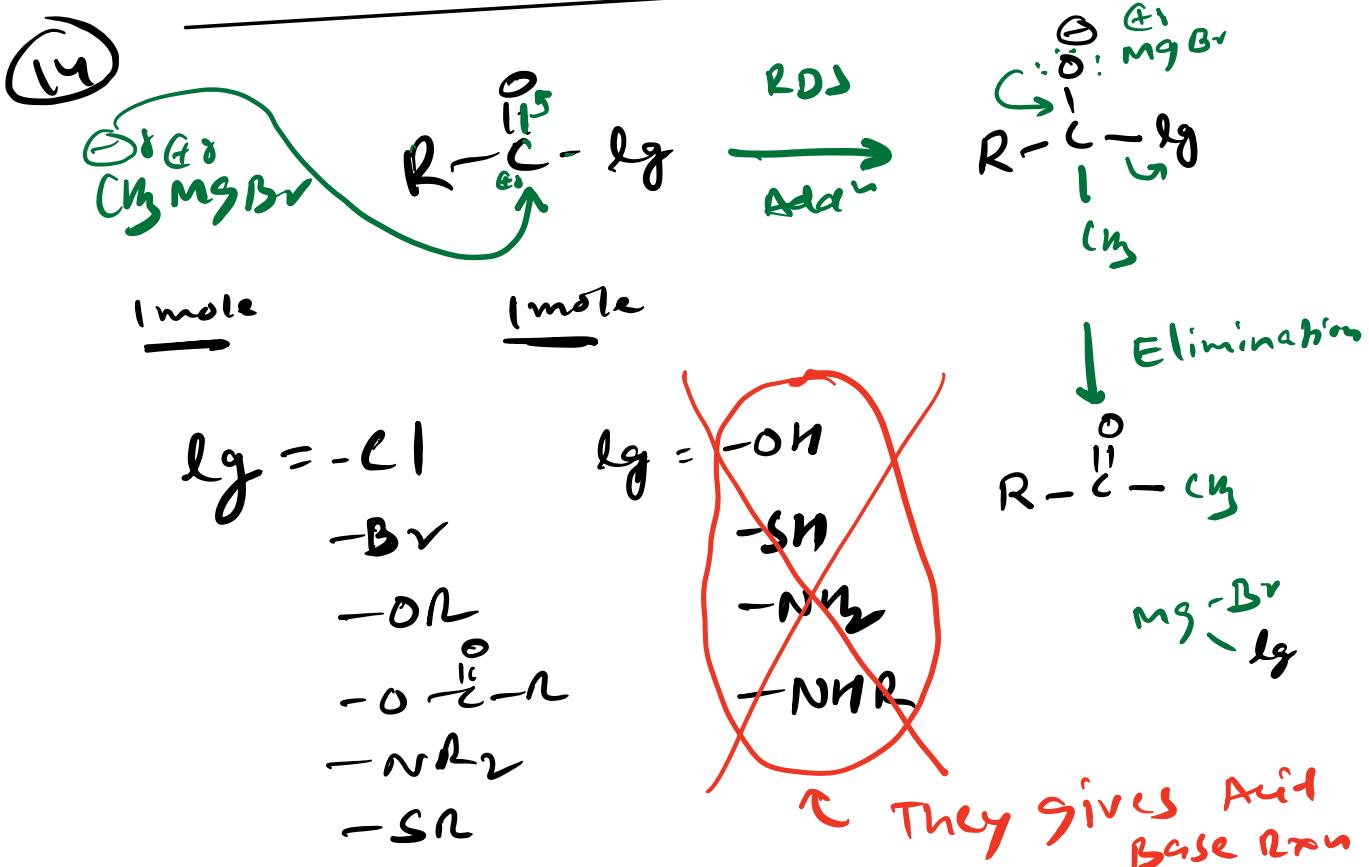


Enantiomers (or EP)

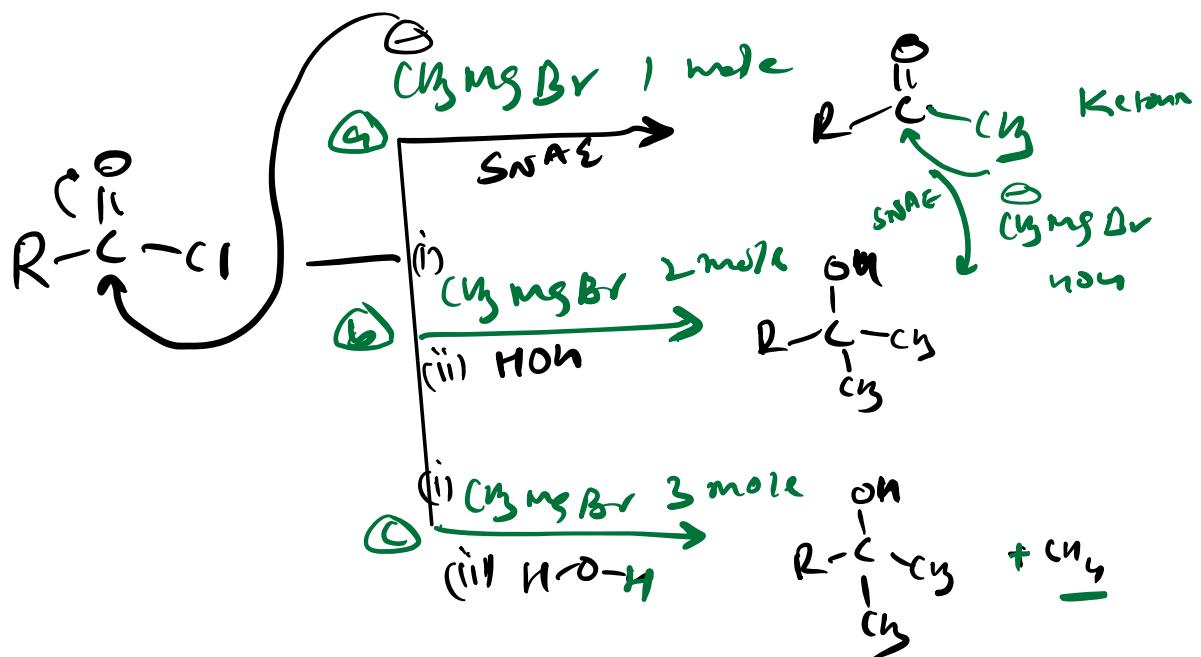


* $\text{S}_{\text{N}}\text{A}\text{E}$

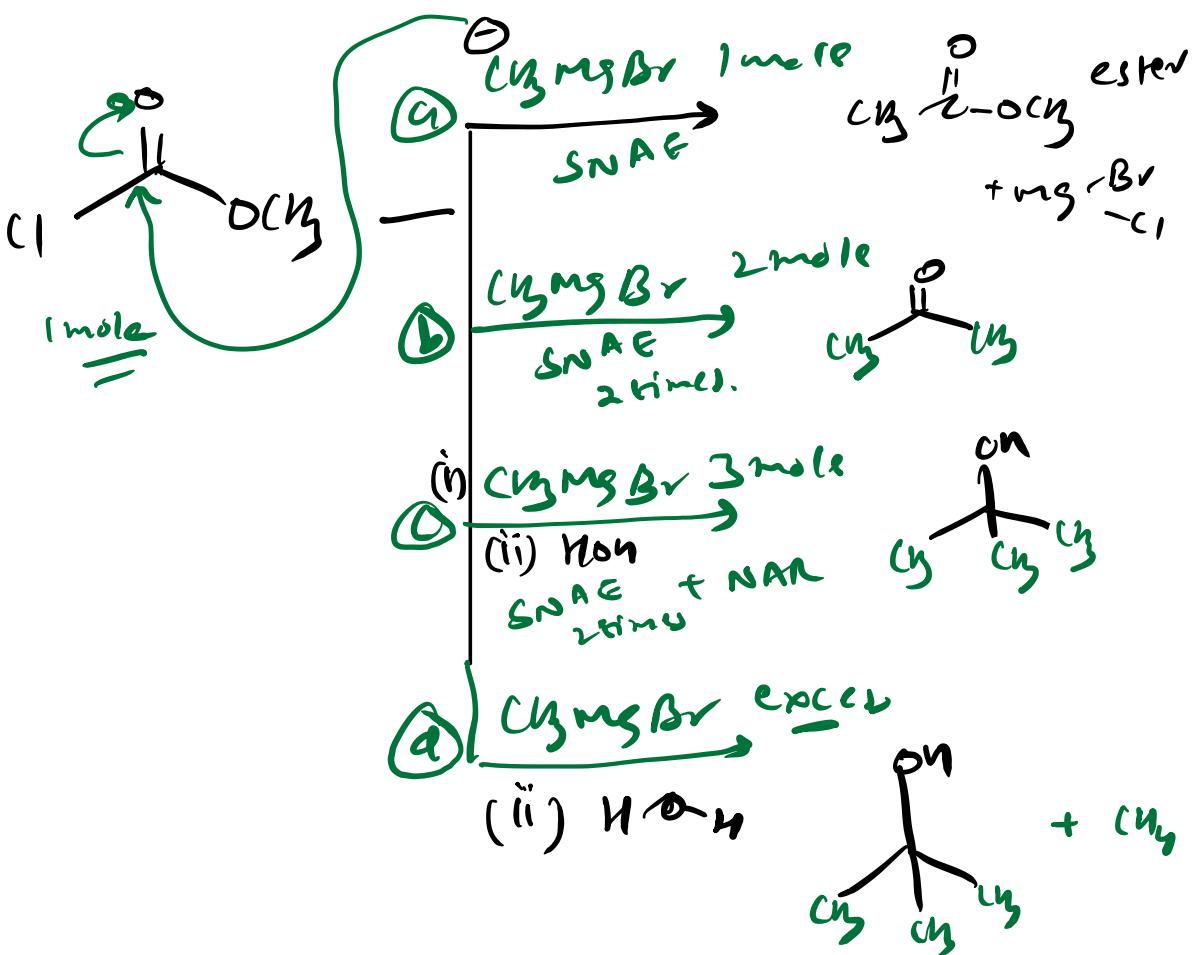
Reactions of Acid derivative



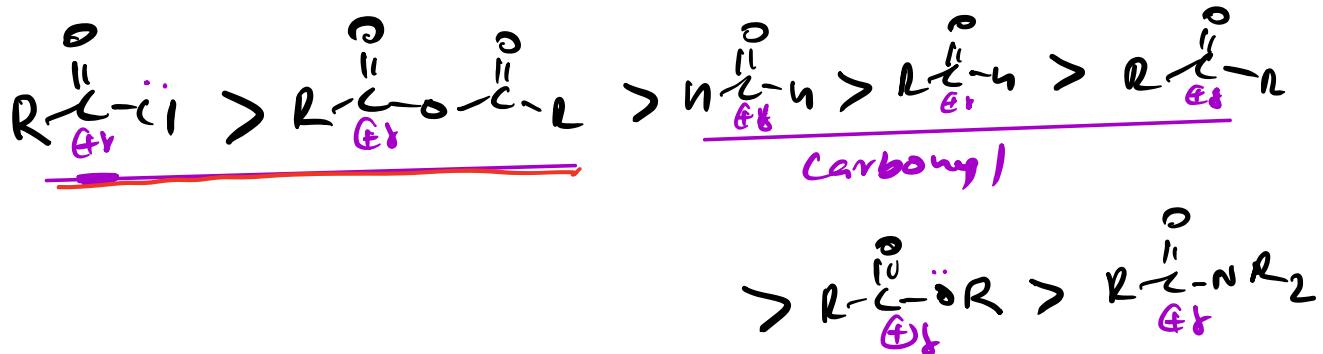
(15)



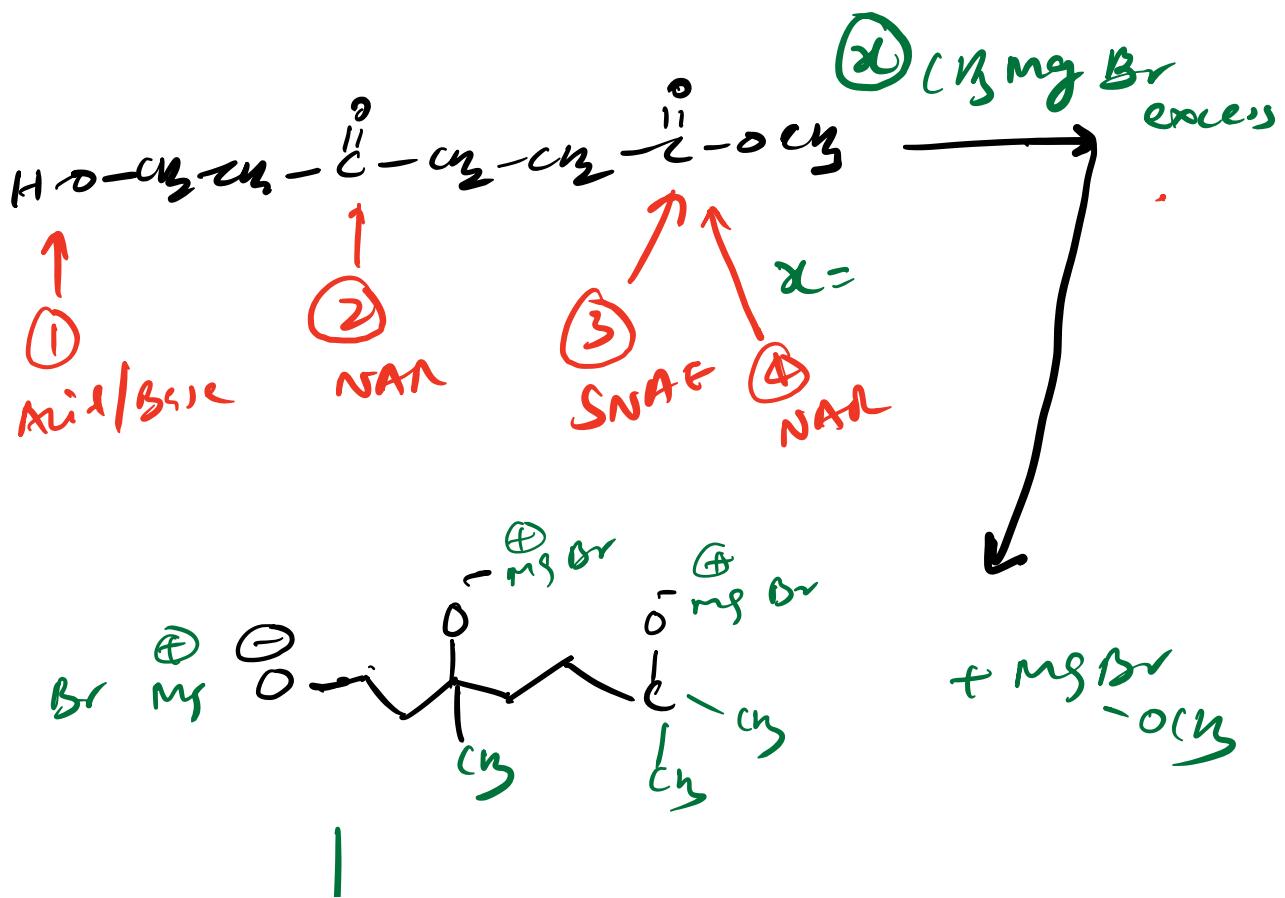
(16)

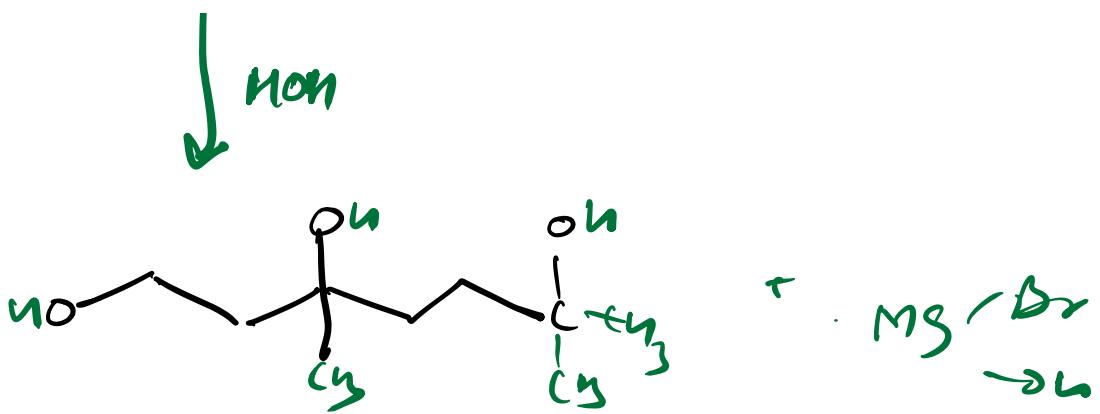


Rate of attack of G.R (or order of electrophilicity)



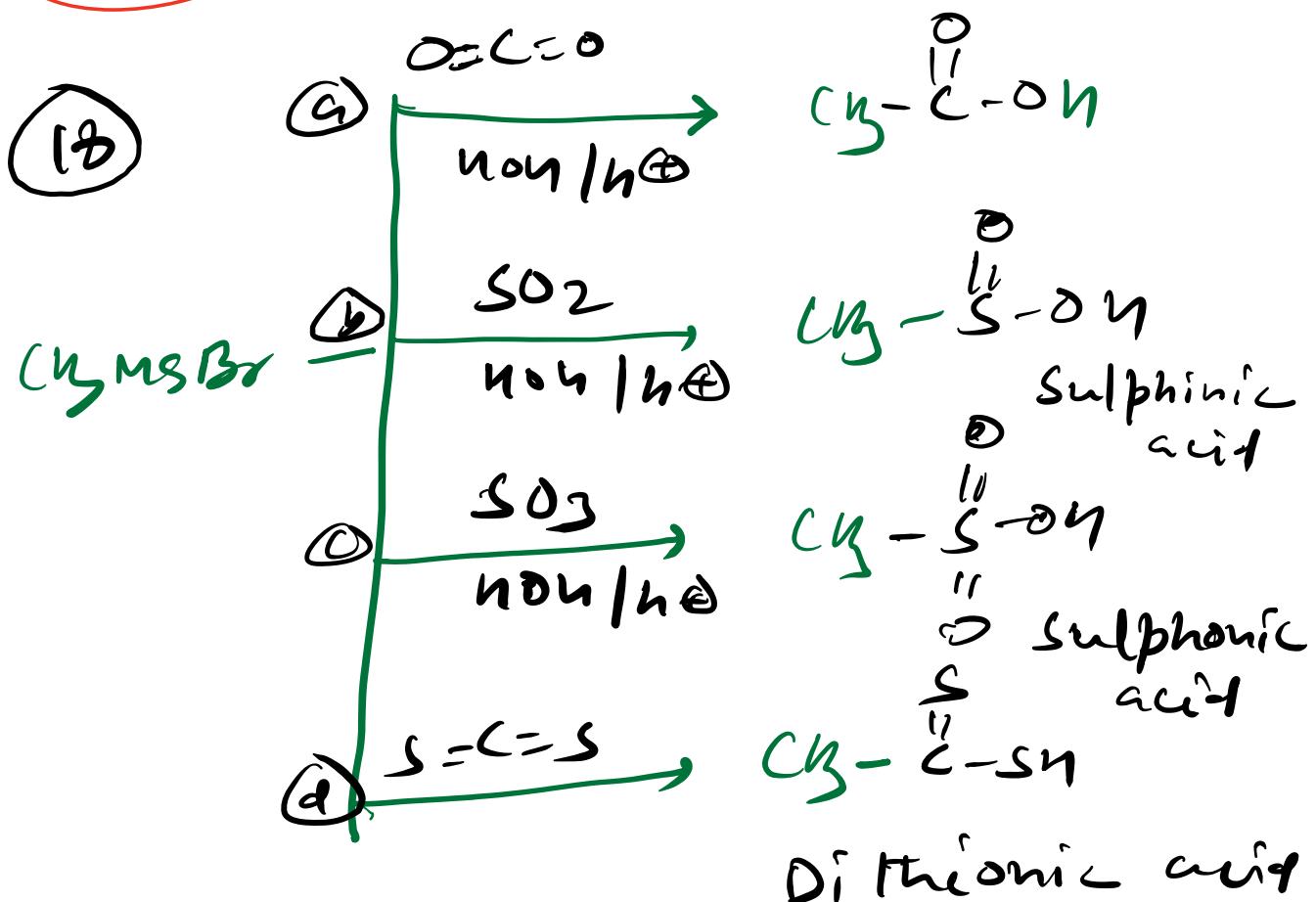
- (17) How many moles of G.R are consumed with following compounds





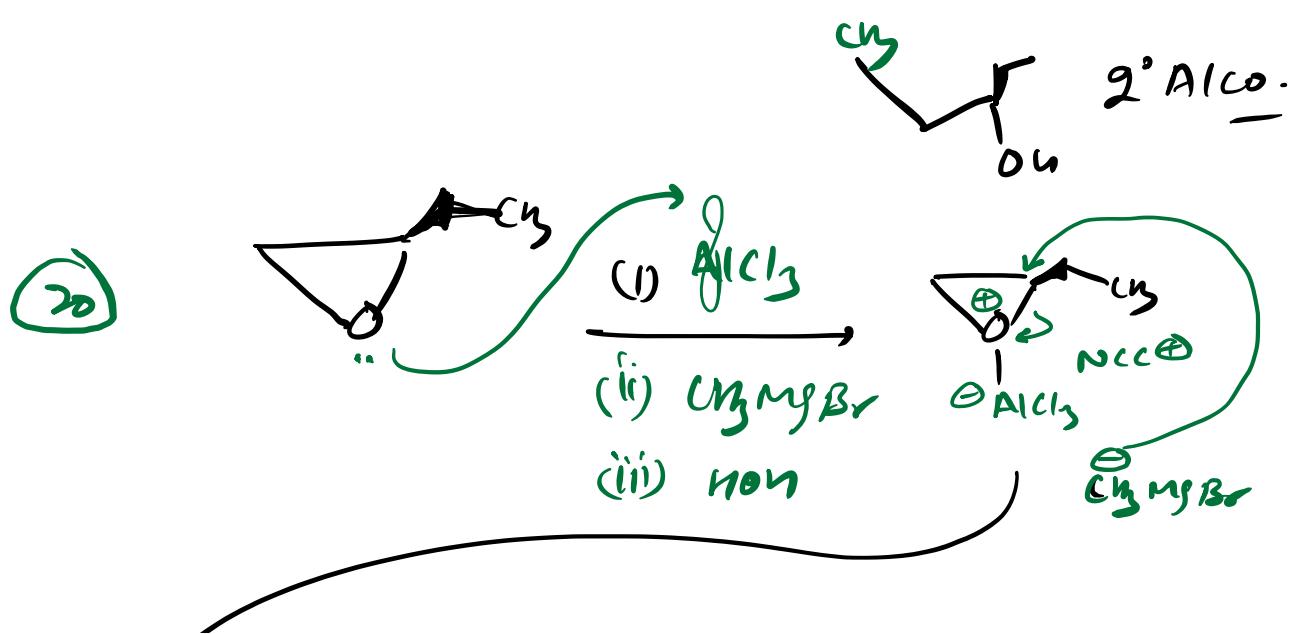
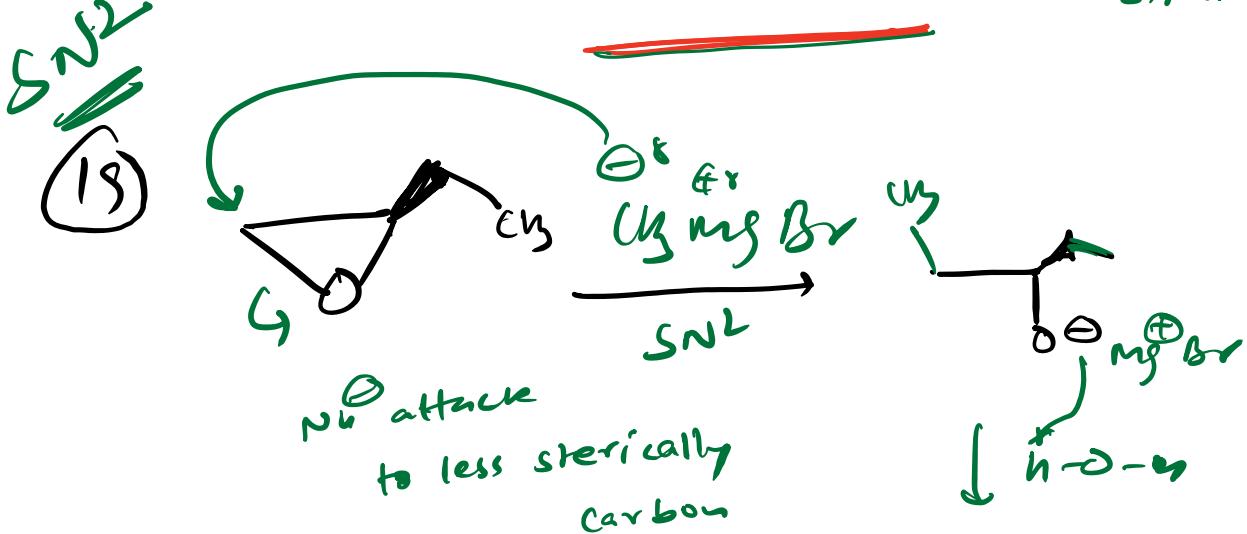
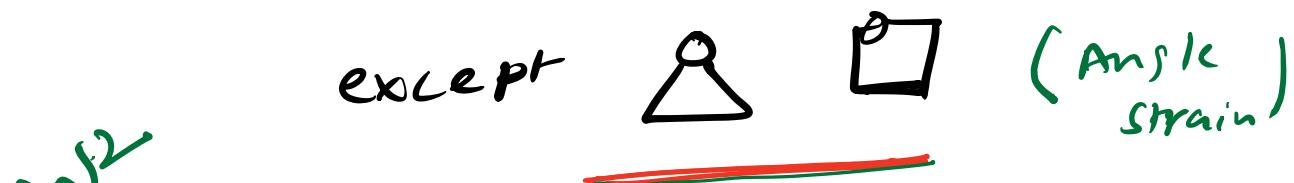
Reactions with oxides $\text{CO}_2/\text{SO}_2/\text{S}_2$
& sulphide CS_2

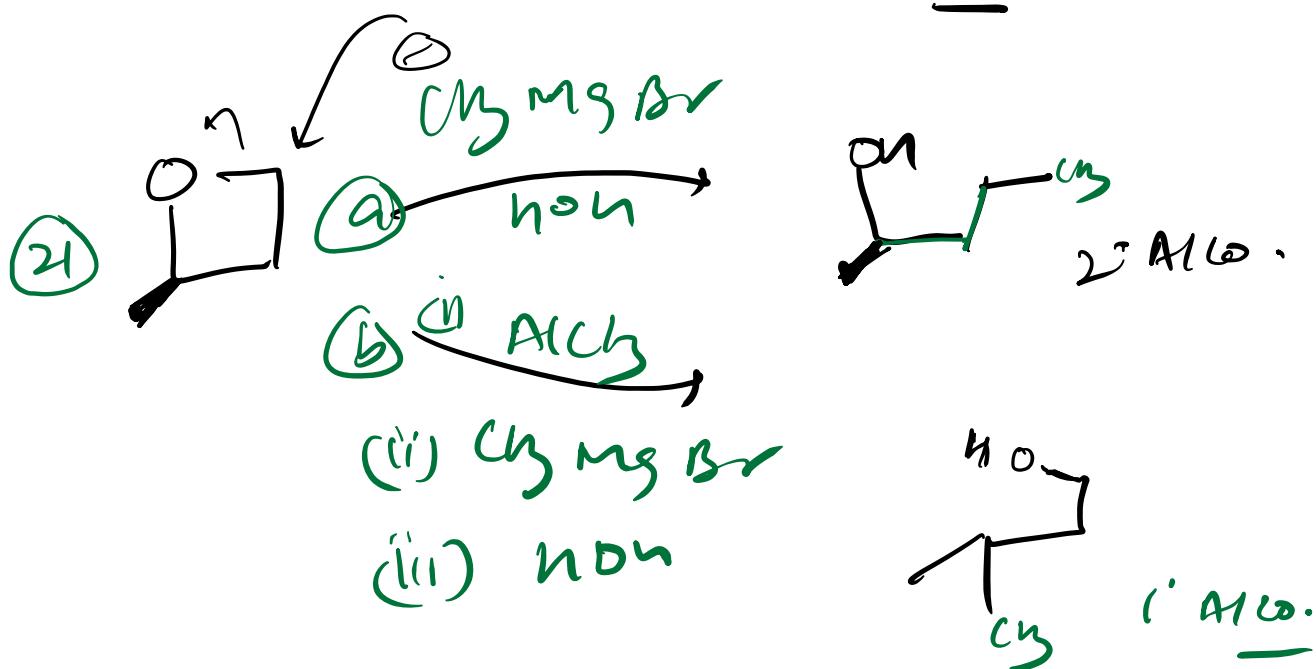
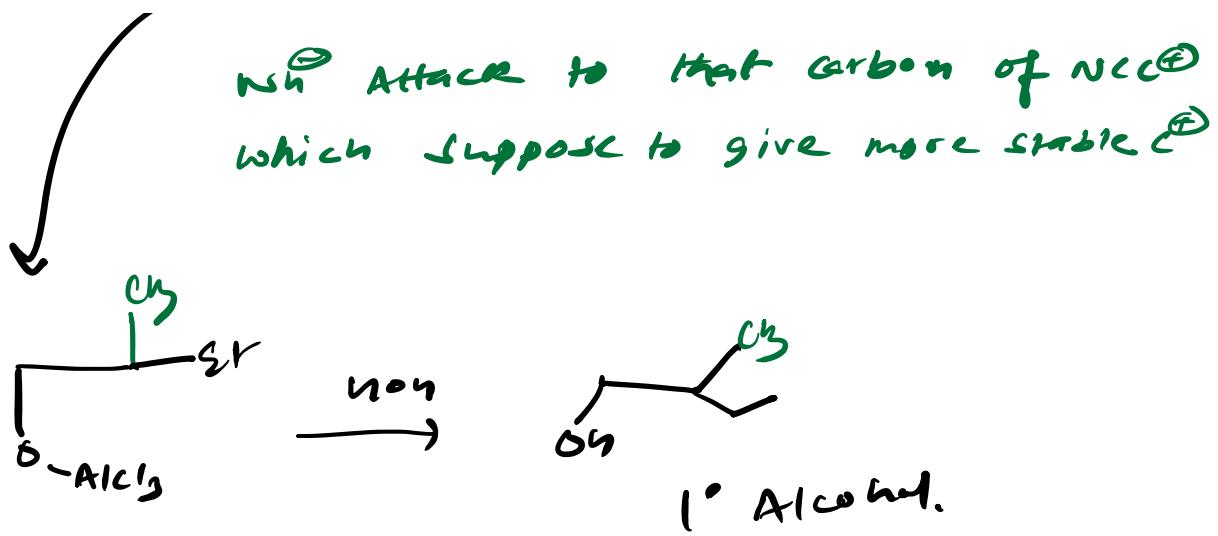
NAR



Reaction of GR with cyclic ether

- * there is no reaction of GR with either a cyclic ether





Reaction of GR with R-X (SN^2)

