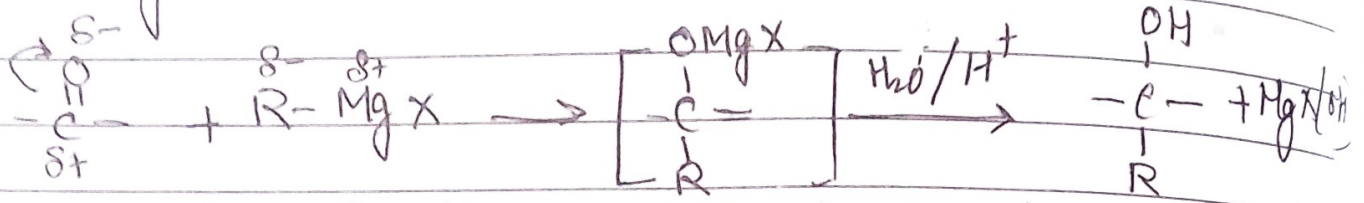
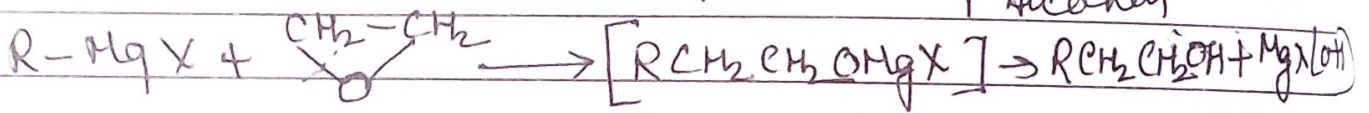
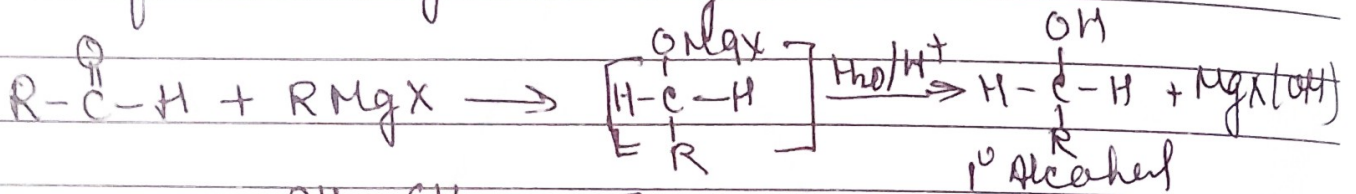


DATE: 7. Addition of G.R. (Grignard Reagent)

Grignard reagents react aldehyde & ketones to form an addition compound which on hydrolysis with dil. acid gives the corresponding alcohol

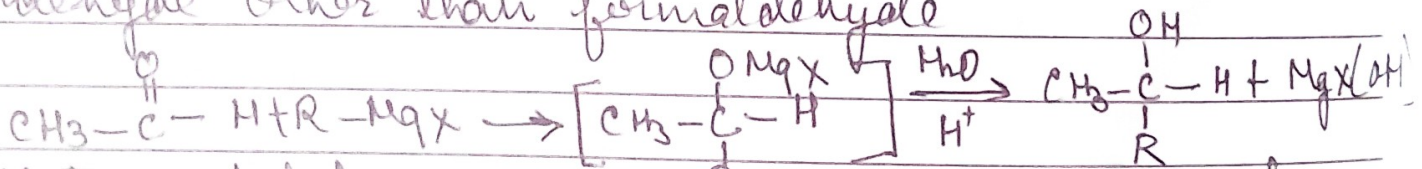


(a) Primary alcohol - It is obtained by heating G.R. with formaldehyde or ethylene oxide

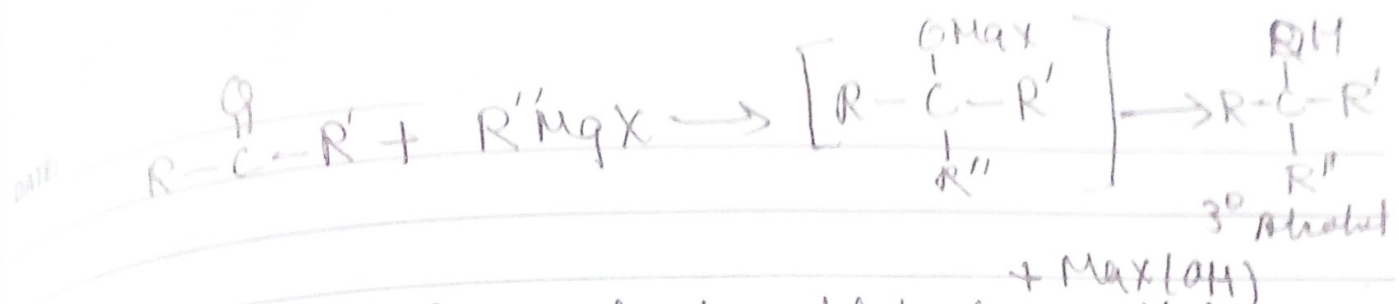


(b) Secondary alcohol - It is obtained by heating a GR with

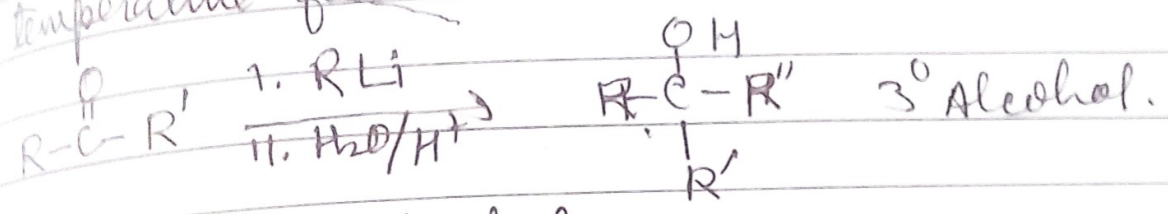
aldehyde other than formaldehyde



(c) Tertiary alcohol - It is obtained by heating G.R. with ketones



② Addition of Li reagents to aldehyde and ketone.
Li reacts with aldehyde and ketone at very low temperature forms alcohol.



Properties of alcohol —

Alcohol are reactive compounds. They are attacked by polar or ionic reagent. because (i) The C-O and O-H bonds of alcohol are polar since oxygen is highly electronegative.

(ii) The oxygen atom of alcohol is an electron rich centre because it has two unshared pair of electrons.