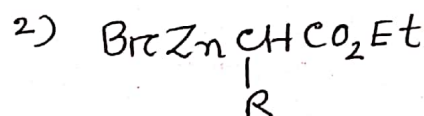


2nd Year ORGANOMETALLICS

①

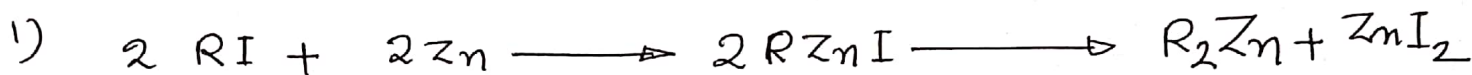
Class-10

Organozinc compound : 1) R_2Zn

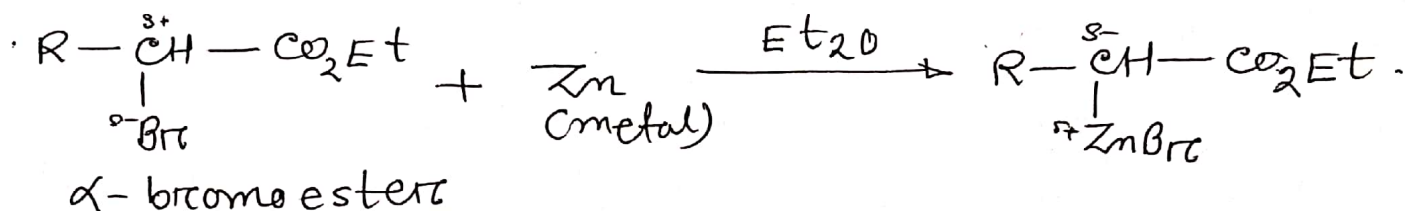


Preparation

Preparation of dialkyl zinc



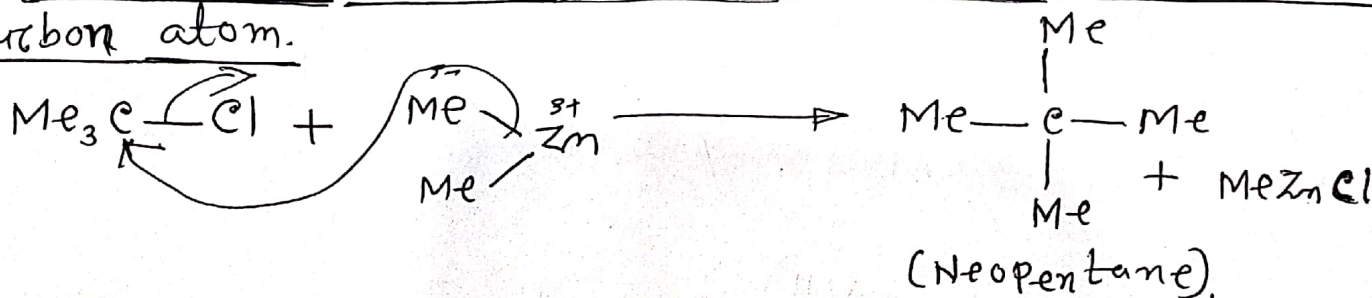
Preparation of Reformatsky reagent :



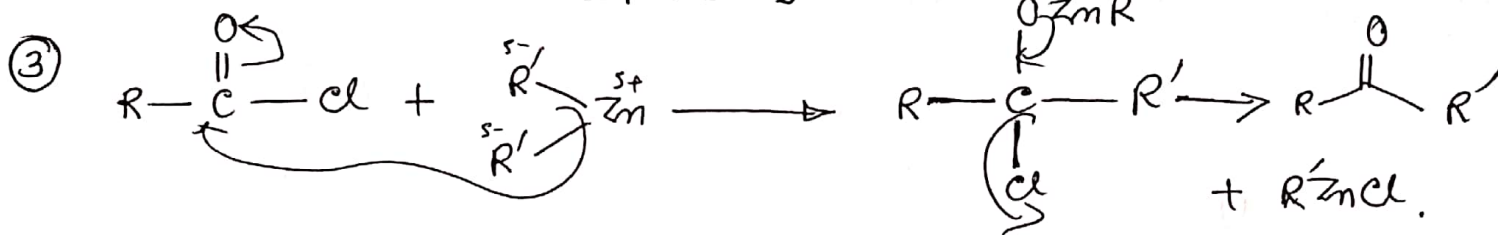
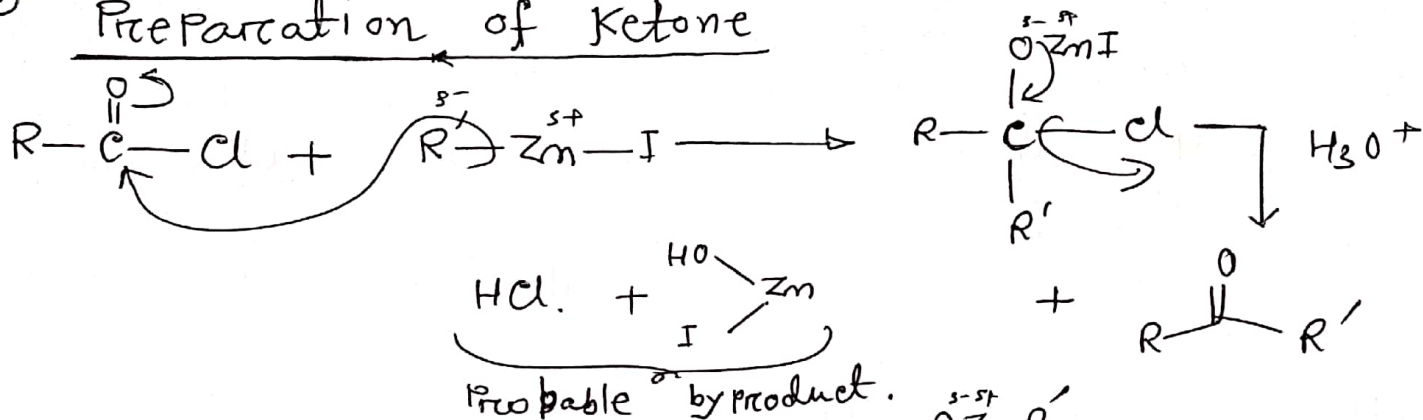
Note:- Organozinc compounds are relatively unstable and less reactive than GR, because the % age of ionic character betwⁿ C-Zn bond is less than $\overset{\delta-}{C}-\overset{\delta+}{Mg}$ bond. As Zn is less electropositive than Mg. Alkyl-zinc compounds are volatile liquids, spontaneously inflammable in air.

Reaction of Organozinc Compounds :

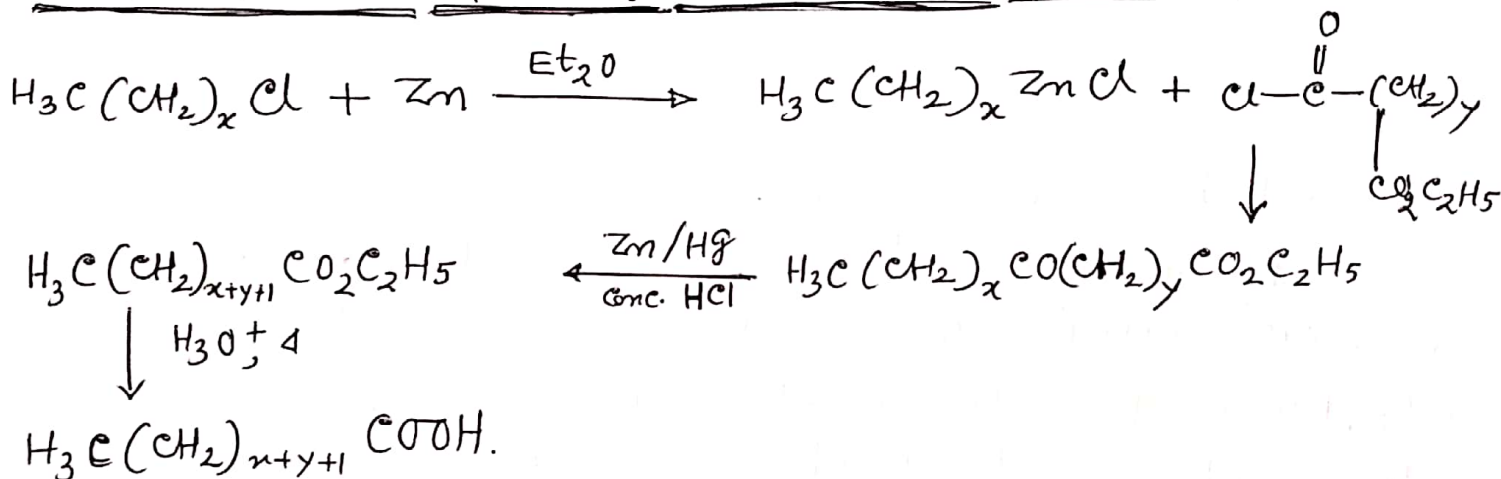
1) Preparation of hydrocarbon containing a quaternary carbon atom.



② Preparation of Ketone



④ Preparation of long chain fatty acid.



Reformatsky Rxn :- In this rxn aldehyde or ketone is made to react with α -bromoester in presence of metallic zinc (under dry ether condition). The insitu generated organozinc comp. undergo nucleophilic addition to carbonyl carbon which is decomposed by mineral acid to afford β -hydroxy ester.

