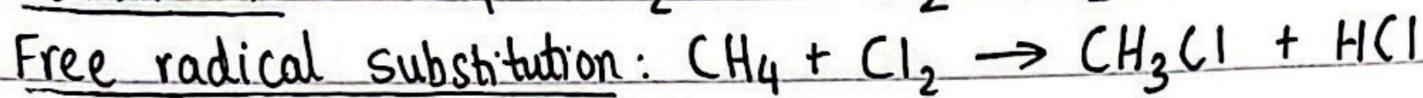
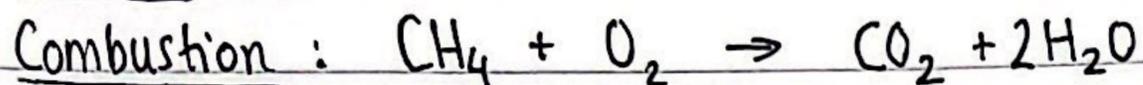
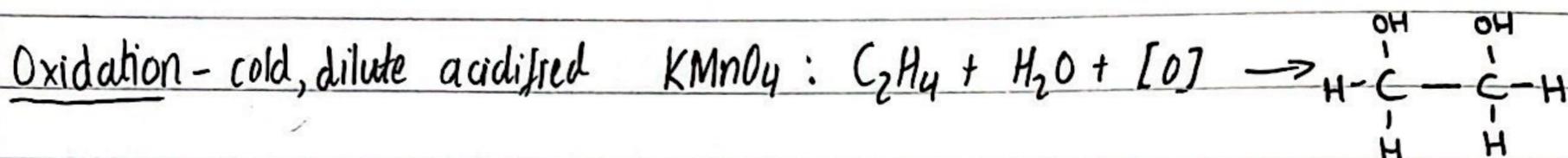
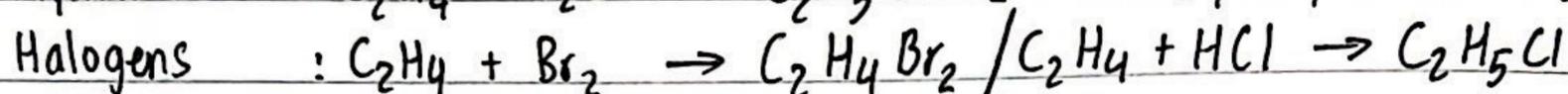
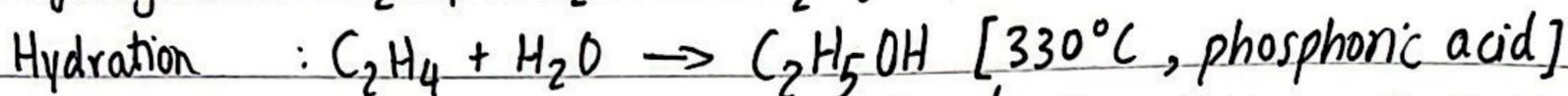
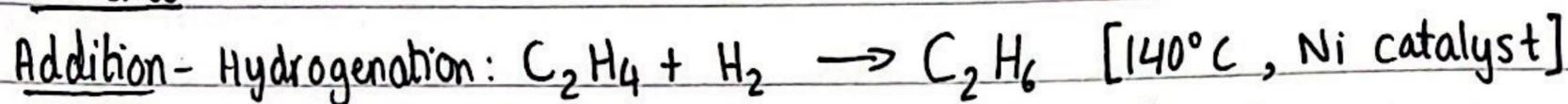


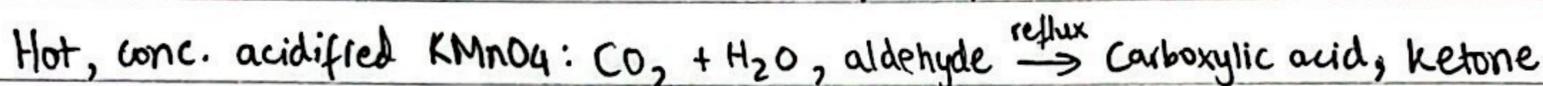
Alkanes



Alkenes

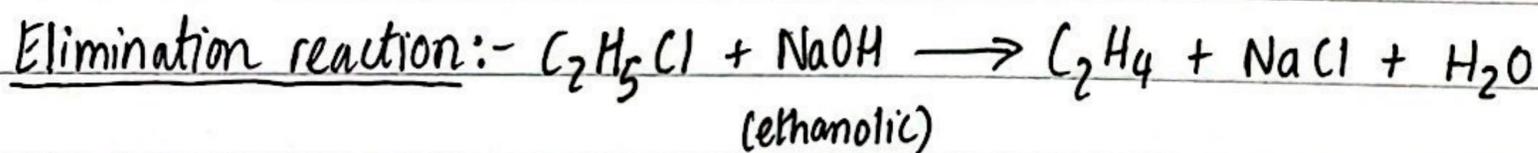
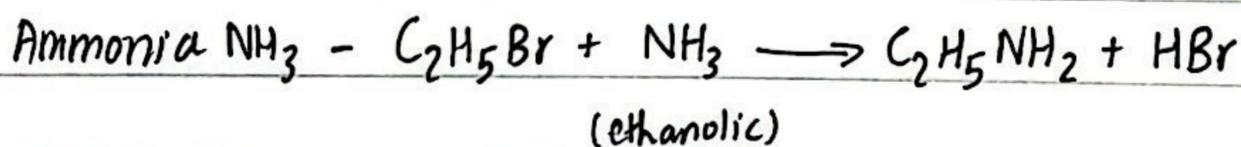
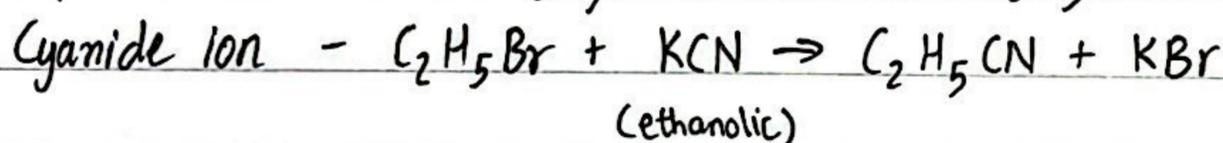
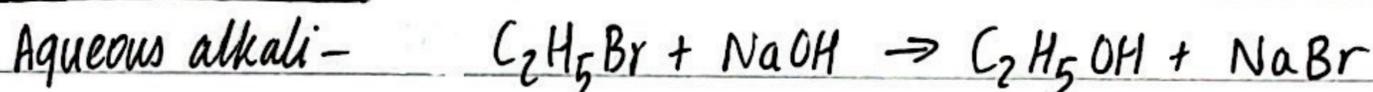


(pale purple to colourless)

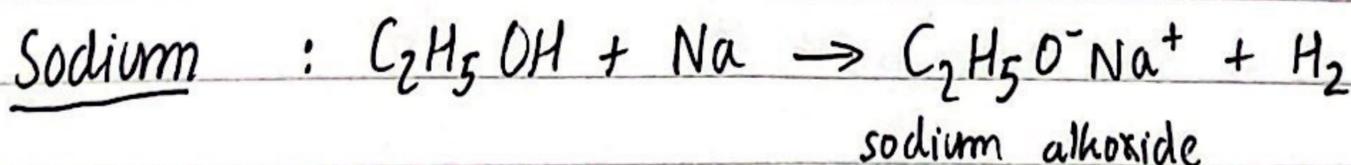
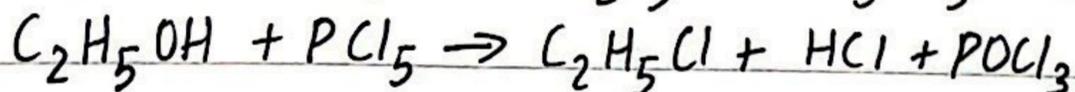
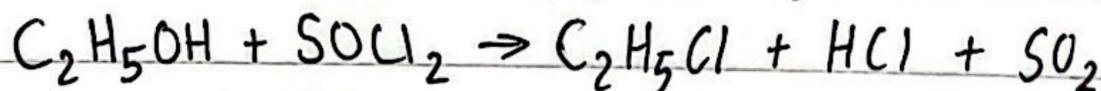
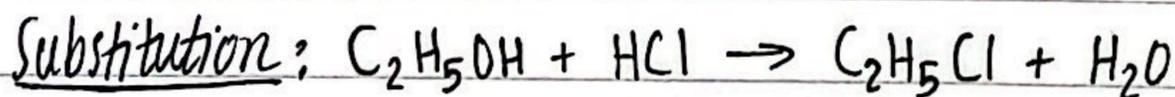
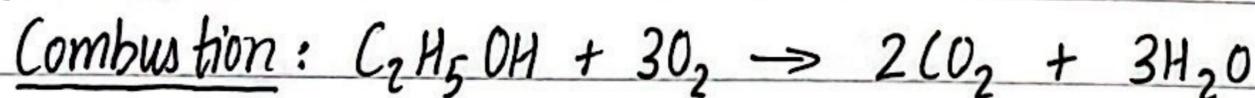


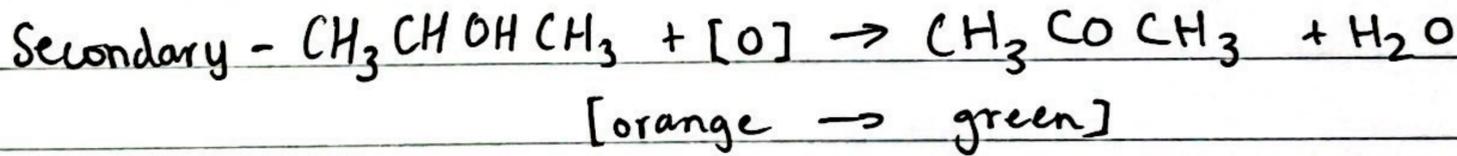
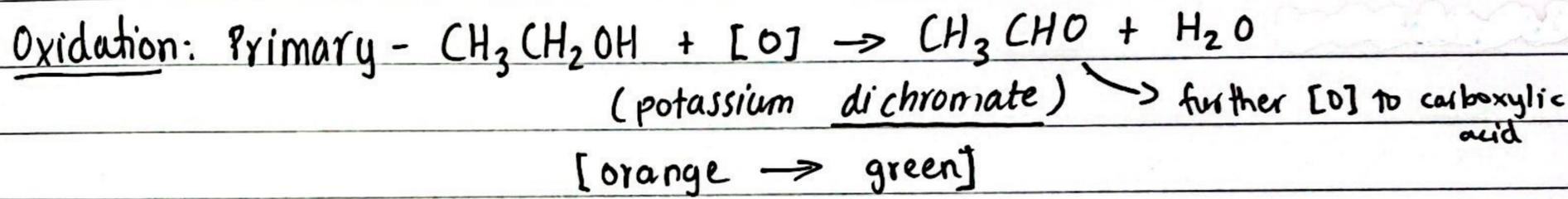
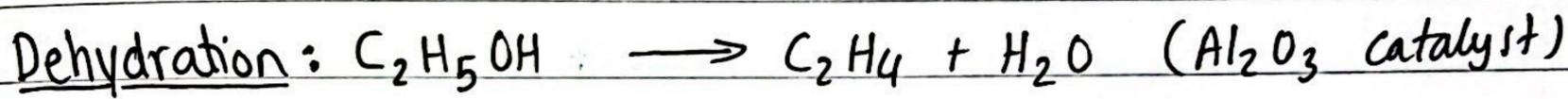
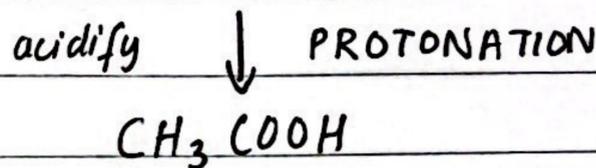
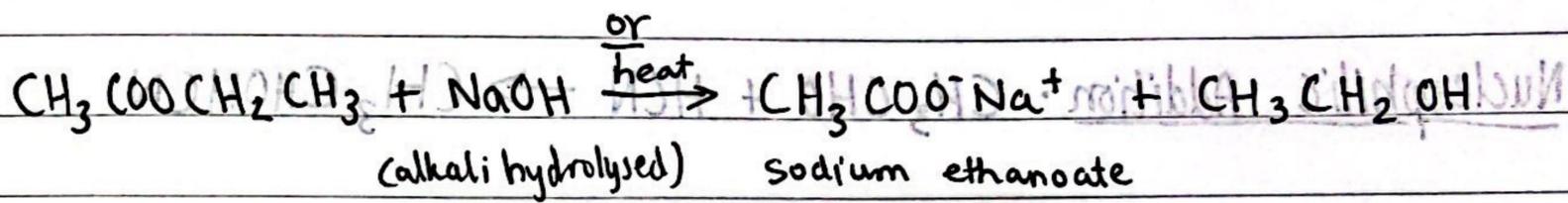
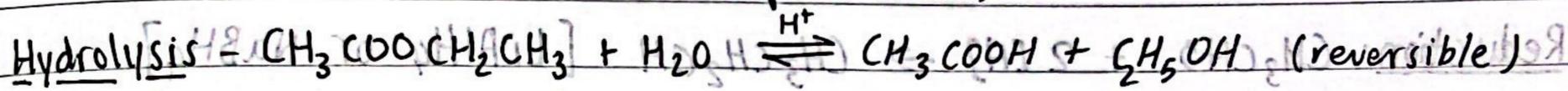
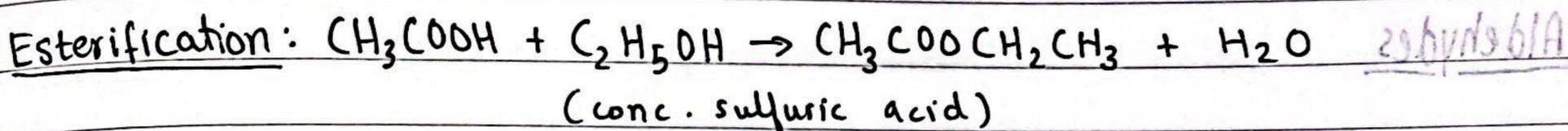
Halogenoalkanes

Nucleophilic substitution:



Alcohols

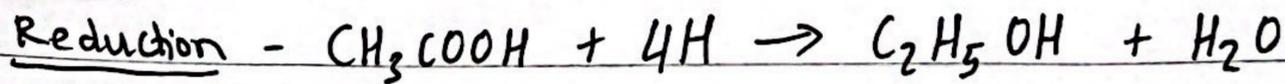
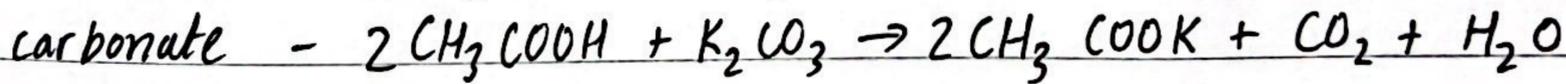
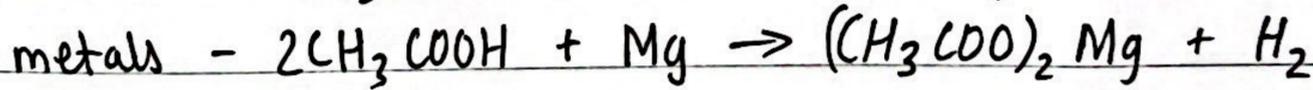
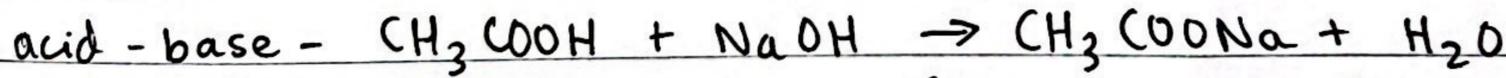




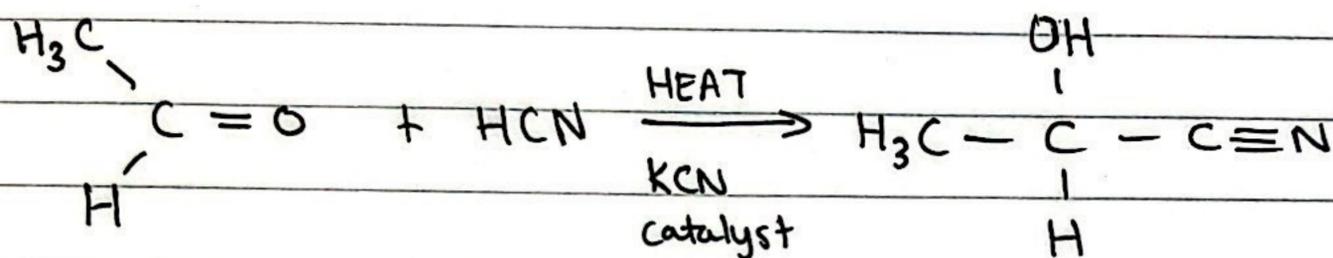
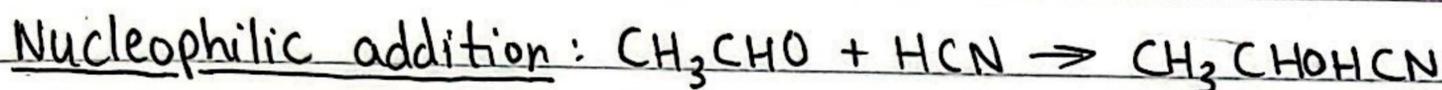
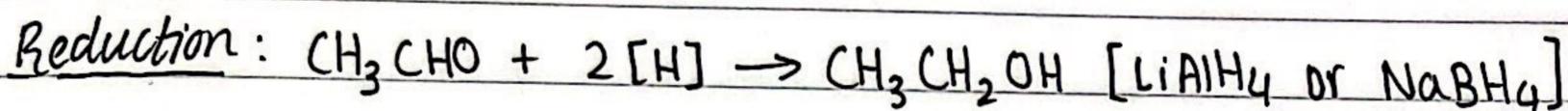
Tertiary alcohols don't oxidise (remain orange in $\text{K}_2\text{Cr}_2\text{O}_7$)

Carboxylic acids

Acid reaction:



Aldehydes



2-hydroxypropanenitrile

" + "

" + "

2,4 DNPH - orange

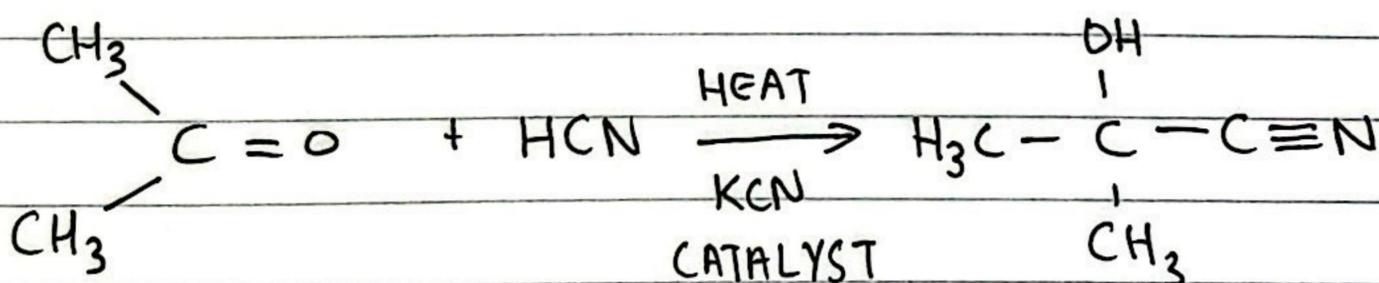
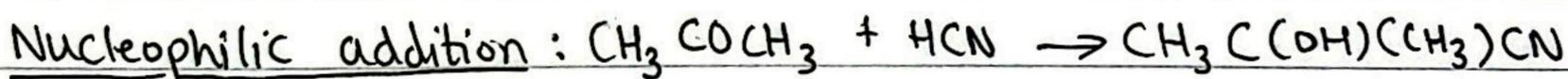
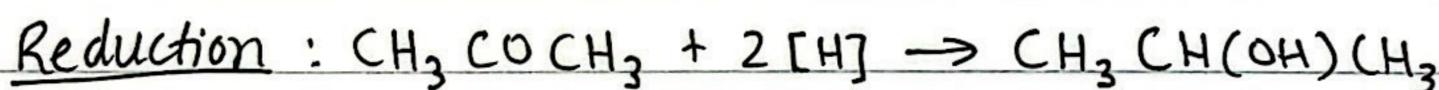
Tollen's reagent - Silver mirror

" + "

Fehling's solution -

Clear Blue \rightarrow Opaque red/orange

Ketones



2-methyl-2-hydroxy
propanenitrile

" + "

" - "

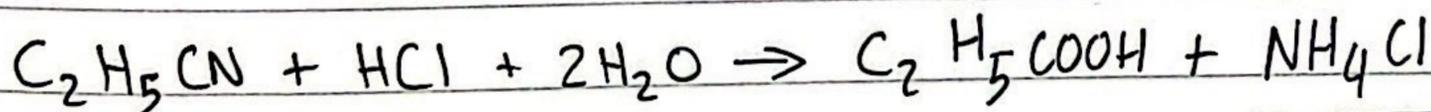
" - "

2,4 DNPH - orange

Tollen's - colourless

Fehling's - blue

CN (cyanide)



Triiodomethane: For $\text{CH}_3-\overset{\text{OH}}{\underset{|}{\text{C}}}$ & $\text{CH}_3-\overset{\text{O}}{\parallel}{\text{C}}$
yellow precipitate - " + "