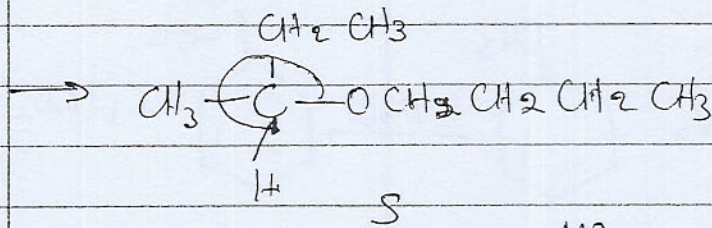
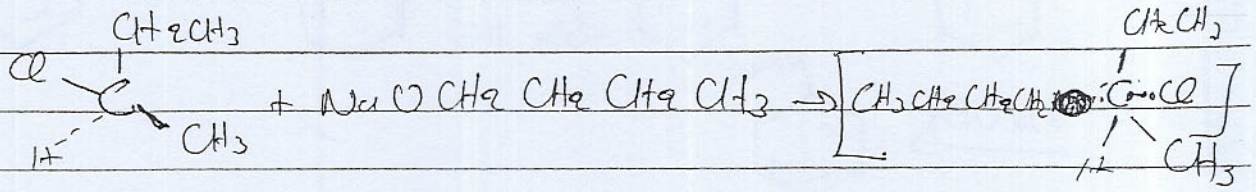
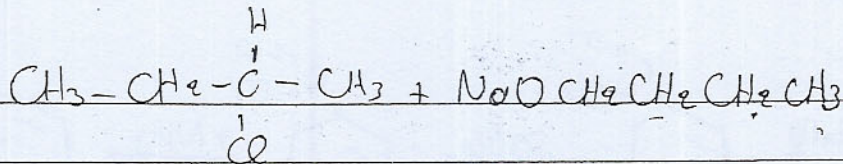
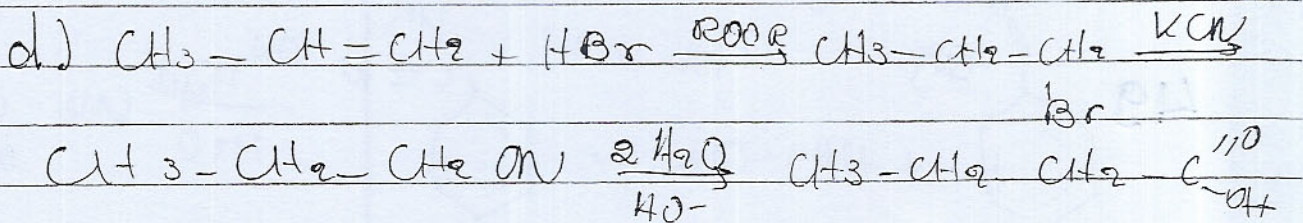
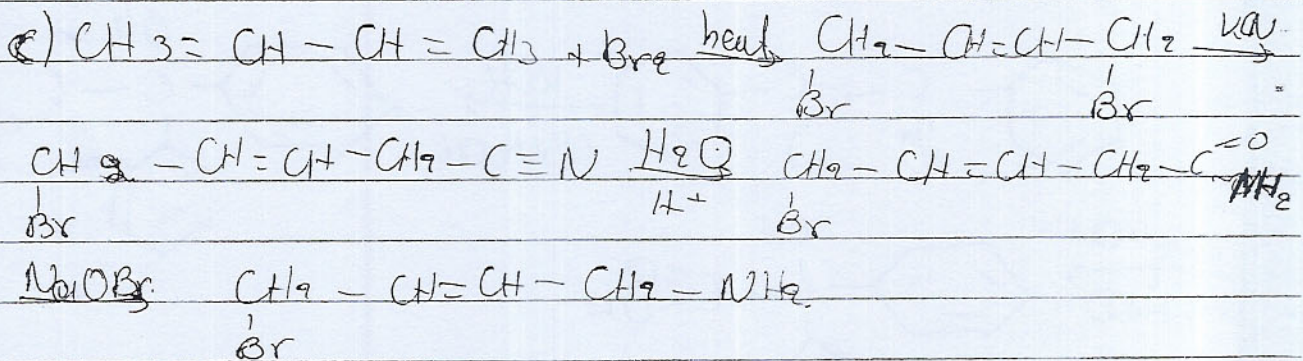
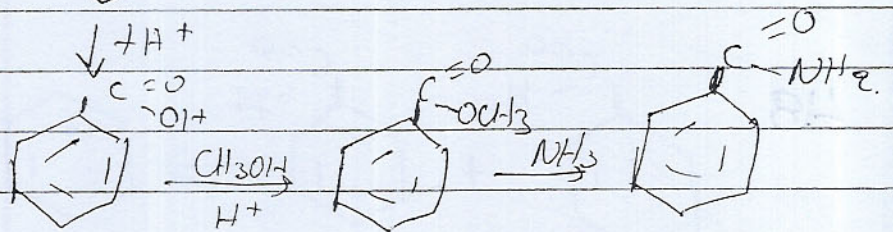
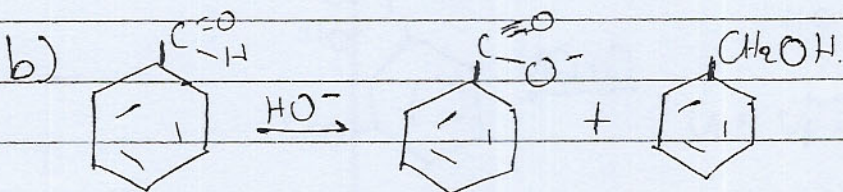
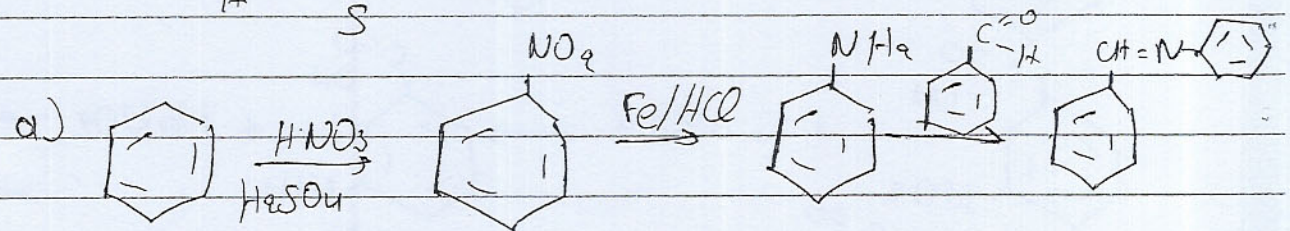
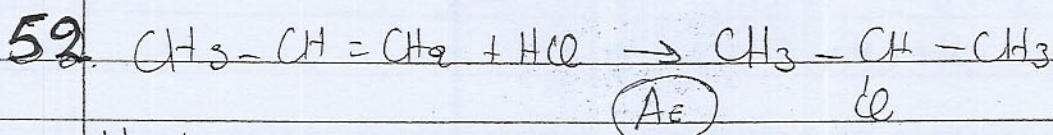


50.

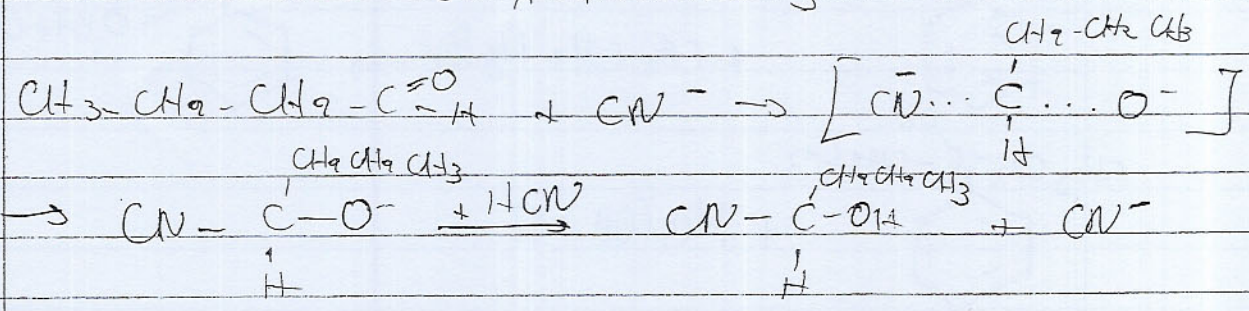
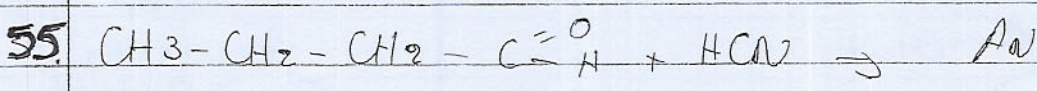
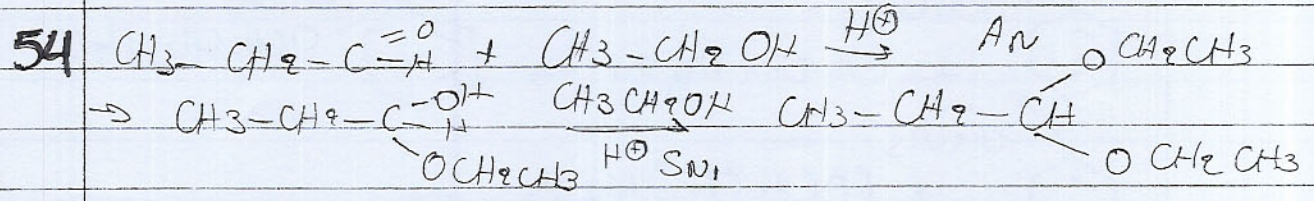
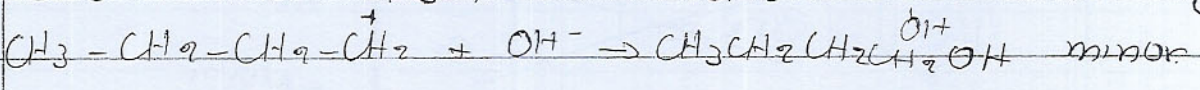
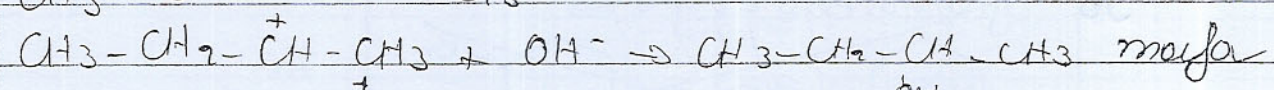
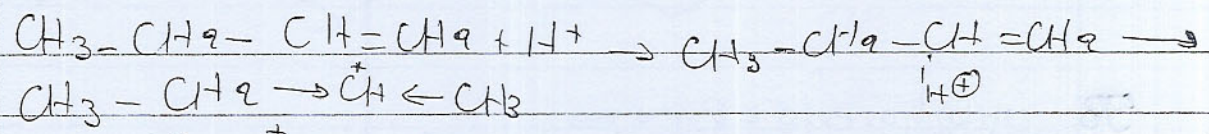
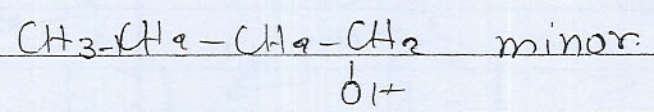
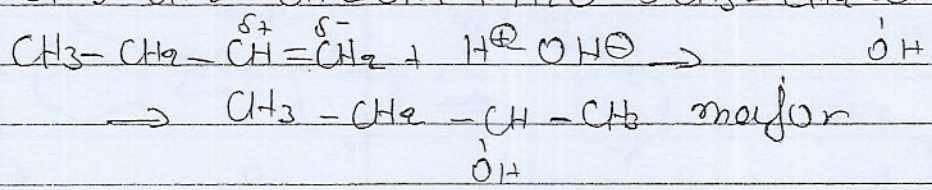
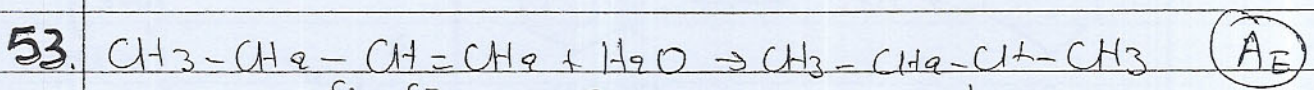
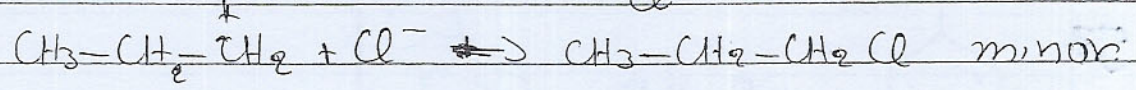
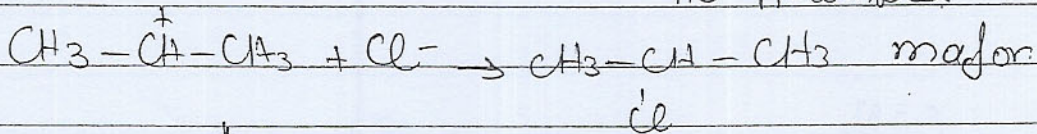
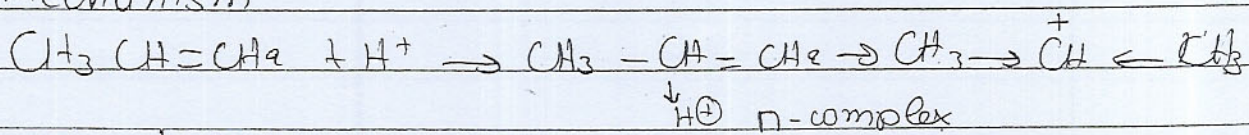


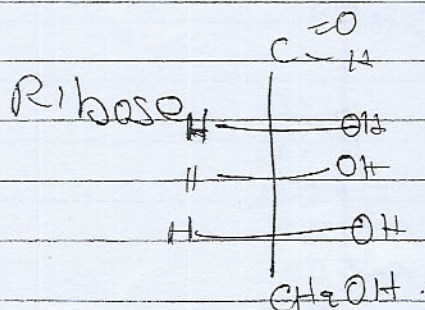
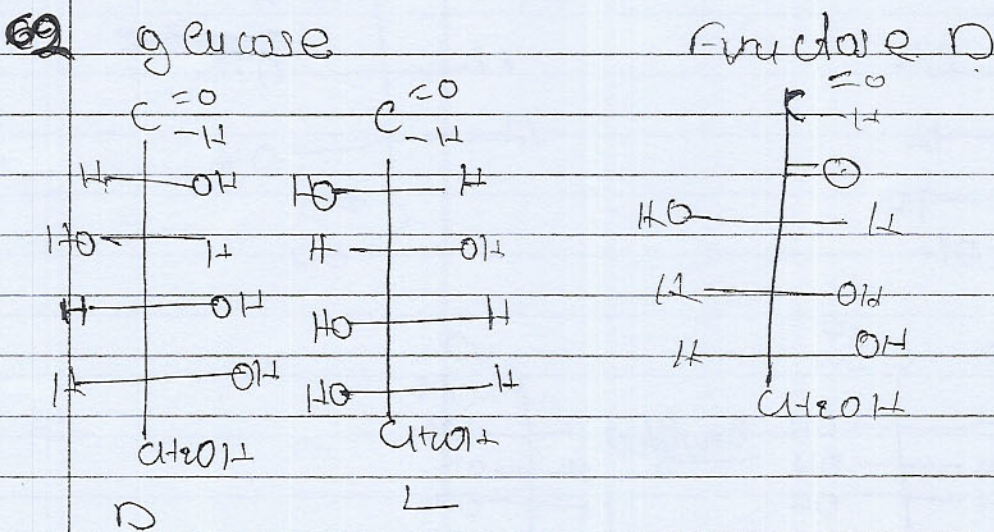
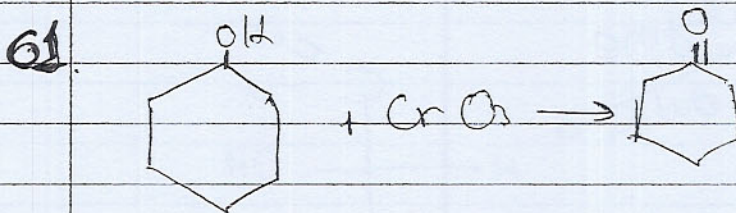
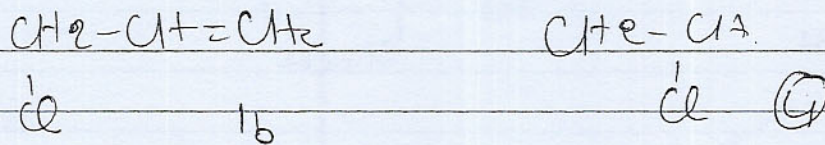
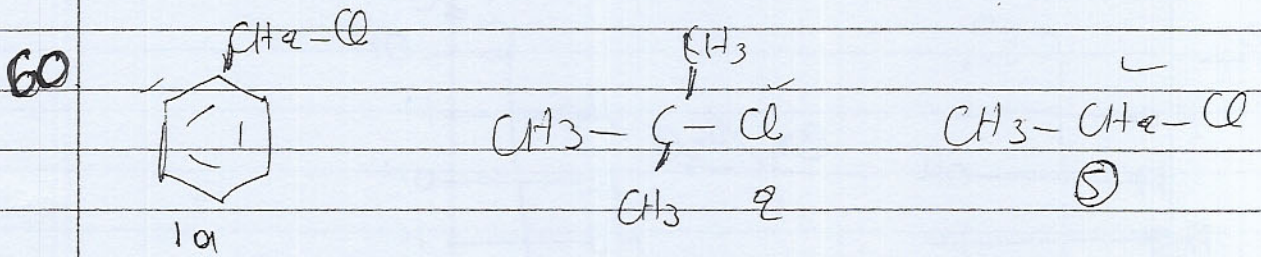
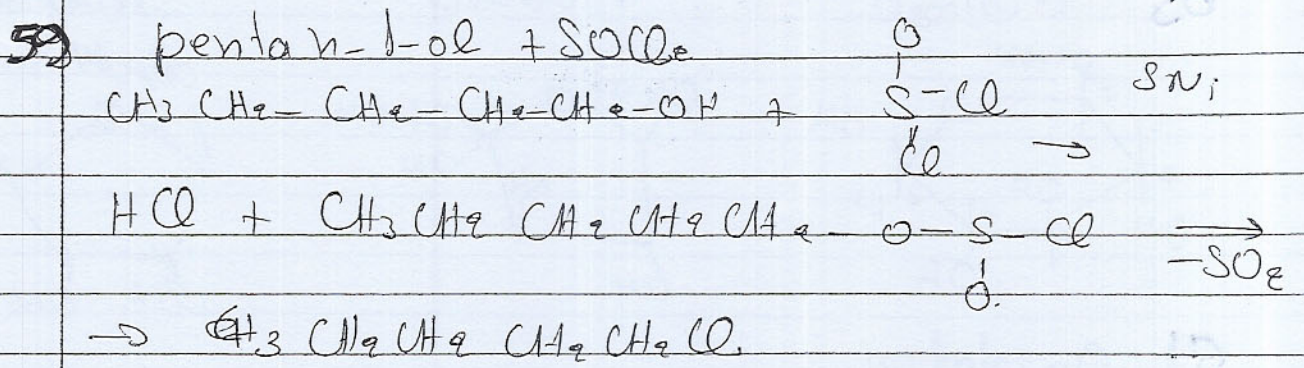
51



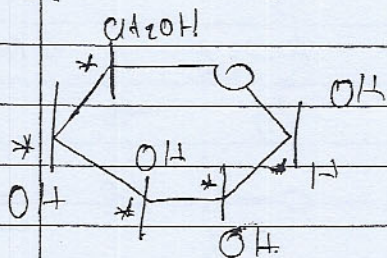


Mechanism

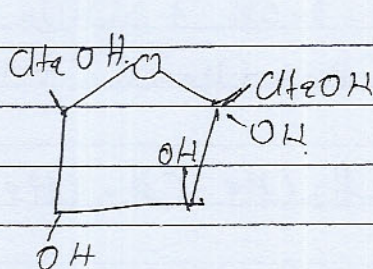




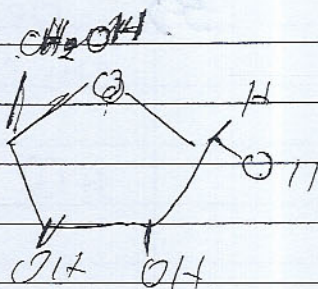
63. Glucose



Fructose

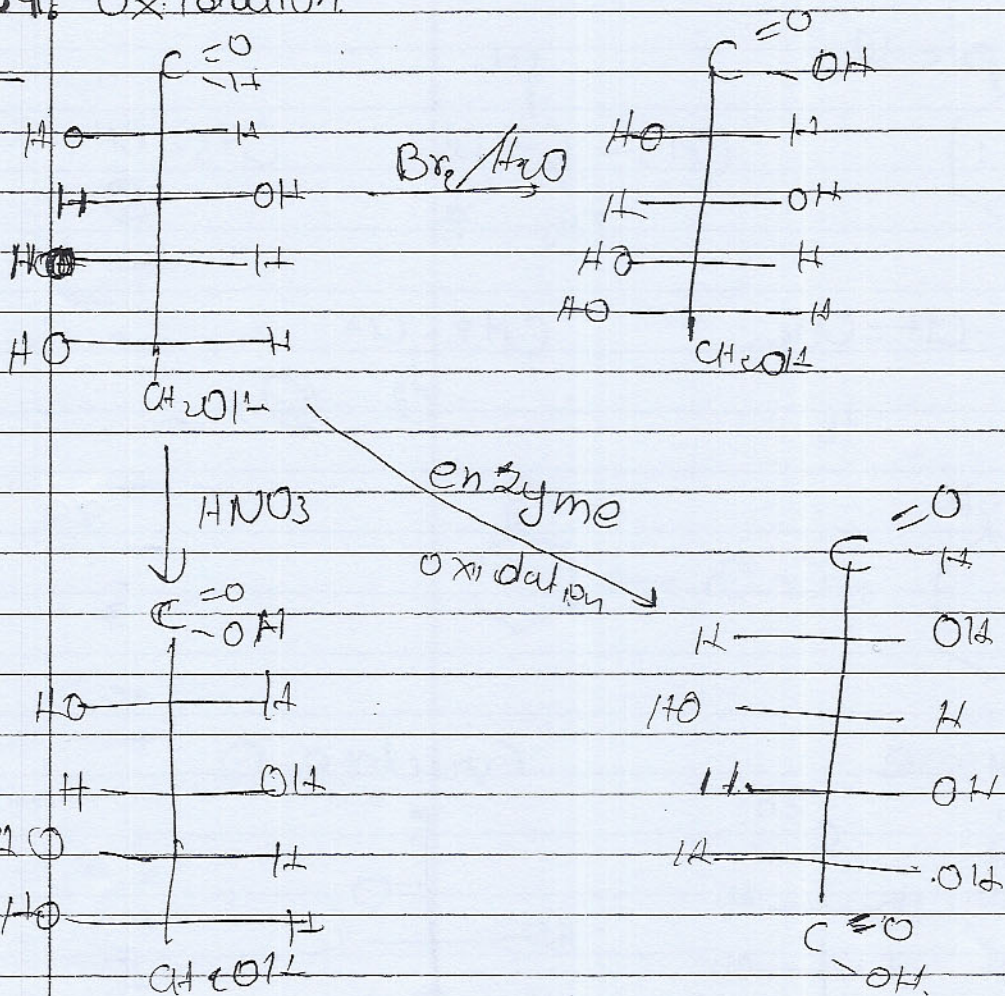


Ribose

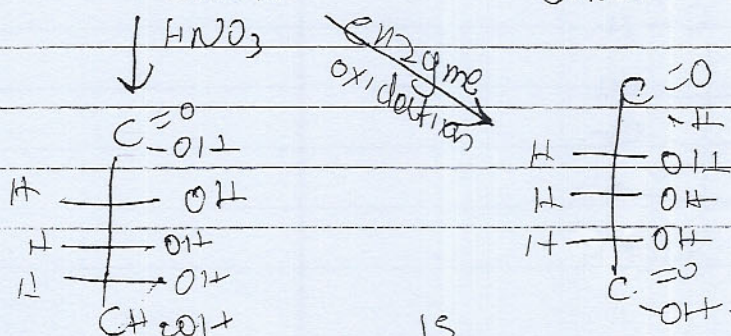
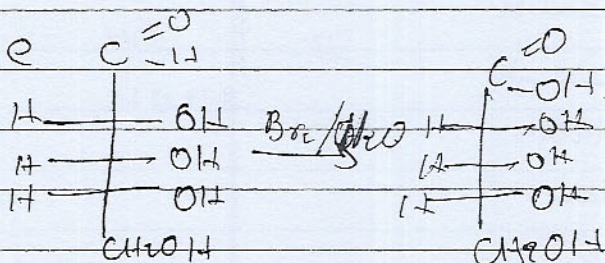


64. Oxidation

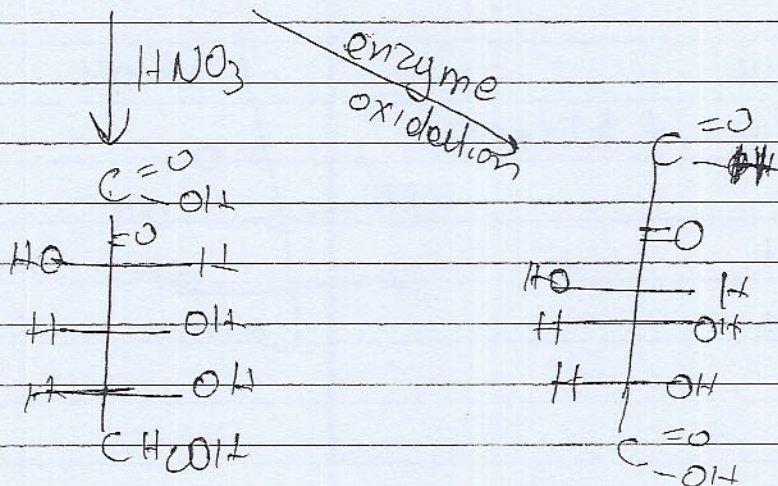
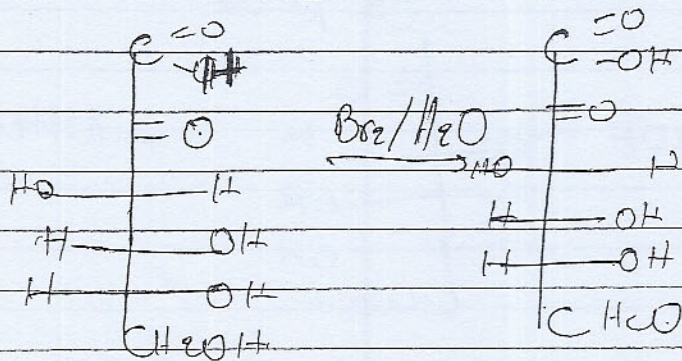
Glucose



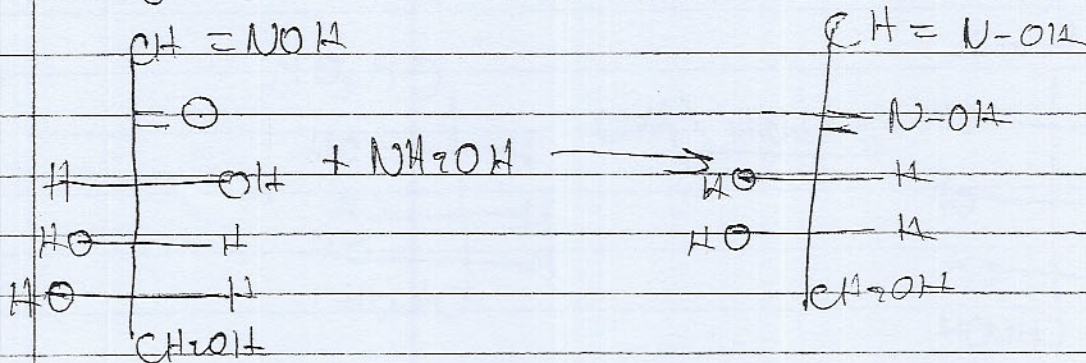
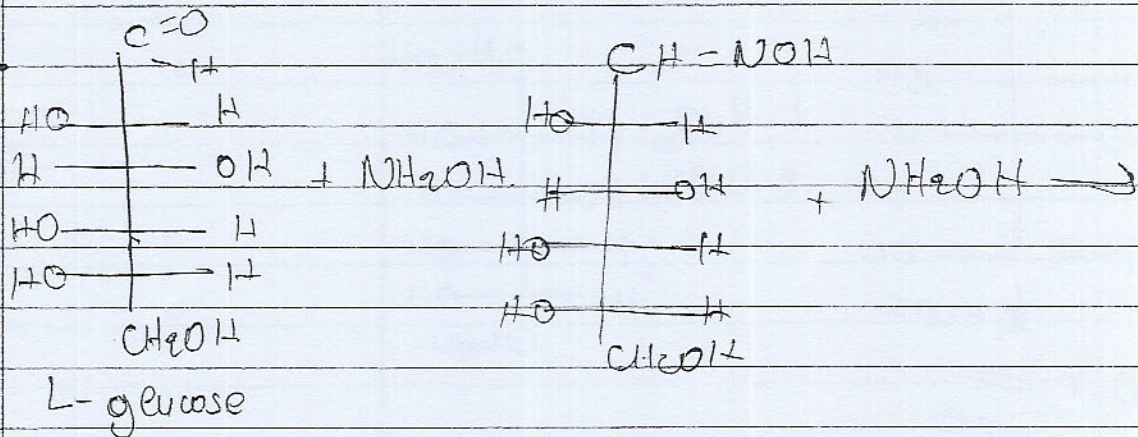
Ribose



64 ~~glucose~~
Fructose

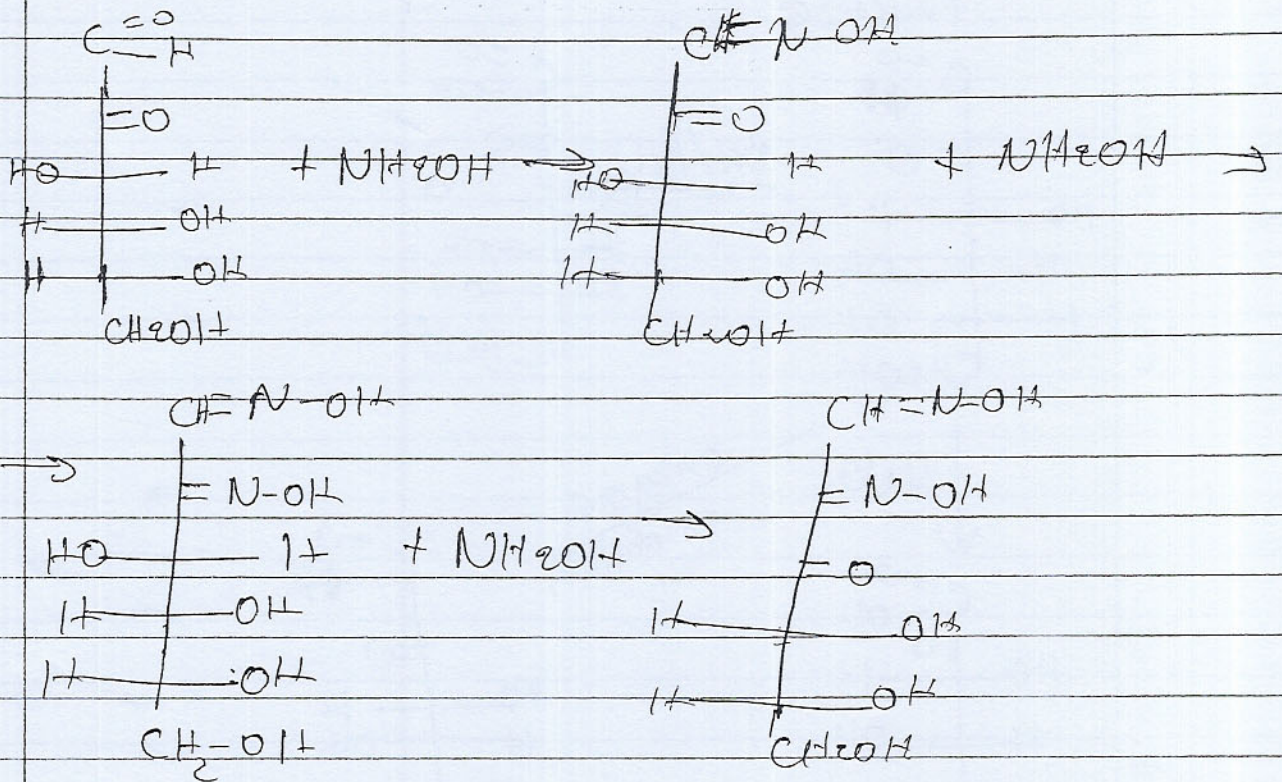


65

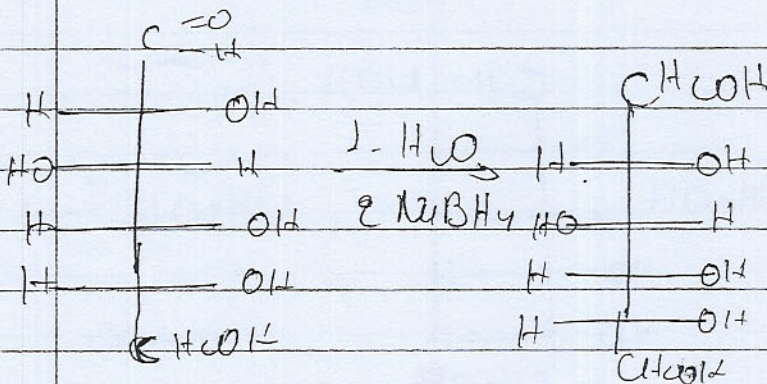


65. Fructose

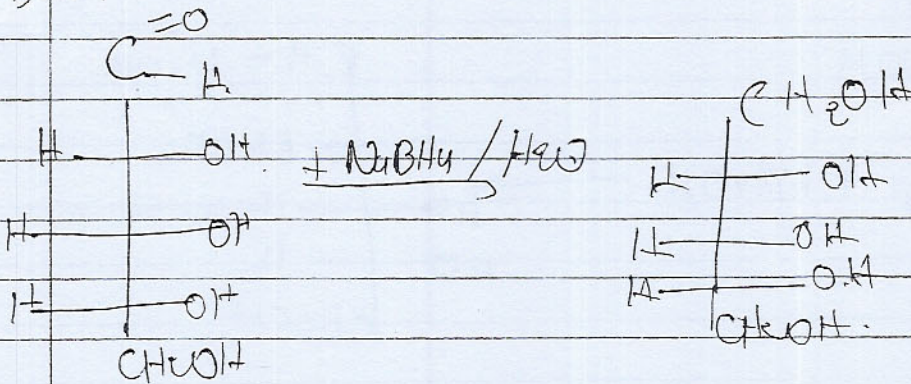
Fructose

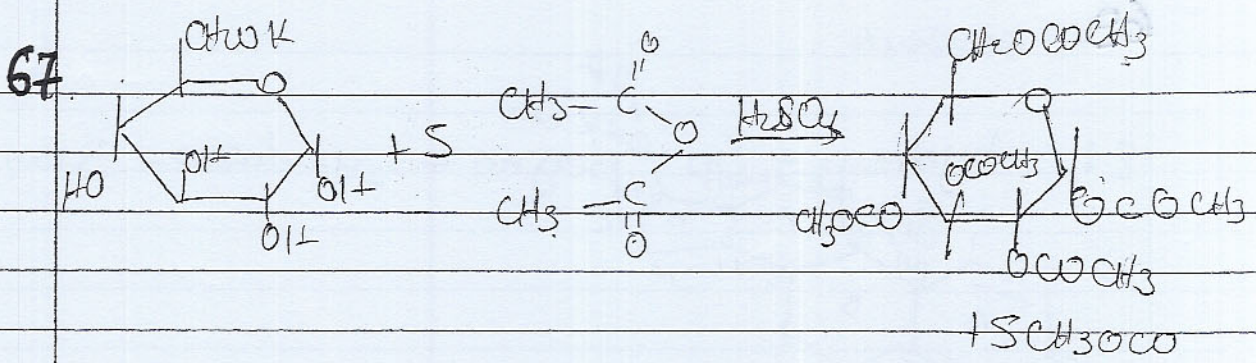


66. D-Glucose

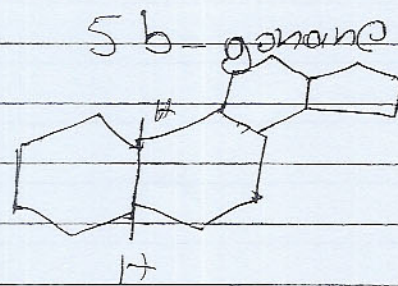
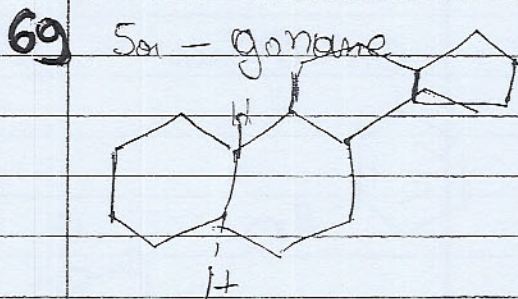
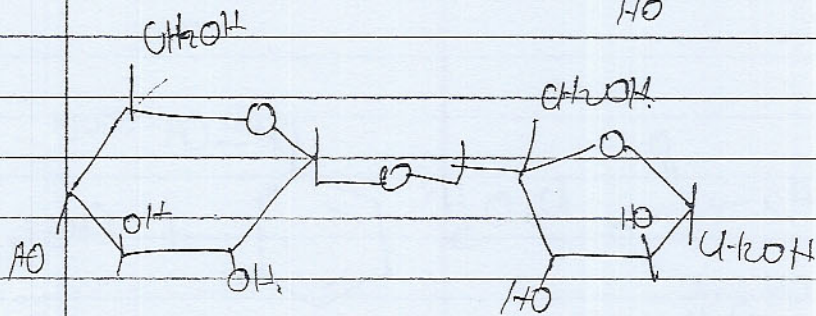
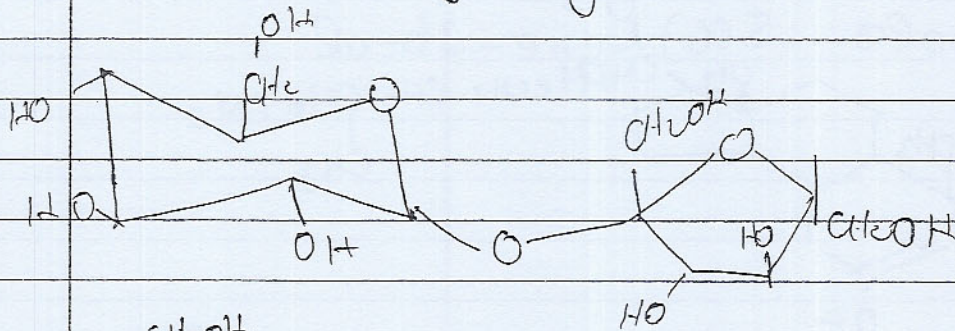


D-ribose

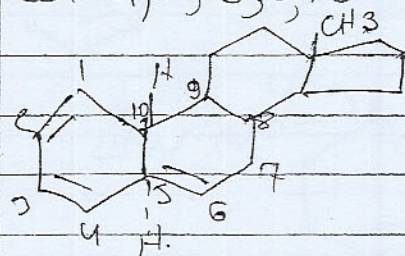




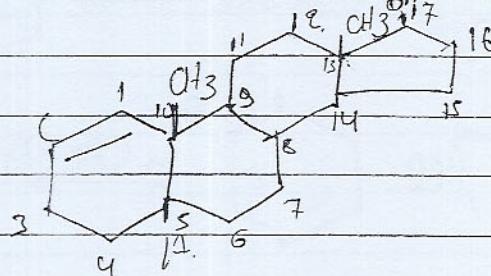
68 Not reducing sugar \rightarrow sucrose



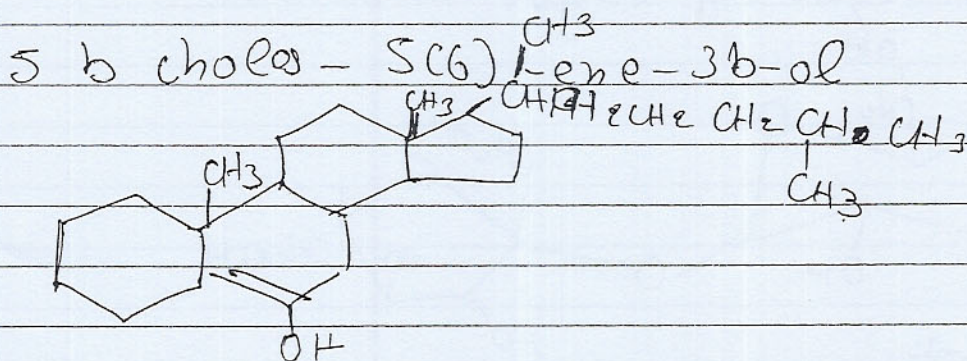
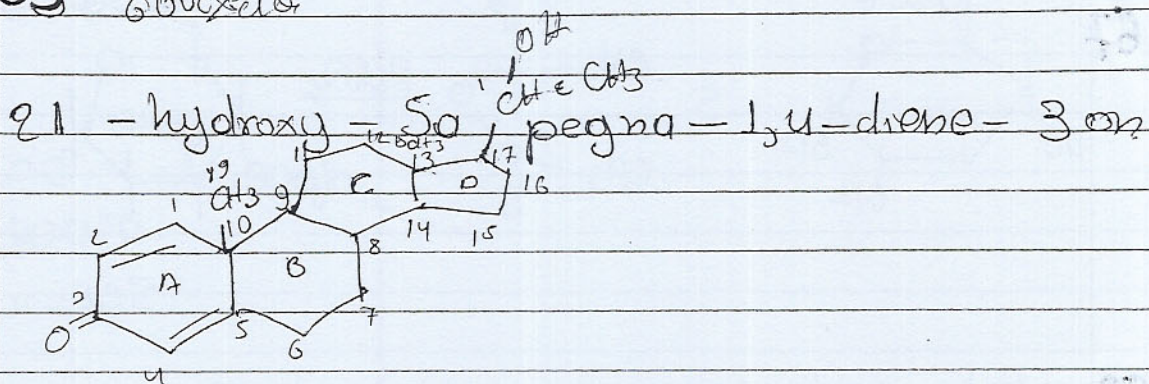
estrogen 1,3,5,10-diene



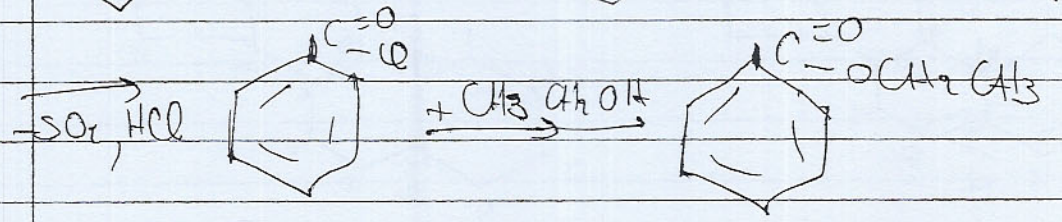
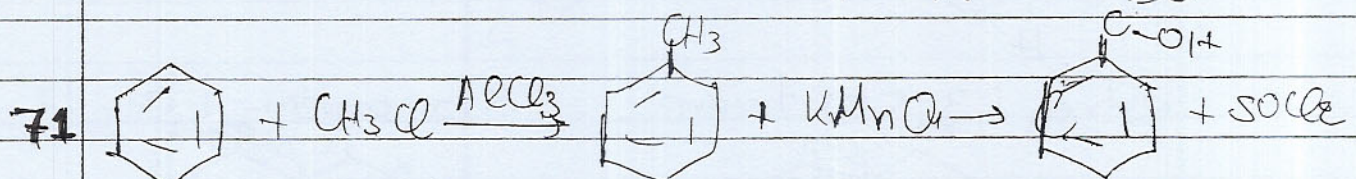
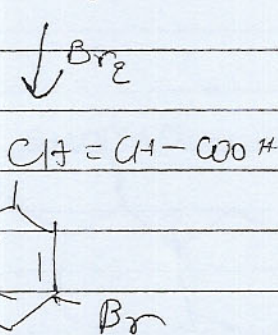
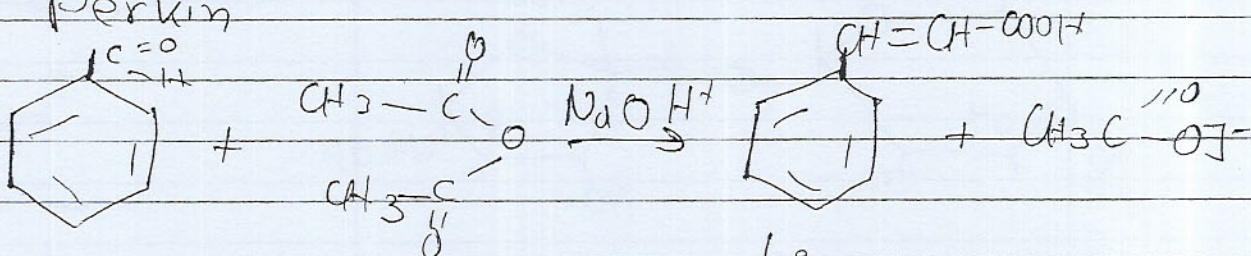
5a andro-1-en, 17b-e



69 *gorgonol*

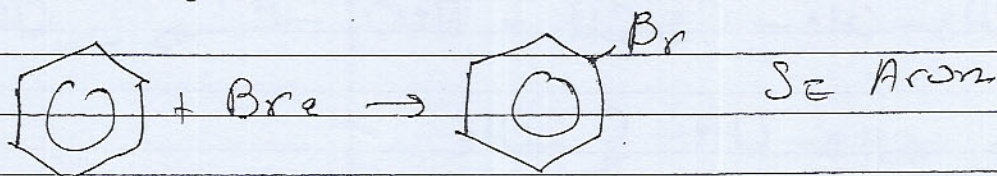


70 Perkin

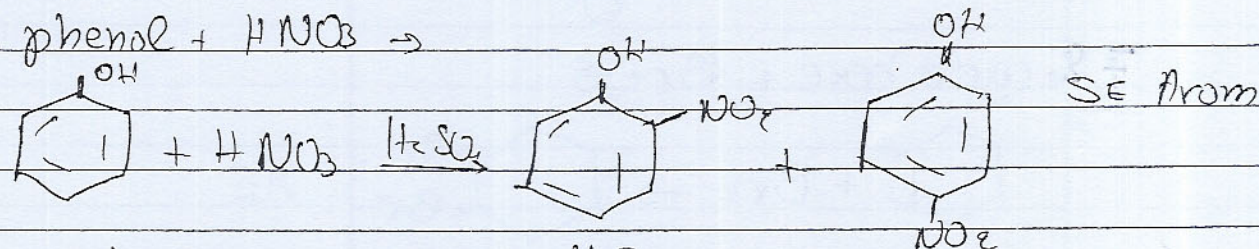


72 Glycerin

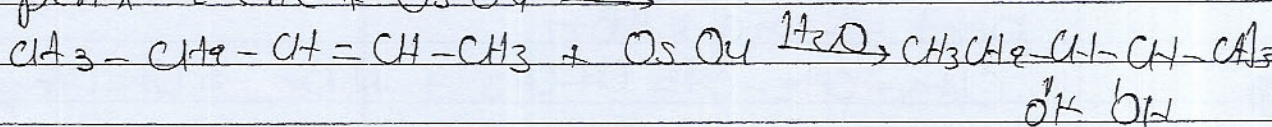
• benzene + Br₂



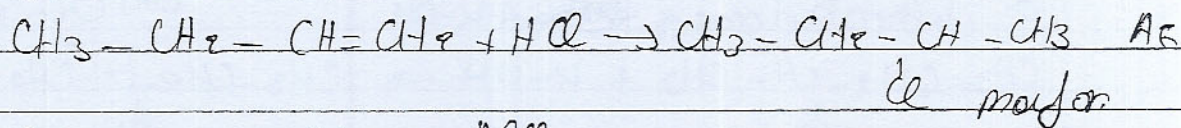
• phenol + HNO₃ →



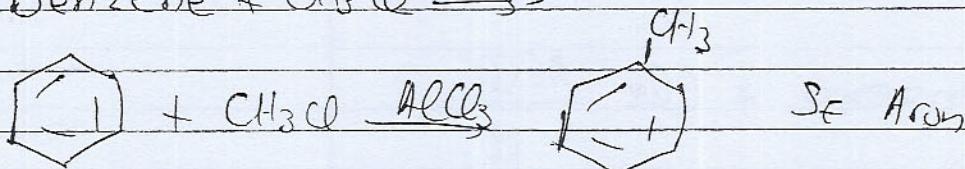
• pent-2-ene + OsO₄ $\xrightarrow{H_2O}$



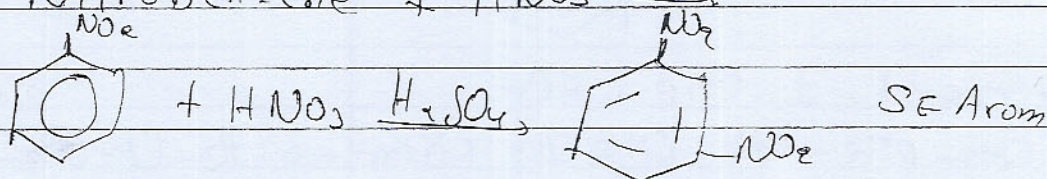
• but-1-ene + HCl



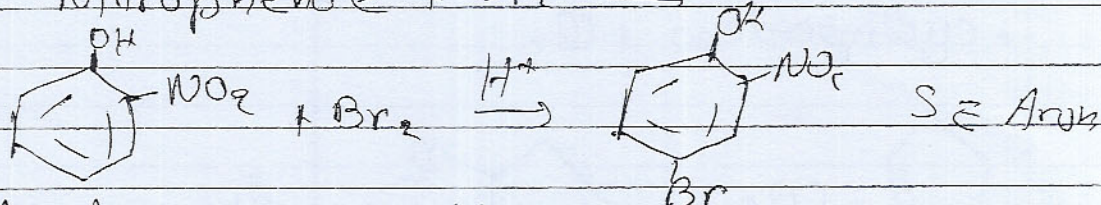
• benzene + CH₃Cl $\xrightarrow{AlCl_3}$



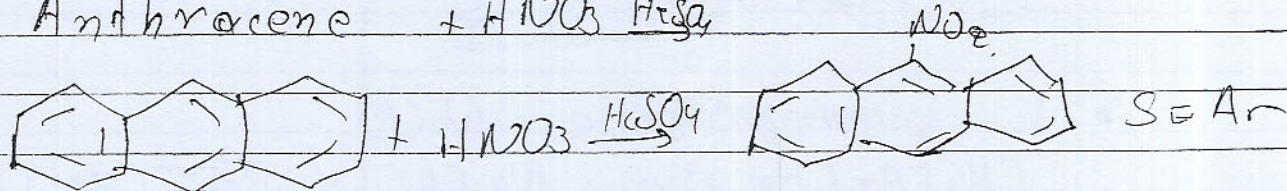
• Nitrobenzene + HNO₃ $\xrightarrow{H_2SO_4}$

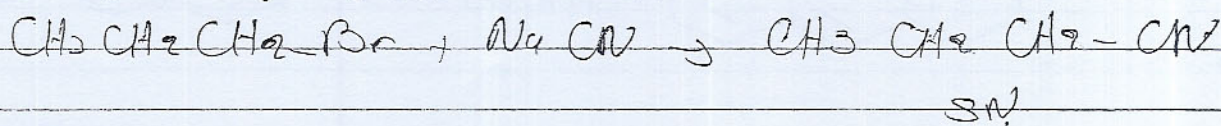
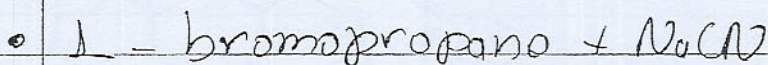
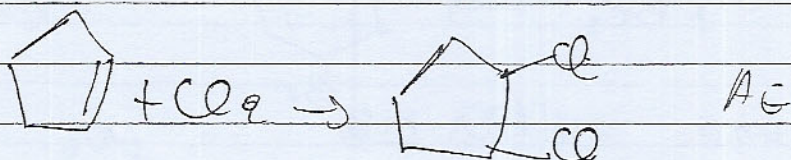
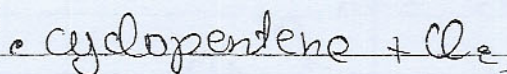
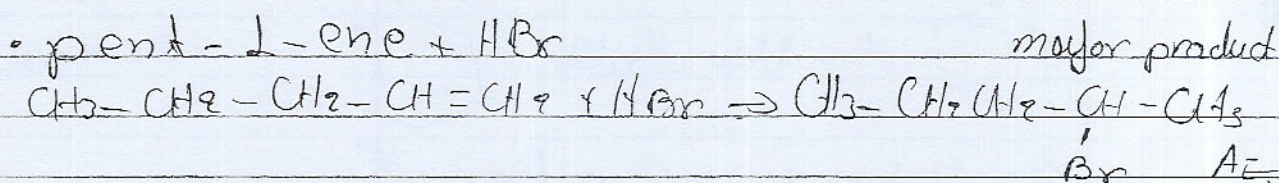
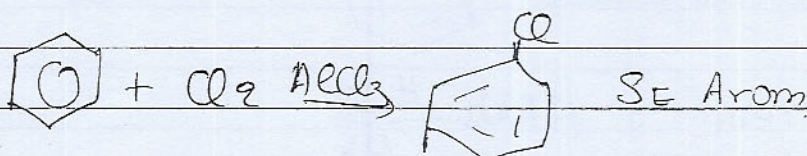
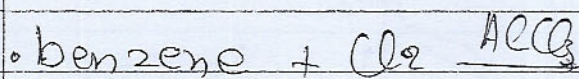
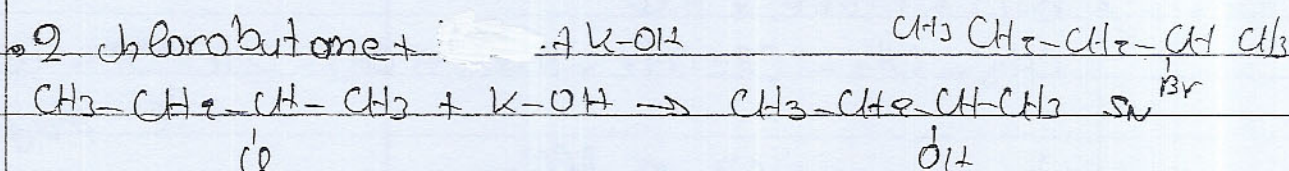
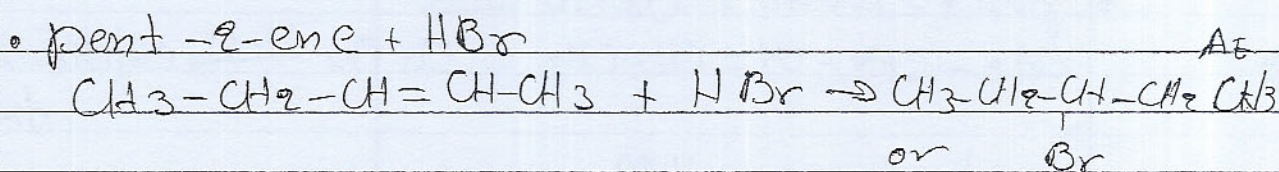
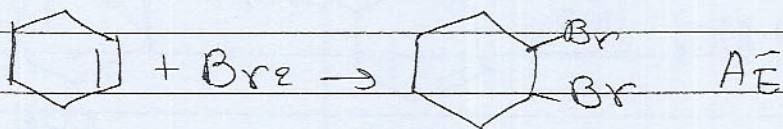
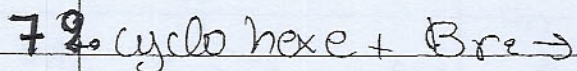
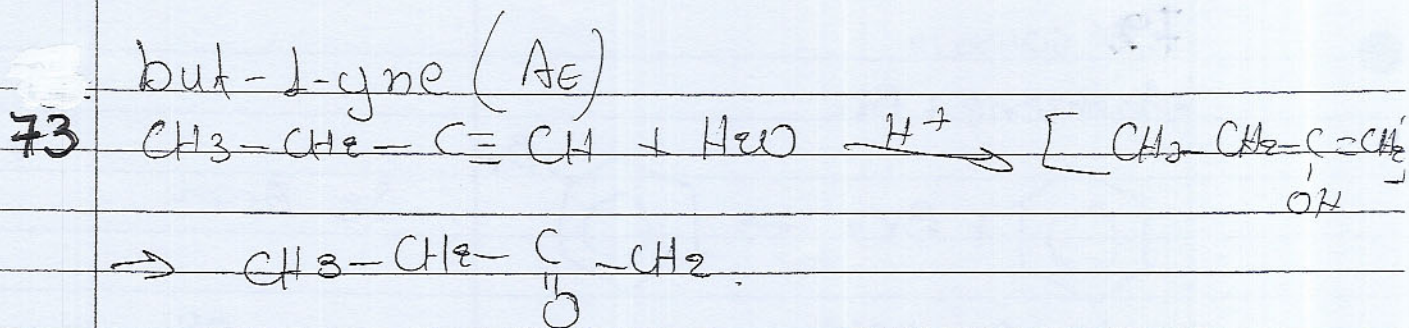


• 2-Nitrophenol + Br₂ $\xrightarrow{H^+}$



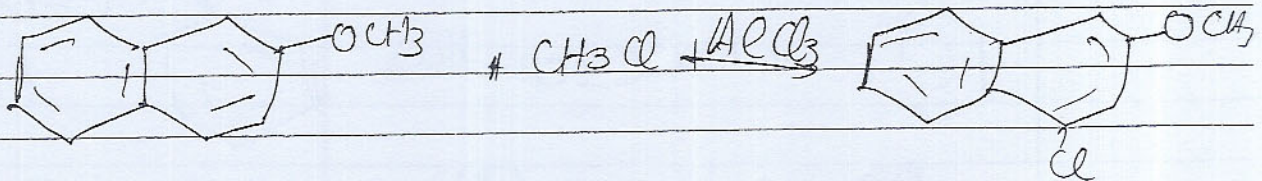
• Anthracene + HNO₃ $\xrightarrow{H_2SO_4}$



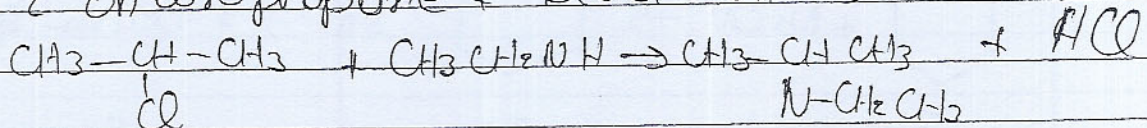


Source 79

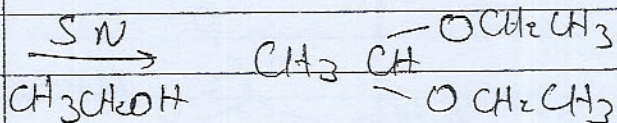
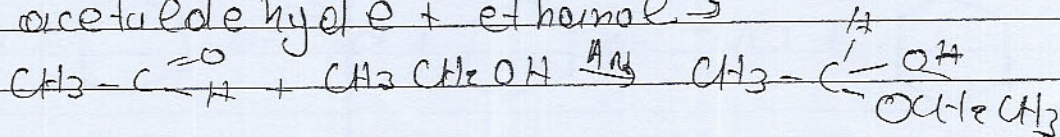
2 methoxynaphthalen + $\text{CH}_3\text{Cl} \xrightarrow{\text{AlCl}_3}$



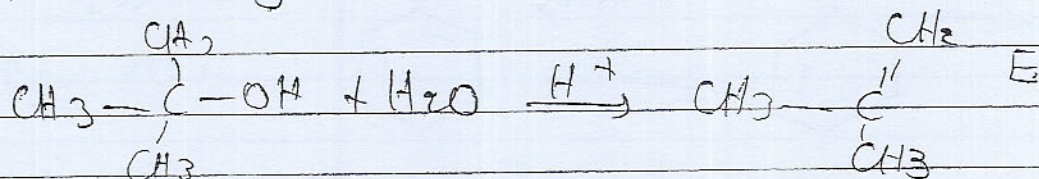
2 chloropropane + $\text{CH}_3\text{CH}_2\text{NH}$ →



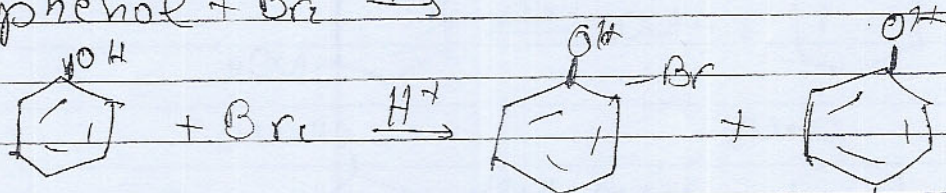
acetaldehyde + ethanol →



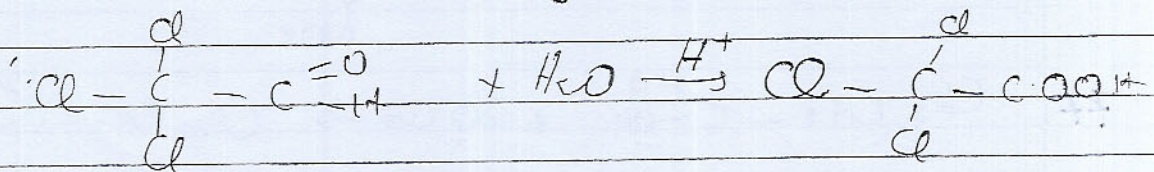
tert-butyl alcohol + $\text{H}_2\text{O} \xrightarrow{\text{H}^+}$



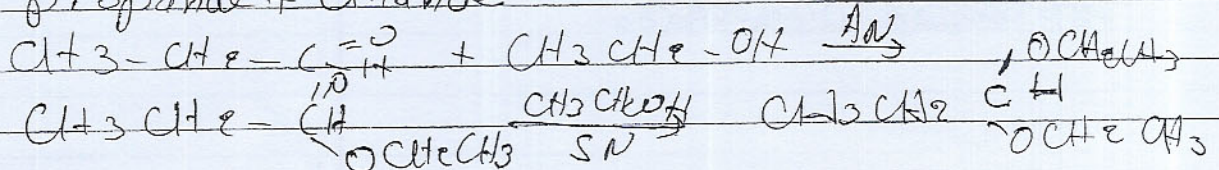
phenol + $\text{Br}_2 \xrightarrow{\text{H}^+}$



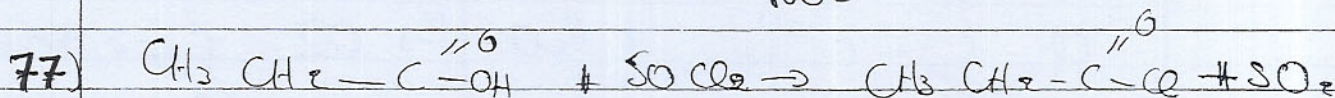
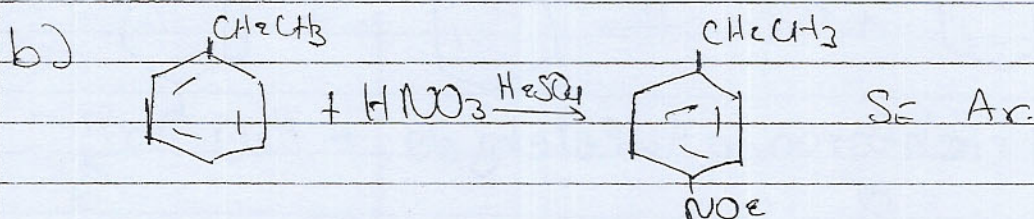
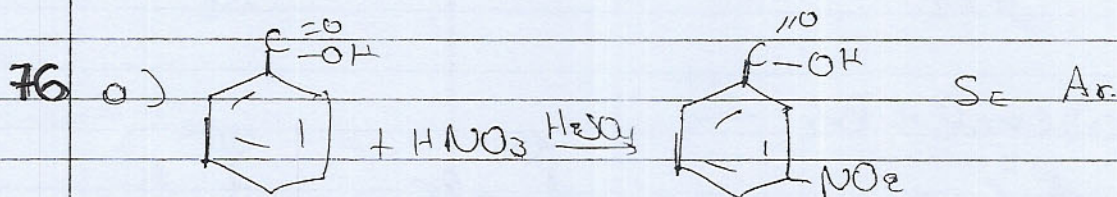
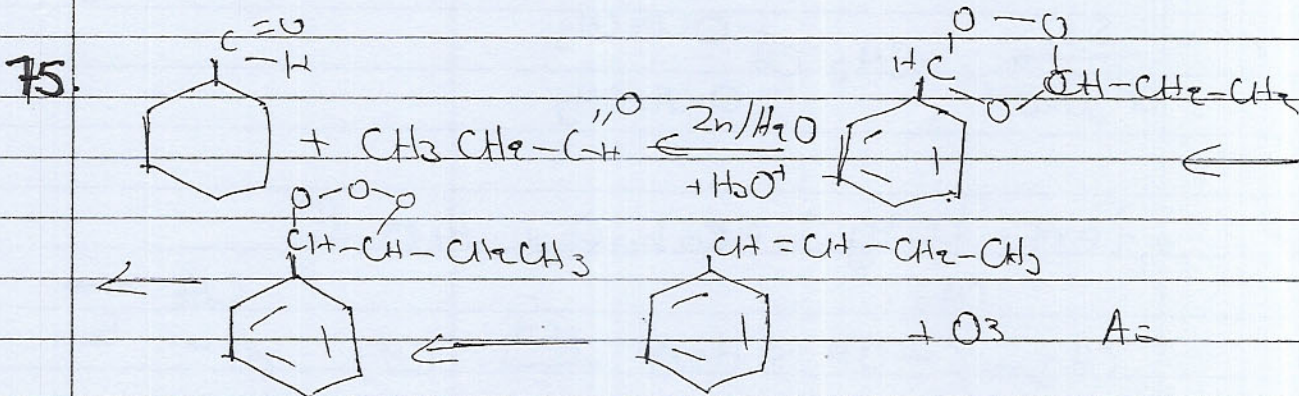
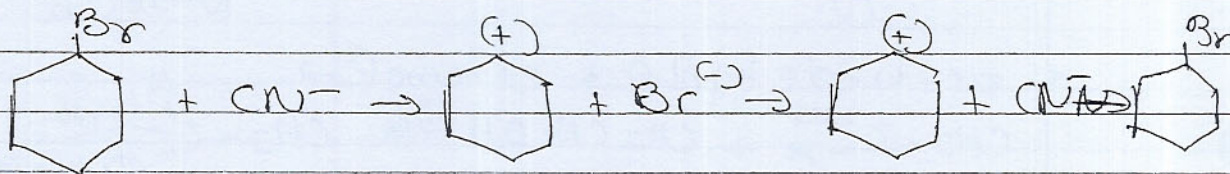
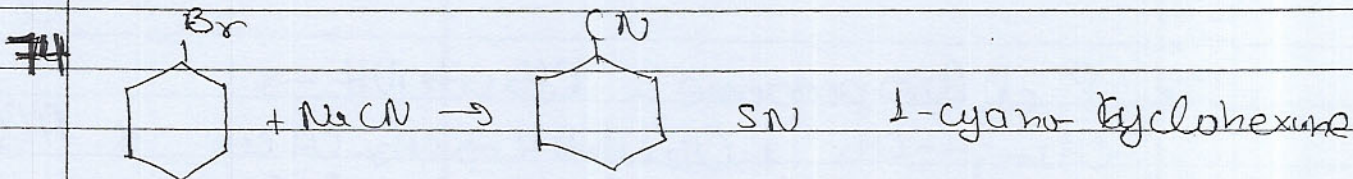
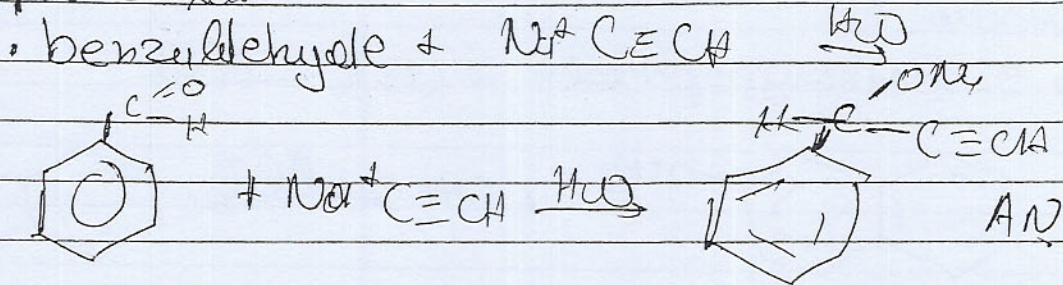
trichloroacetaldehyde + $\text{H}_2\text{O} \xrightarrow{\text{H}^+}$



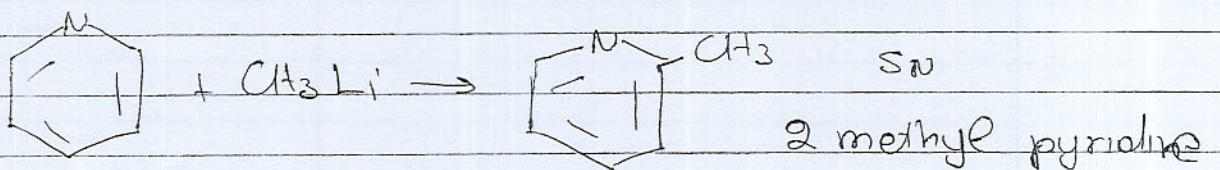
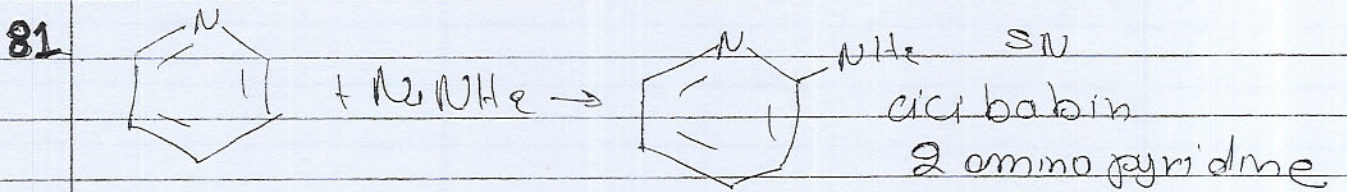
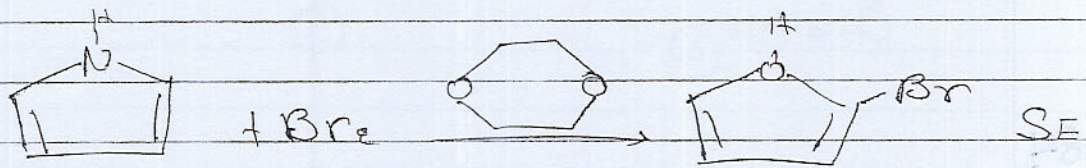
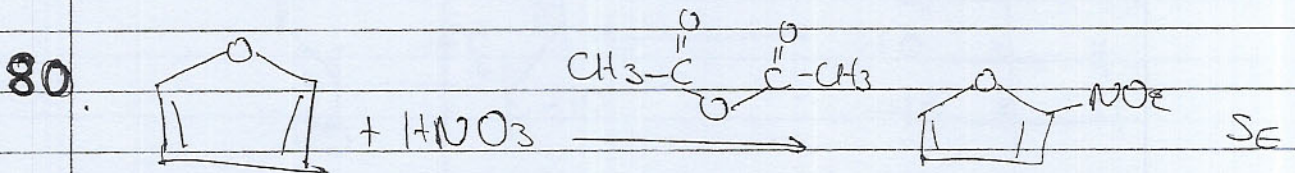
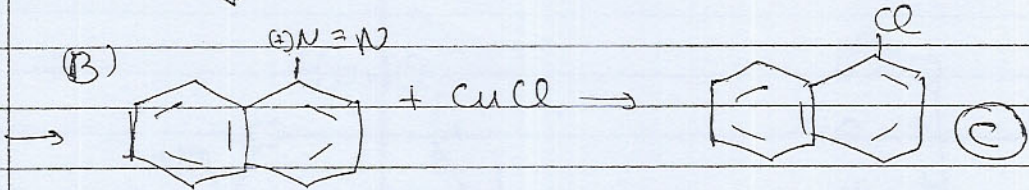
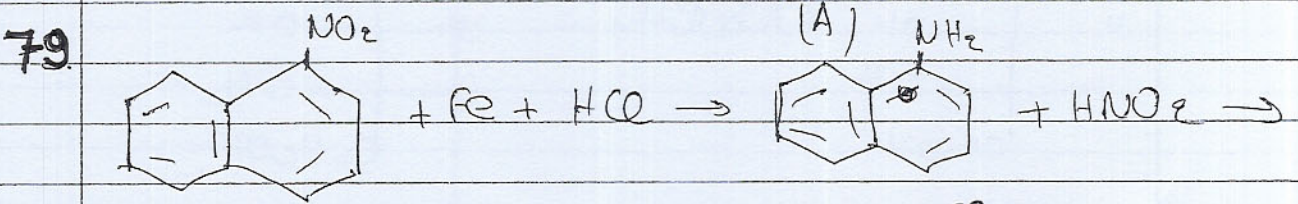
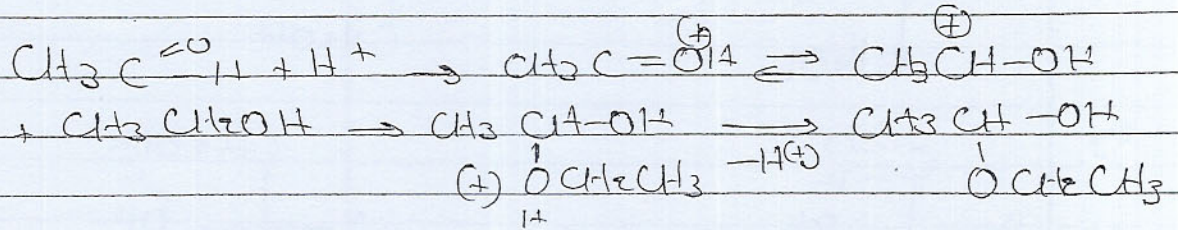
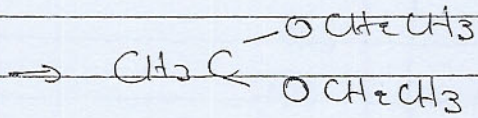
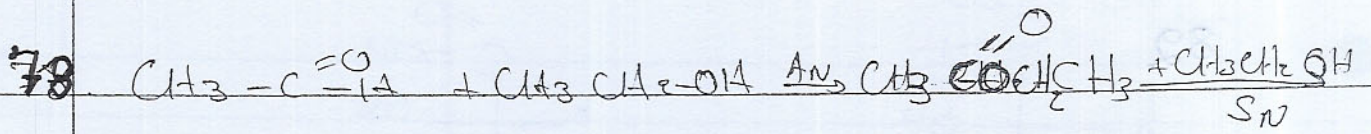
propional + ethanol



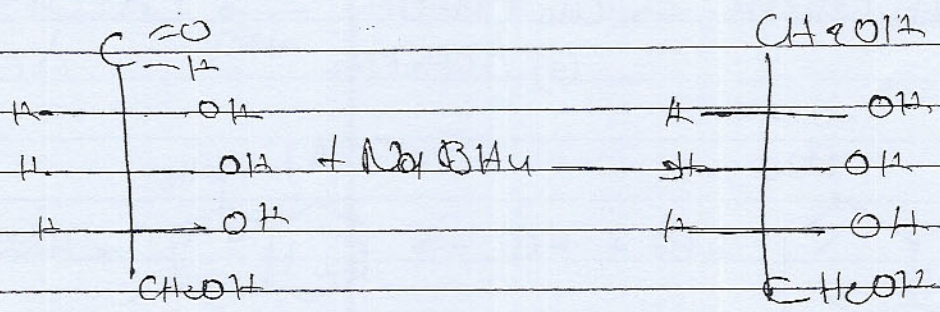
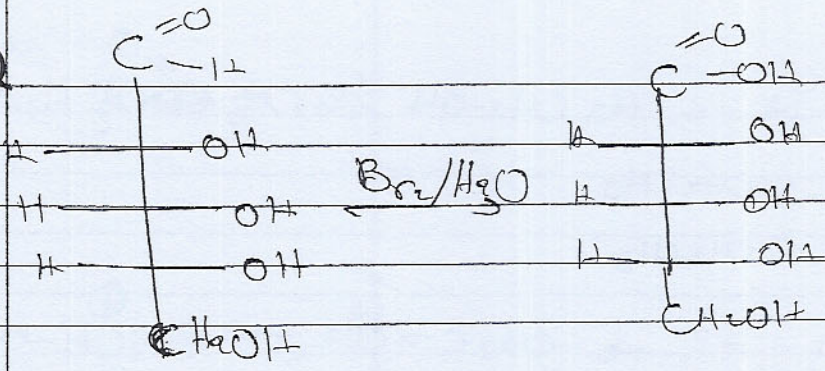
72. Goussier



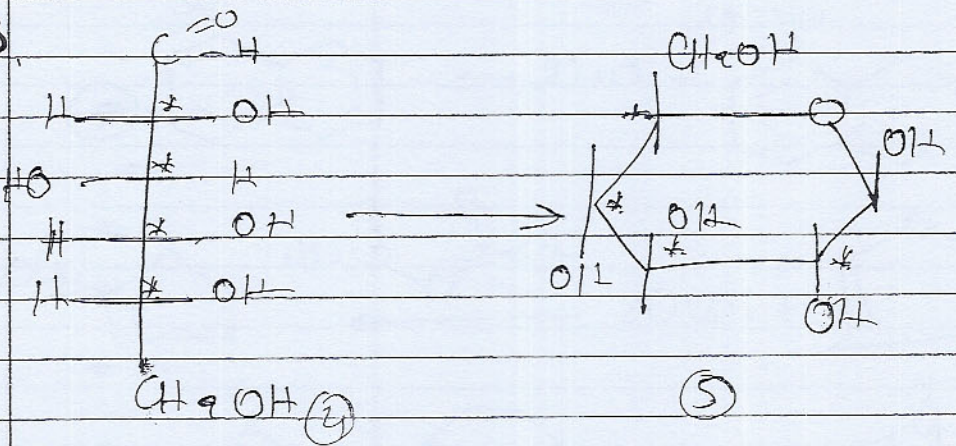
~~78) ~~



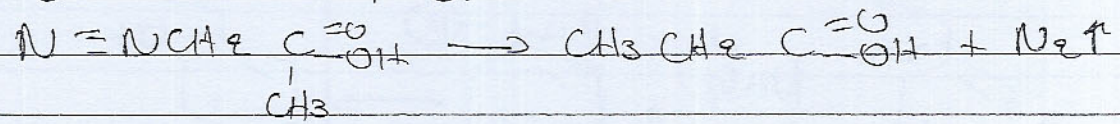
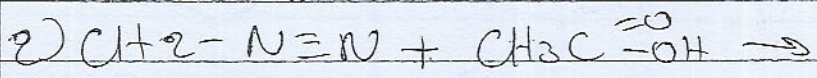
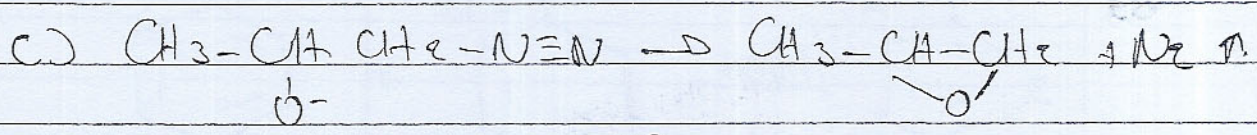
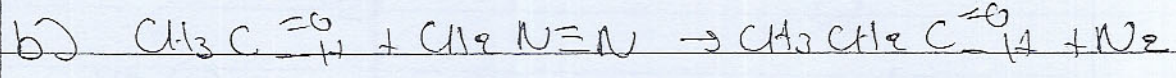
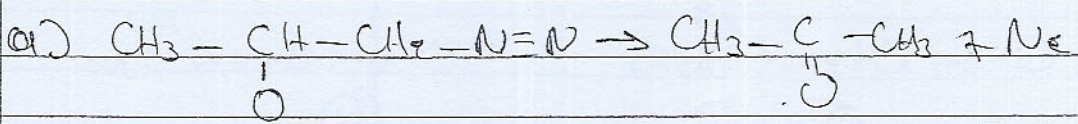
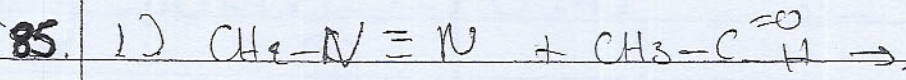
82



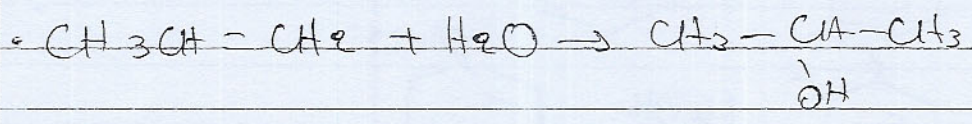
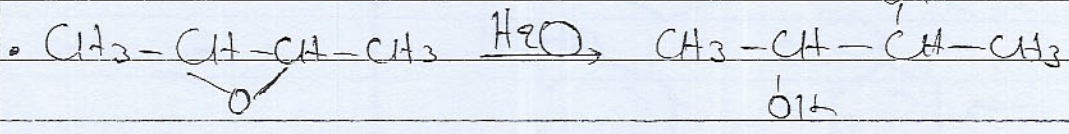
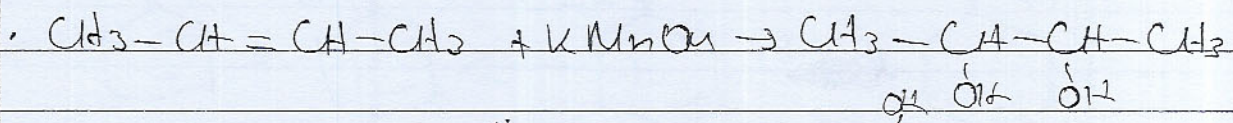
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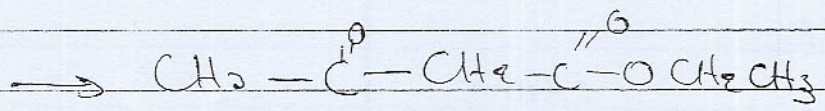
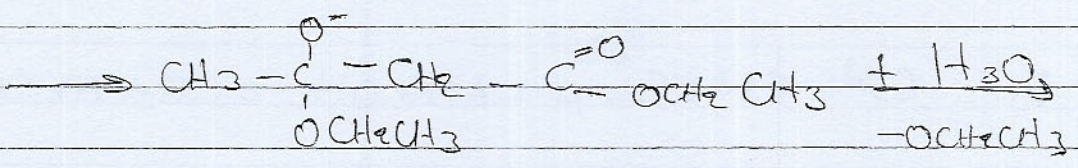
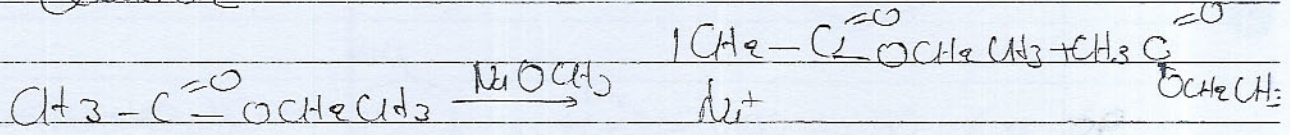
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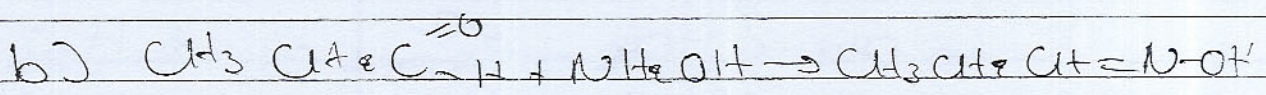
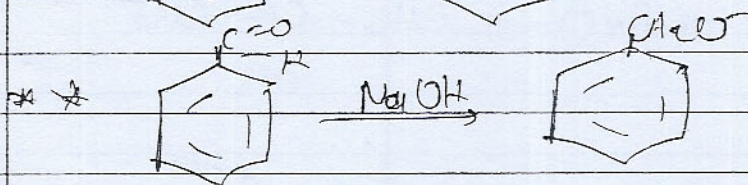
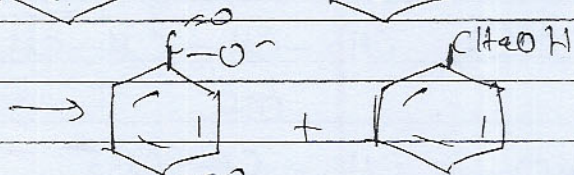
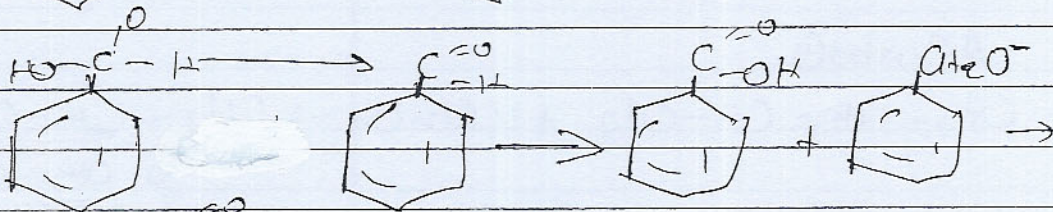
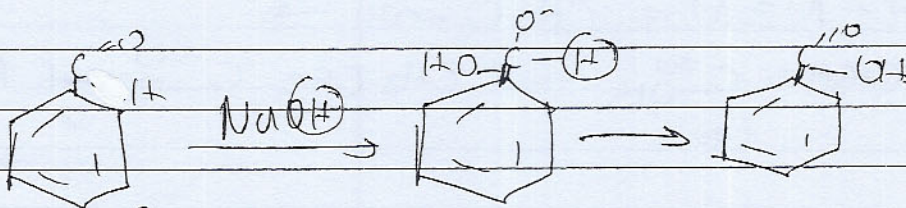
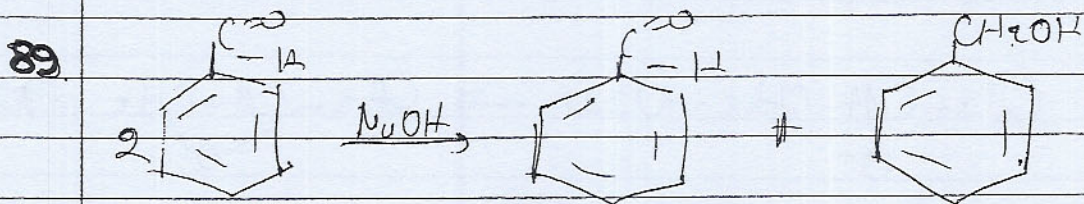
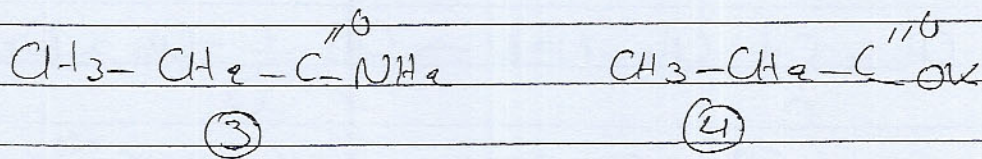
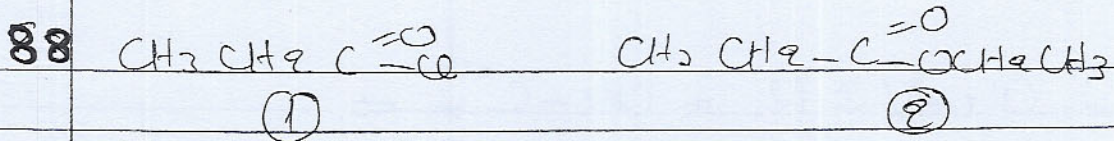


86) Alcohols

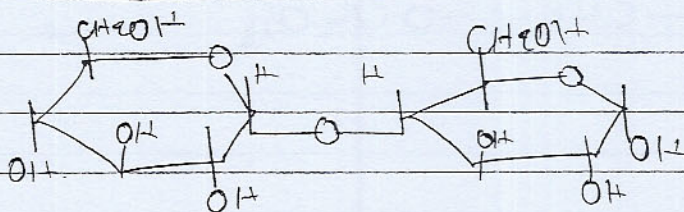


87 Claisen



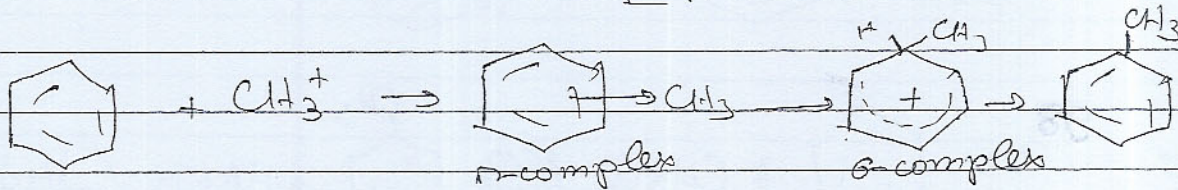
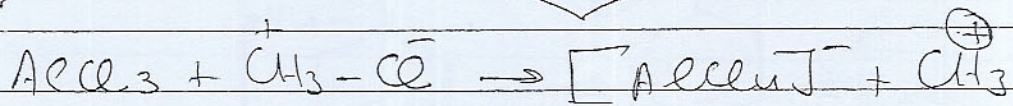
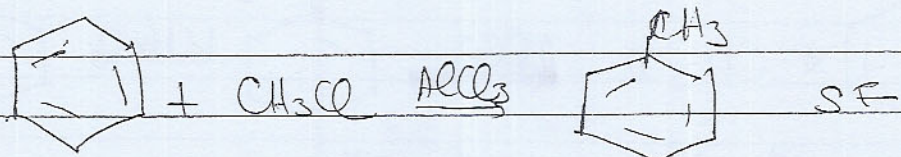


92 Maltose

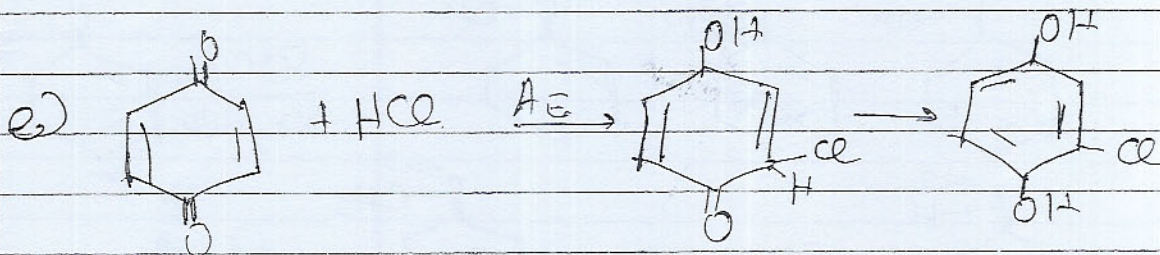
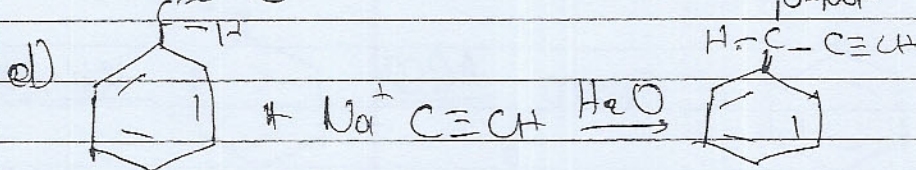
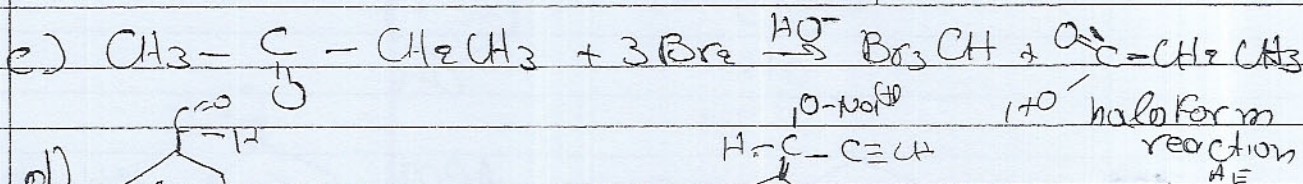
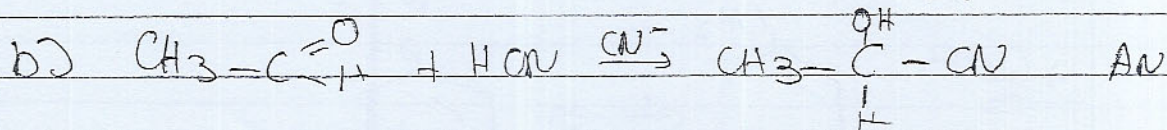
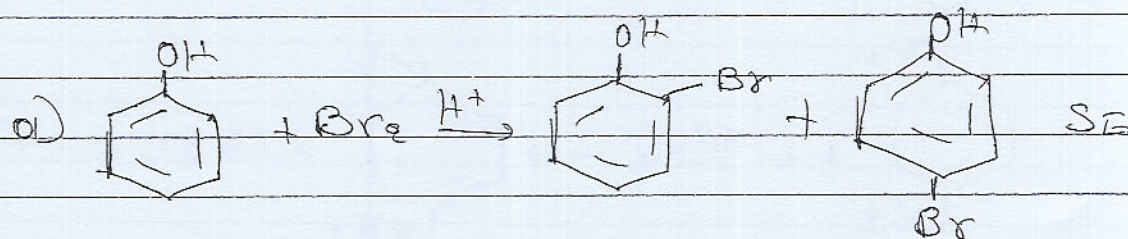


reducing sugar

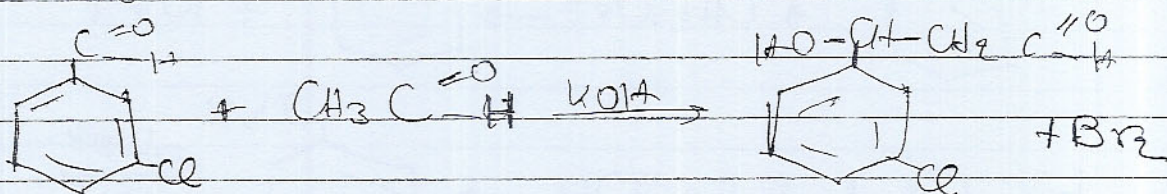
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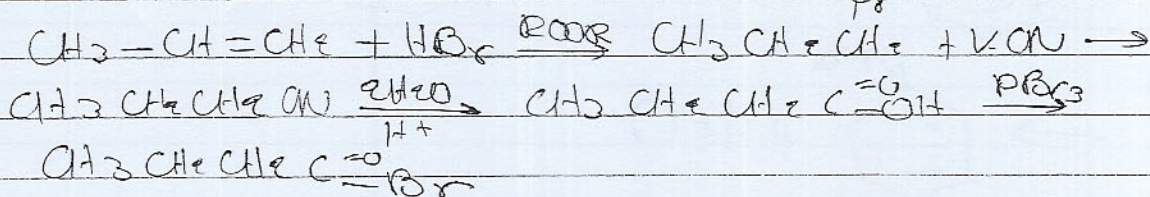
94



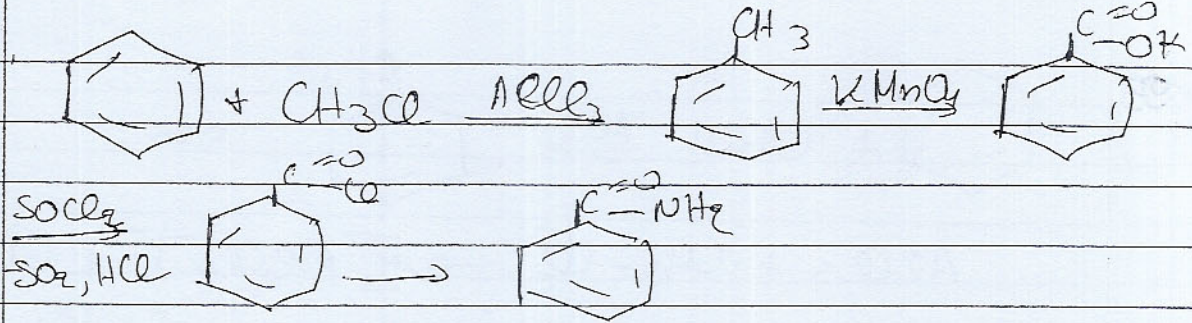
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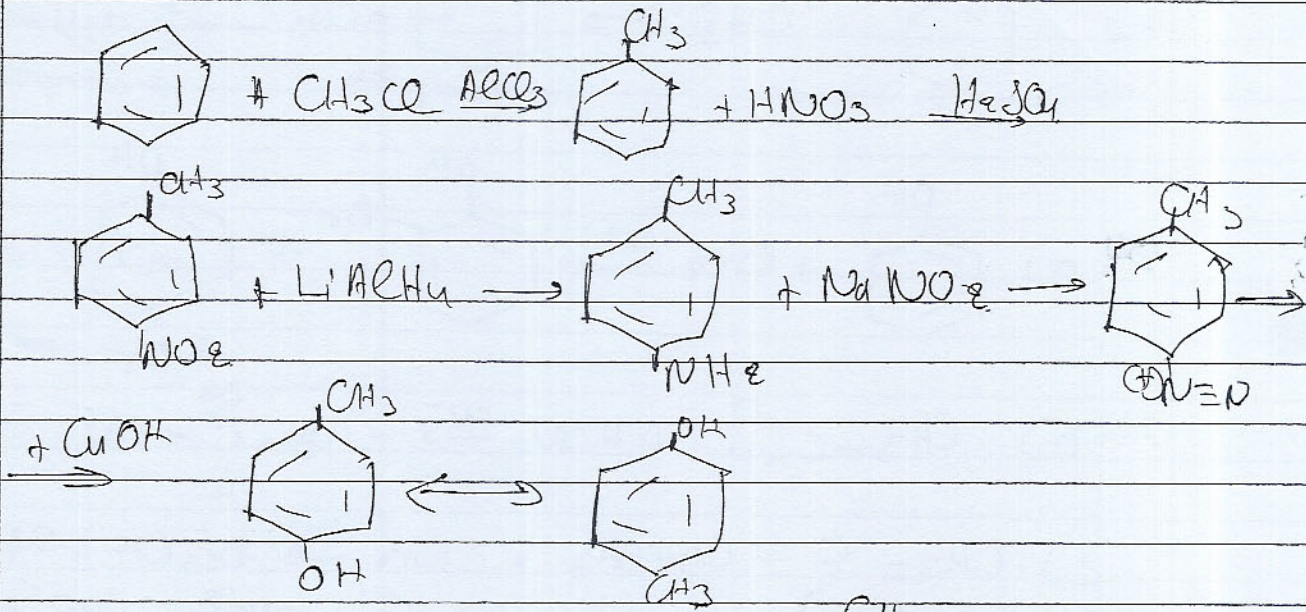
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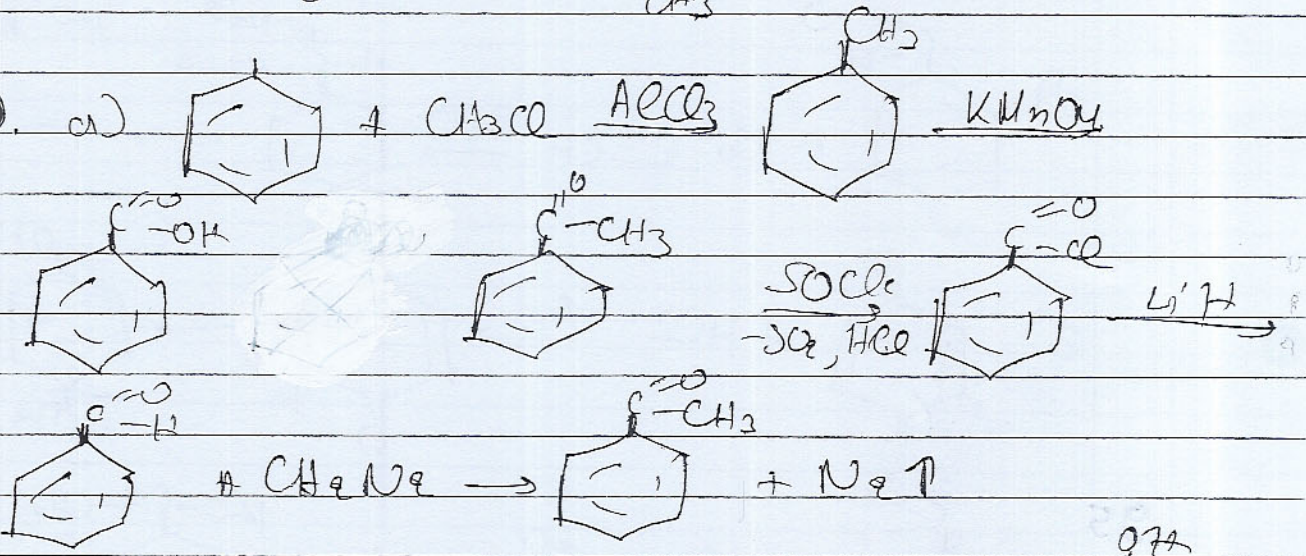
97



98



100



b)

