

Chem assignment

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MRBS

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1) Alcohols are very important organic compound. Discuss briefly their classification and give one example each.

- Based on the number of hydrogen atoms attached to the carbon atom bearing the hydroxyl group. Divided into Primary, Secondary and tertiary alcohols.

Ex. Methanol, CH_3OH .

- Based on the number of hydroxyl groups Alcohols possess. Divided into monohydric, dihydric, polyhydric

Ex. $\text{OH-CH}_2\text{-CH}_2\text{-OH}$ - Propan-1,2-diol

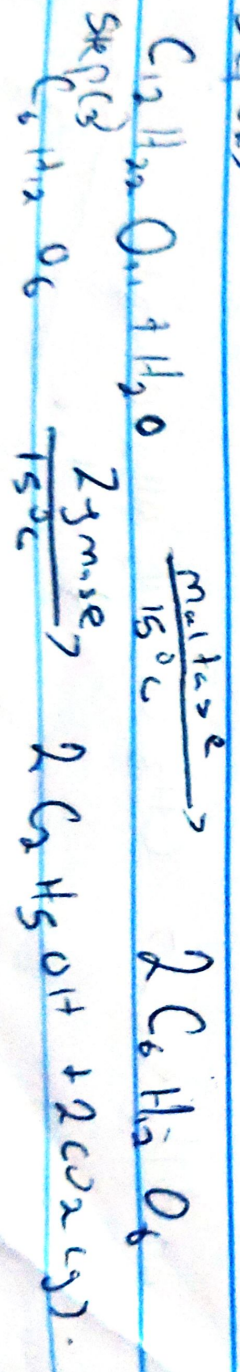
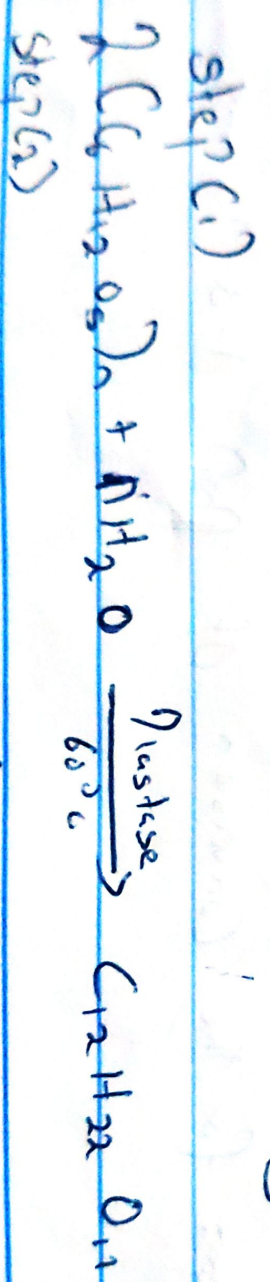
2) Discuss the solubility of alcohols in water, Organic solvent
- Lower alcohols are soluble in water and as the number

↳ monohydric, dihydric, polyhydric

↳ OH groups, etc. etc. - 1, 2, 3, diol

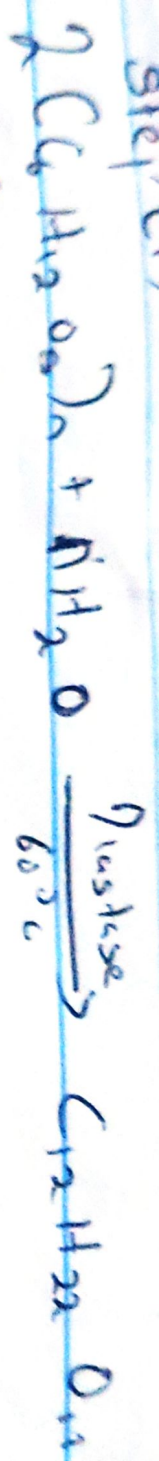
1) Discuss the Solubility of alcohols in water, Organic solvent
- lower alcohols are Soluble in water and as the Number of Carbon atoms increase, Solubility decreases
- Alcohols are always Soluble in organic Compounds because they're both organic.

3) Show the three steps in the industrial Manufacture of Ethanol. Equations of reaction are mandatory

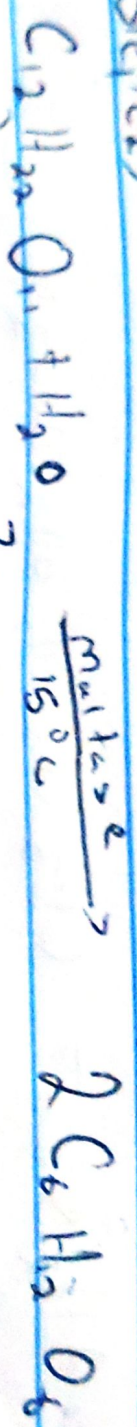


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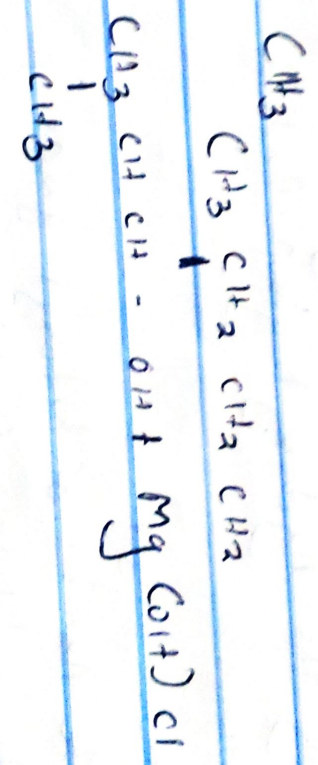
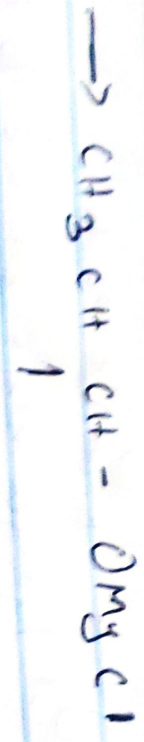
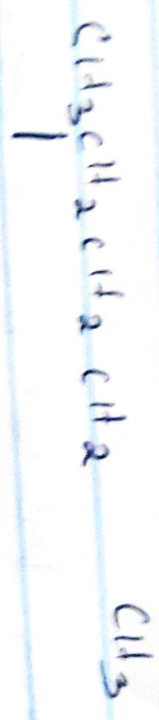
step (1)



step (2)



4) Show the reaction between 2-methyl propanal and butylmagnesium chloride. Hint: Grignard synthesis.



(5) Skipped

(6) Skipped

Q Skipped

7) Show the reduction reaction of 2-Methyl Propanoic acid



8) Propose a scheme for the conversion of propan-2-ol to propan-1-ol

