

19/MHS01/235

MBBS

CHEMISTRY 102 ASSIGNMENT ONE

1) Alcohols can be ~~bas~~ classified based on the number of Hydrogen atoms attached to the carbon atom containing the hydroxyl group.

1° primary alcohol → Methanol → CH_3OH - one Hydrogen atom

2° secondary " → Ethanol → $\text{CH}_3\text{CH}_2\text{OH}$ - two hydrogen atom is attached

3° tertiary " → $(\text{CH}_3)_3\text{COH}$ → 2-methyl propan-2-ol

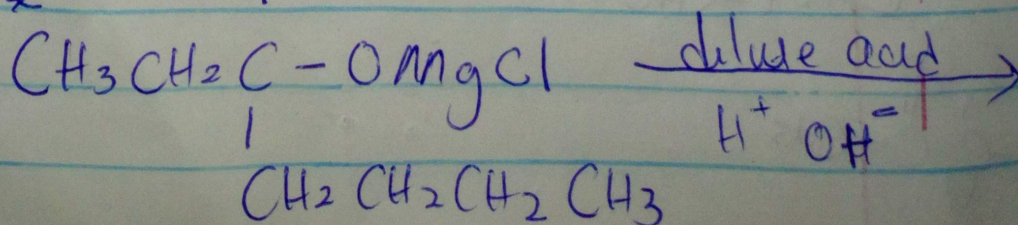
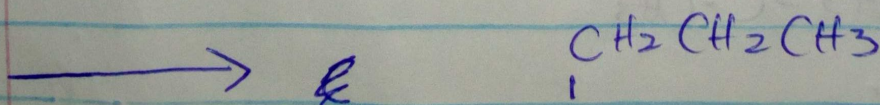
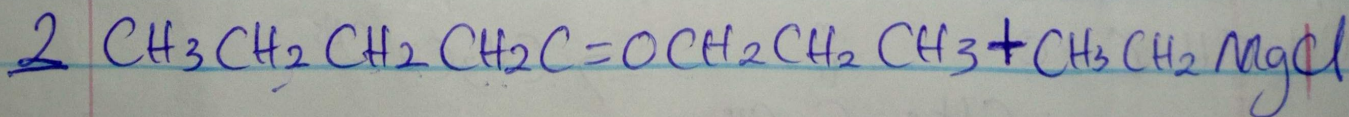
ii) Alcohols can be classified based on the number of hydroxyl group they possess.

> Monohydric alcohols → one hydroxyl group e.g. $\text{CH}_3\text{CH}_2\text{CH}_2\text{OH}$ - Propanol

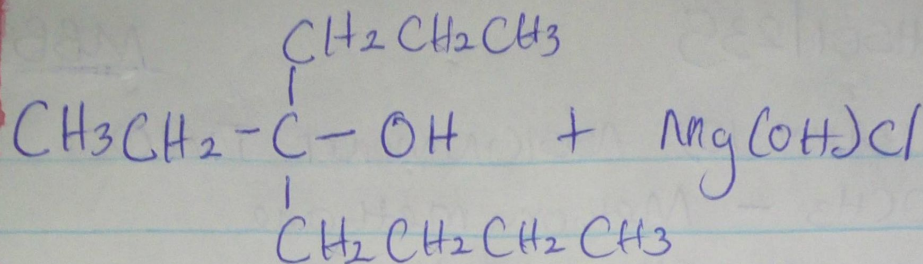
> Dihydric alcohols → 2 hydroxyl group e.g. $\text{HOCH}_2\text{CH}_2\text{OH}$ - Ethane-1,2-diol

> Trihydric (Triols) → 3 hydroxyl group e.g. $\text{OHCH}_2\text{CH}(\text{OH})\text{CH}_2\text{OH}$ - Propane-1,2,3-triol

> Polyhydric / polyols → More than 3 hydroxyl group Heptane-2,3,4,5,6-pentaol.

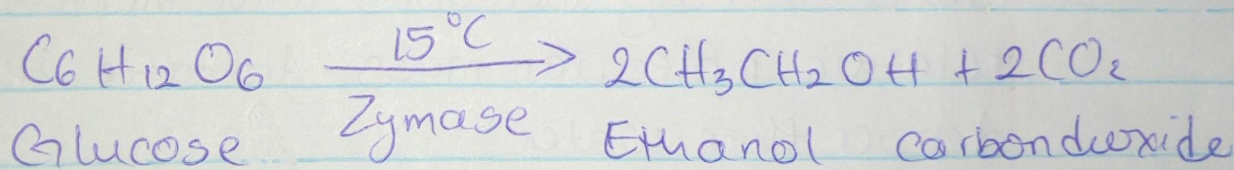
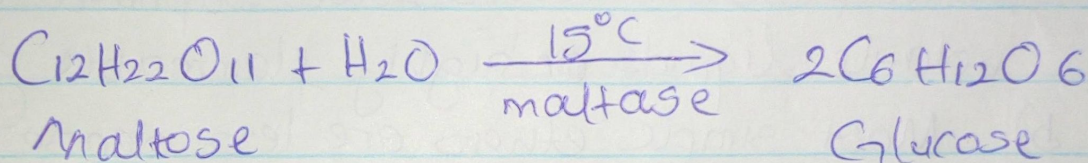
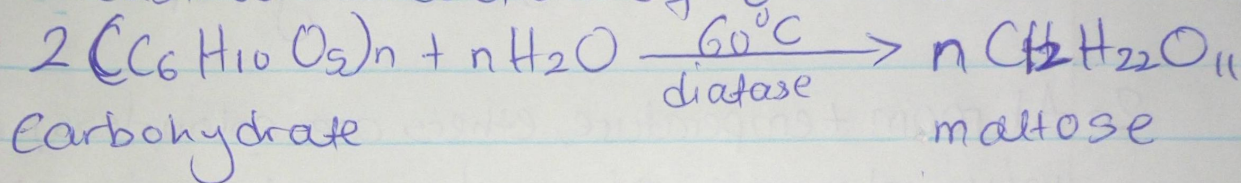


page
2

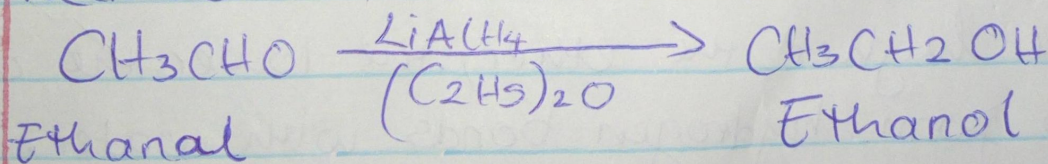


3-propyl Heptan-3-ol

3 Industrial Production Of Ethanol



4 Reduction of Alkanal



Reduction of Alkanone

