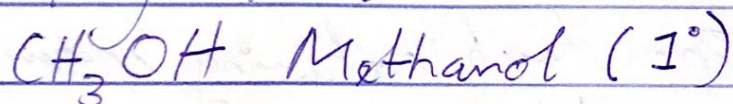


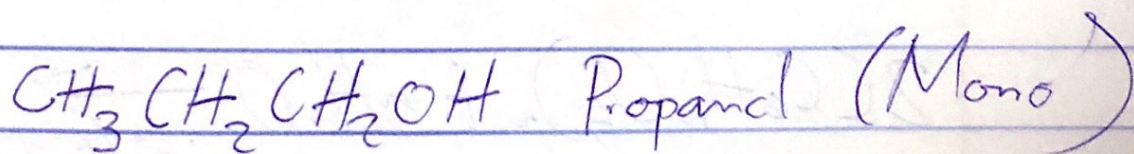
Obi Marshall Azuka  
MBBS 19/MHS07/271

## ① Classification of Alcohols

- a. Based on the number of hydrogen atoms attached to the carbon atom containing the hydroxyl group:
- if hydrogen atoms are 3 or 2, it is called a primary alcohol. If the no. hydrogen atoms is 1, it is called secondary alcohol. No hydrogen atom is tertiary alcohol.



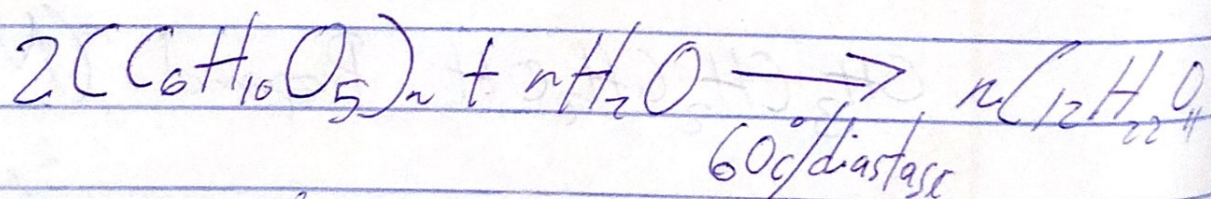
- b. Based on the number of hydroxyl groups they possess: Monohydric alcohols have 1, Dihydric alcohols have 2, Trihydric alcohols have 3.



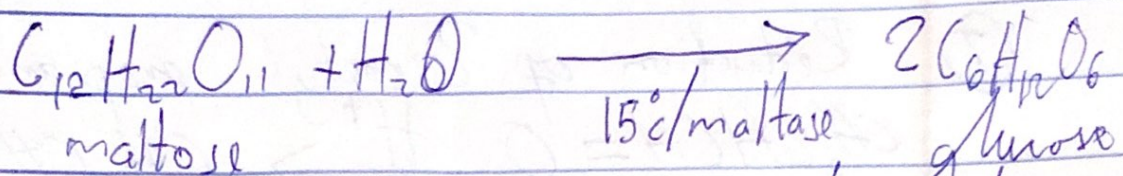
② Solubility of alcohols in water, organic solvents  
→ Alcohols with up to three carbon atoms are soluble in water as a result of their ability to form a bond with water.

→ All monohydric alcohols are soluble in organic solvents.

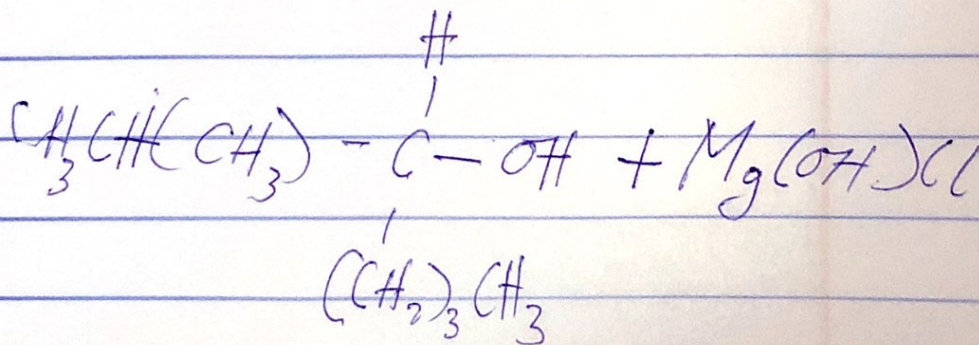
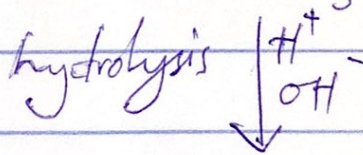
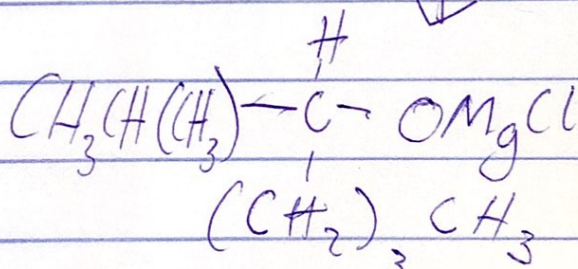
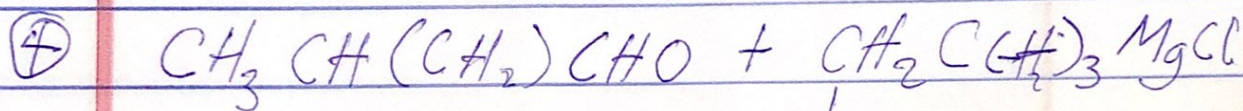
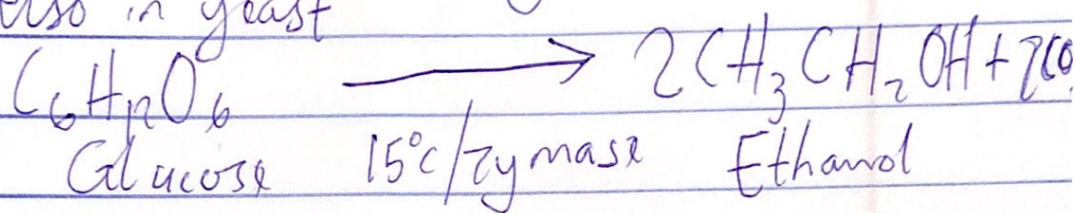
③ The starch containing materials include rice, potatoes, etc and on warming with malt to  $60^{\circ}\text{C}$  for a specific period of time are converted into maltose by the enzyme diastase contained in the malt.



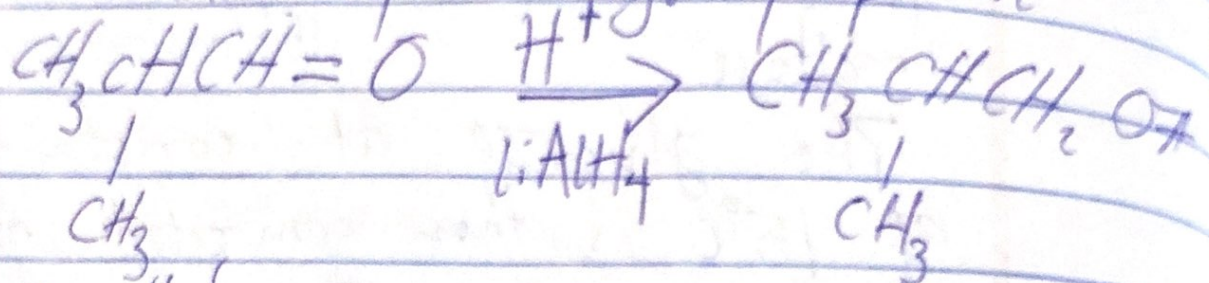
The maltose is broken down into glucose on addition of yeast which contains the enzyme maltase and at a temp. of  $15^{\circ}\text{C}$ .



The glucose at constant temp. of  $15^\circ C$  is then converted into alcohol by the enzyme Zymase contained also in yeast



⑦ Reduction of 2-methyl propanal



2-methyl propanal

2-methyl propanol