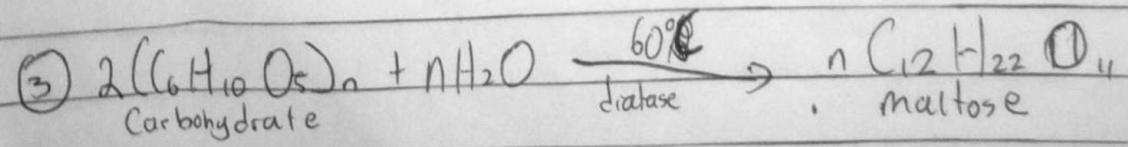
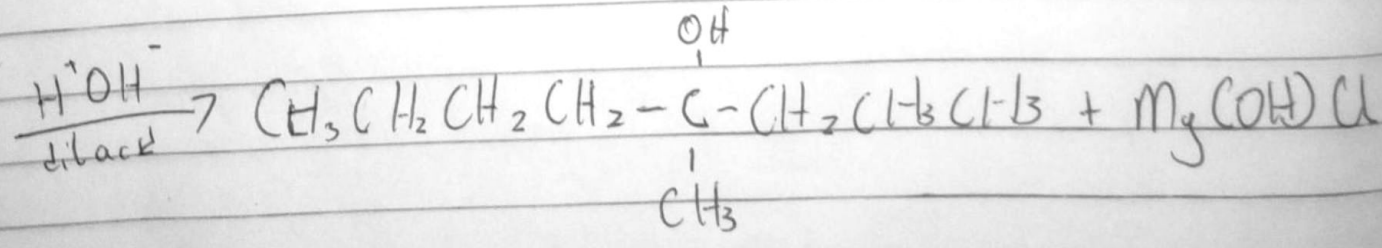
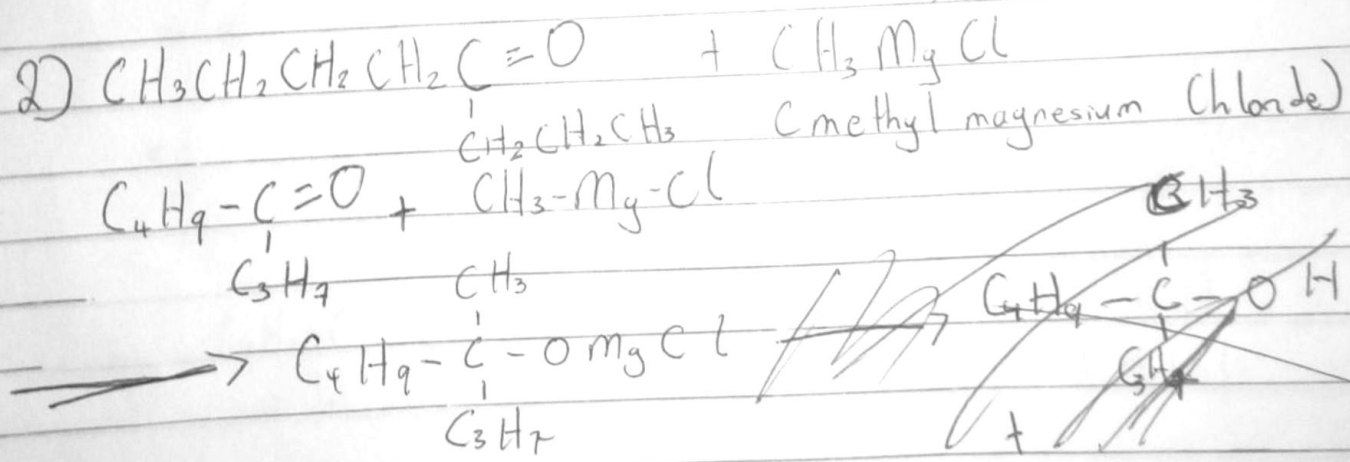


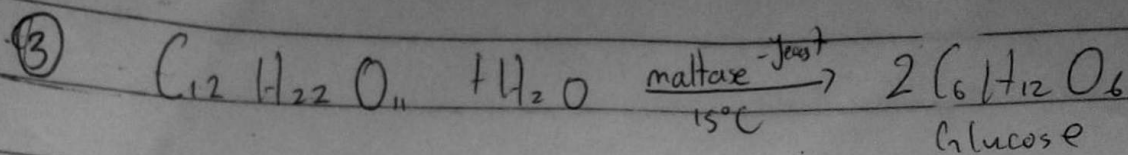
Oyeleke Ibrahim Nass Oluwaseyi CHM102  
 19/E0604/052 Elect/Elect Engineering

① ~~Primary Alcohol~~: Based on the number of hydrogen atoms attached to the hydroxyl group: If there are three or two carbon atoms connected to the carbon atoms containing the OH group it is known as a primary alcohol (1°) if there is just one hydrogen atom. It is known as a secondary alcohol (2°) and if it is none is known as tertiary alcohol (3°) eg  $\text{CH}_3\text{OH}$  (1°),  $\text{CH}_3\text{CH}(\text{OH})\text{CH}_3$  (2°),  $(\text{CH}_3)_3\text{C}-\text{OH}$  (3°)

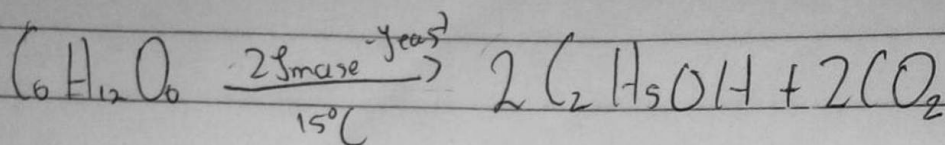
② Based on number of OH groups they possess: monohydric alcohols possess one OH group present in the carbon chain/series. Glycols (Dihydric alcohols) possess two while triols (trihydric alcohols) possess three. Polyhydric alcohols contain more than three



Starch containing products on warming with diastase at 60°C for a specific period of time is converted to Maltose



The maltase is broken down into glucose using maltase as a catalyst at  $15^\circ\text{C}$



Glucose is then converted into alcohol and carbon dioxide at constant temperature of  $15^\circ\text{C}$  using the enzyme Zymase

$\textcircled{4}$  By using  $\text{LiAlH}_4 / (\text{C}_2\text{H}_5)_2\text{O}$  (lithium tetrahydridoaluminate (III)) in ethoxyethane or  $\text{LiBH}_4 / (\text{C}_2\text{H}_5)_2\text{O}$  or Sodium tetrahydridoborate (III) in water as reducing agents, Carbonyl compounds can be converted to alcohols

