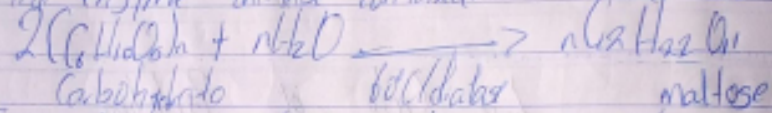


1) This is based on the number of hydrogens attached to the carbon atom containing the hydroxyl group. If the number of hydrogens attached to the carbon atom bearing the hydroxyl group are three or two, it is called a primary alcohol ( $1^\circ$ ). If it is one hydrogen atom, it is called secondary alcohol ( $2^\circ$ ). If it has ~~two~~ no hydrogen atom attached to the carbon atom bearing the hydroxyl group, it is called a tertiary alcohol ( $3^\circ$ ).  
E.g.  $\text{CH}_3\text{CH}_2\text{OH}$  Propan-1-ol ( $1^\circ$ ) etc

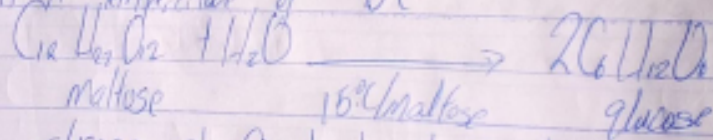
b) This is based on the number of hydroxyl groups they possess. Monohydric alcohols have one hydroxyl group present in the alcohol structure. Dihydric alcohols are also called Glycols, they have 2 hydroxyl groups present in the alcohol structure while trihydric alcohols or triols have 3 hydroxyl groups present in the structure of the alcohols. Polyhydric alcohols or polyols have more than 3 hydroxyl groups e.g.  
 $\text{CH}_2\text{OH}(\text{OH})\text{CH}_2(\text{OH})\text{CH}_2(\text{OH})\text{CH}_2\text{CH}_3$  - Hexane-2,4,6-trihydric alcohol

2) Alcohols are soluble in water, due to the hydroxyl group in the alcohol which is able to form hydrogen bonds with water molecules. Alcohols with a smaller hydrocarbon chain are very soluble. As the length of the hydrocarbon chain increases, the solubility in water decreases.

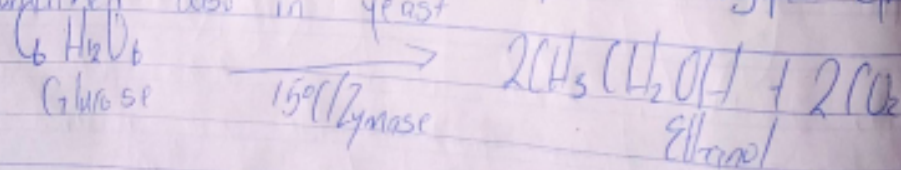
3) Starch containing materials include molasses, potato, cereals, rice and on warming with malt to 60°C for a specific period of time are converted into maltose by the enzyme diastase contained in the malt.



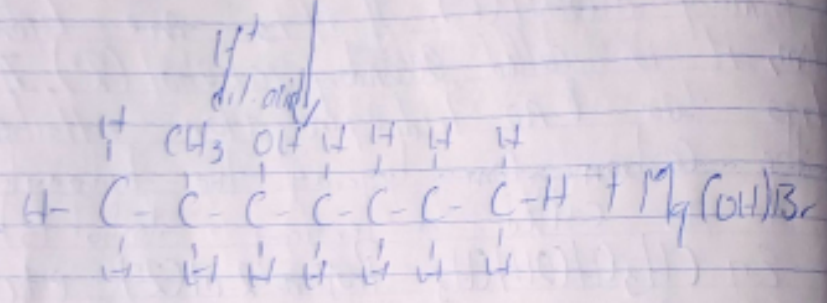
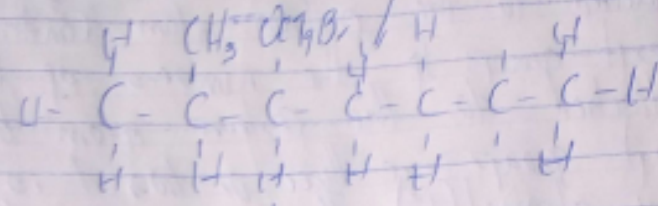
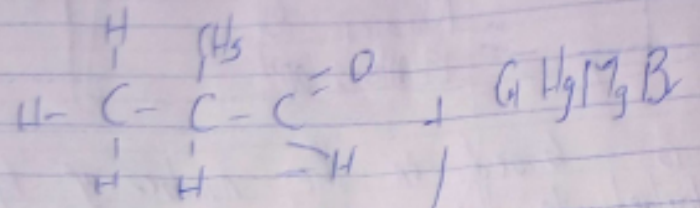
The maltose is broken down into glucose on addition of yeast which contains the enzyme maltase at a temperature of 15°C.



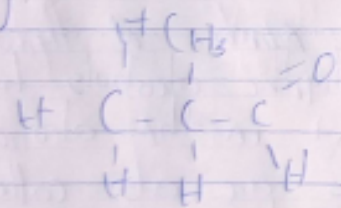
The glucose at constant temperature of 15°C is then converted into alcohol by the enzyme Zymase contained also in yeast.



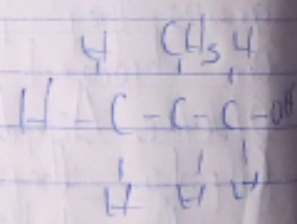
6)



7)



? methyl propanol



? methyl propanol



8) Dehydration of Propan-1-ol to Propene;  
When Propan-1-ol is treated with concentrated sulphuric acid ( $H_2SO_4$ ) the phenomenon called dehydration occurs due to which a water from Propan-1-ol gets eliminated. Due to this Propan-1-ol gets converted into Propene. The reaction involved is as follows-

