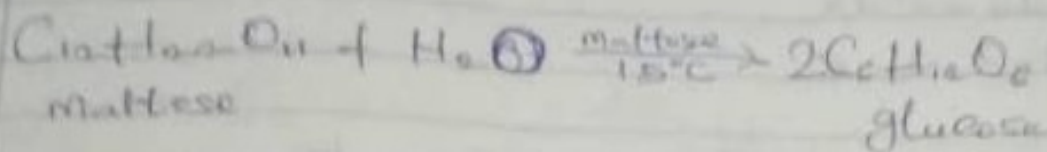
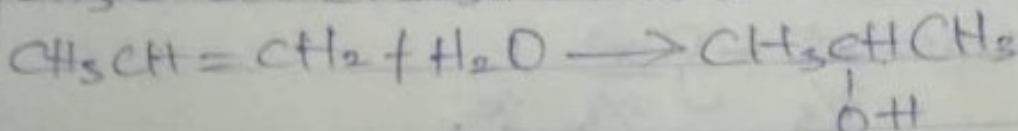
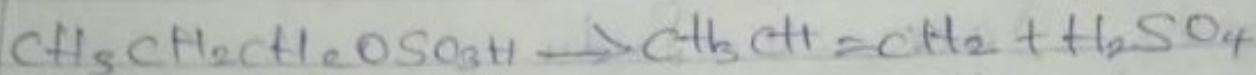
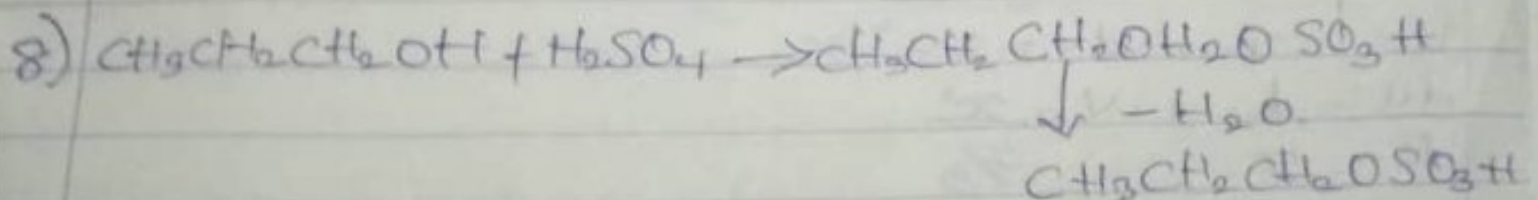
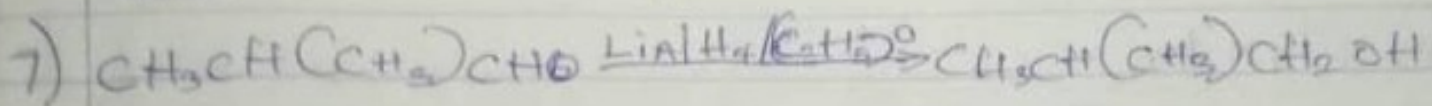
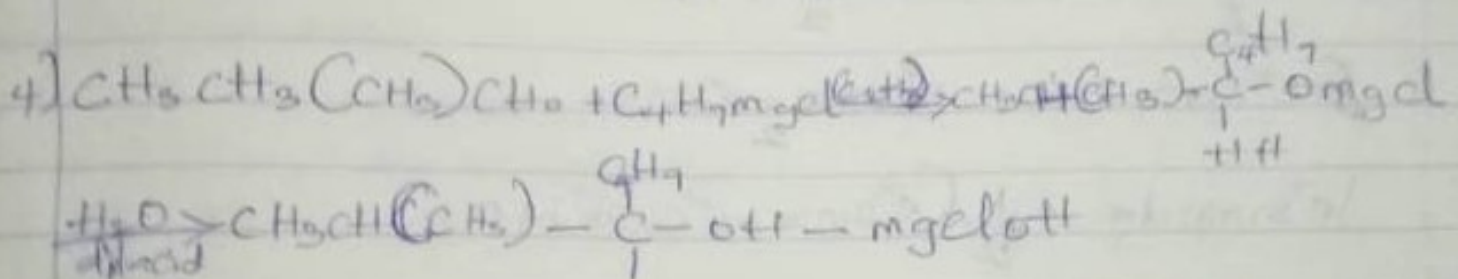
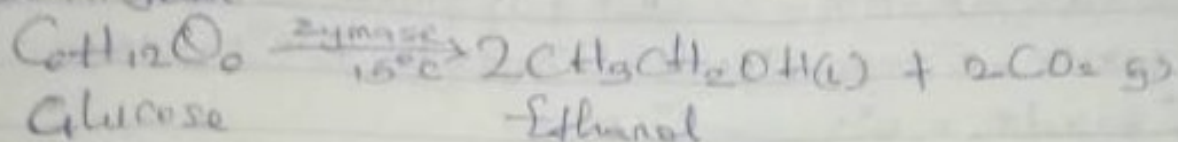


b) The maltose is broken down into a glucose solution of yeast which contains the enzymes (maltase) at a temperature of  $15^\circ C$



c) The glucose solution at a constant temperature of  $15^\circ C$  is then converted into alcohol by the enzyme (zymase) also in yeast



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### Chem 102 Assignment

1) Classification based on number of hydrogen atoms attached to the Carbon atoms containing hydroxyl groups.

If the number of hydrogen atoms are ~~two~~ three or two, it is considered a Primary alcohol and if the number of hydrogen atoms is one, it is considered a secondary alcohol and if no hydrogen atom is attached, it is tertiary alcohol.  
e.g  $\text{CH}_3\text{OH}$  (Primary alcohol)  $1^\circ$   $\text{CH}_3\text{CH}(\text{OH})\text{CH}_3$  (Secondary alcohol  $2^\circ$ ),  $(\text{CH}_3)_3\text{C-OH}$  (Tertiary alcohol  $3^\circ$ )

2) Classification based on the number of hydroxyl groups they possess. If one hydroxyl group is present, it is monohydric alcohol. If two hydroxyl groups are present, it is a dihydric alcohol and if it's three hydroxyl groups, it is said to be a trihydric alcohol (triol). Polyhydric alcohols have more than three hydroxyl groups.

$\text{CH}_3\text{CH}_2\text{CH}_2\text{OH}$  (monohydric),  $\text{HOCH}_2\text{CH}_2\text{OH}$  (Dihydric)  
 $\text{OHCH}_2\text{CH}(\text{OH})\text{CH}_2\text{OH}$  (trihydric alcohol)

3) Solubility: Lower alcohol with up to three carbon atoms in their molecules are soluble in water hydrogen bond. The solubility of alcohols in water decreases with increasing relative molecular mass. All monohydric alcohols are soluble in organic solvents.

4) The material containing starch is warmed with is warmed with malt to  $60^\circ\text{C}$  for a period of time and converted into malt by the enzyme (diastase) contained in the malt.