

Name: EZINWOSA O. LUEBUGA BAMA

MEDICINE & SURGERY

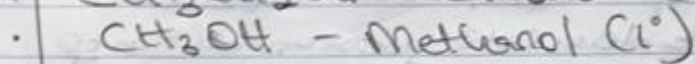
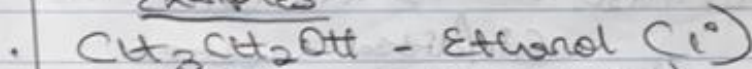
19/MHS01/170

CHM 102

Assignment

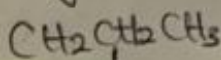
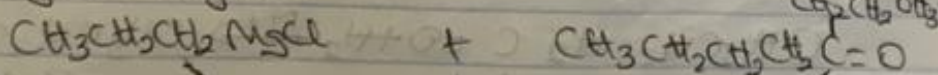
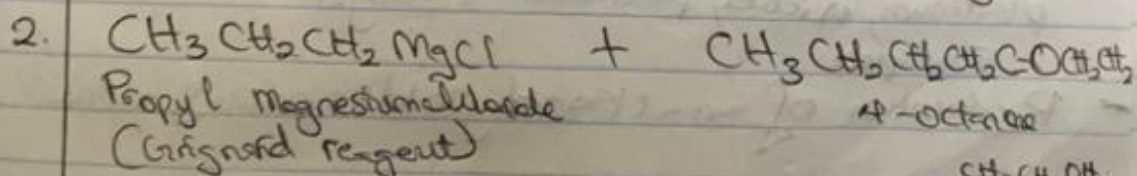
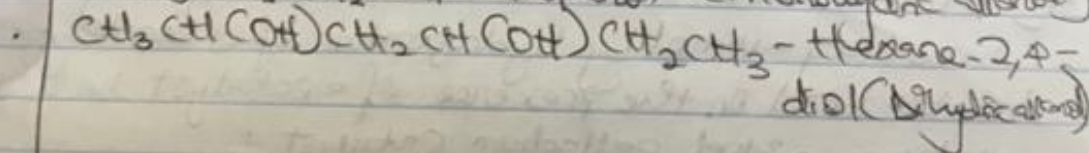
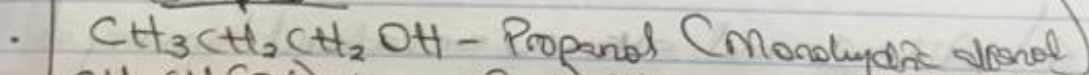
- 1a) Classification based on the number of hydrogen atoms attached to the carbon atom containing the hydroxyl group. If the ~~number~~ number of hydrogen atoms attached to the carbon bearing the hydroxyl group are three or two, it is called primary alcohol (1°). If it is one hydrogen atom, it is called secondary alcohol (2°) and if no hydrogen atom is attached to the carbon atom bearing the hydroxyl group, it is called tertiary alcohol (3°).

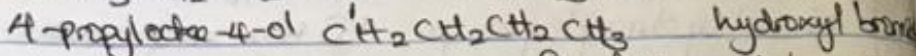
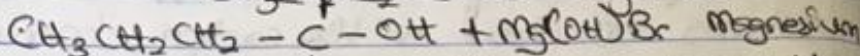
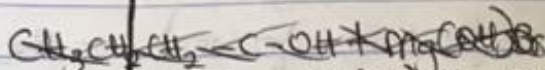
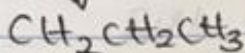
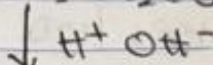
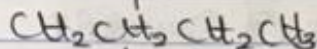
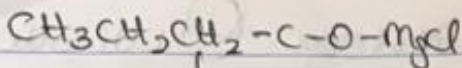
Examples:



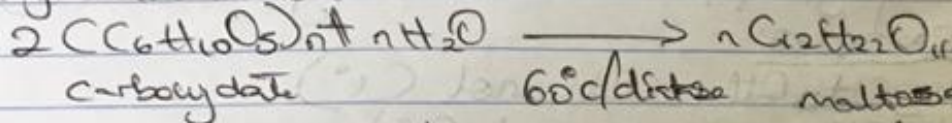
- b) Classification based on the number of hydroxyl groups they possess. Monohydric alcohols have one hydroxyl group present, Dihydric alcohols also called Glycols have two hydroxyl groups present while trihydric alcohols or triols have three hydroxyl groups present in the structure of the alcohol. Polyhydric alcohols or polyols have more than three hydroxyl groups.

Examples:

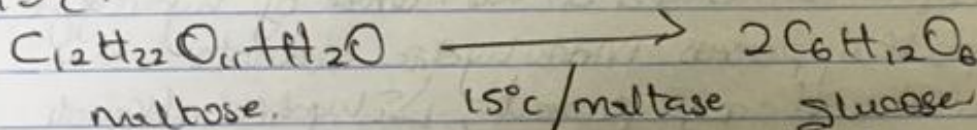




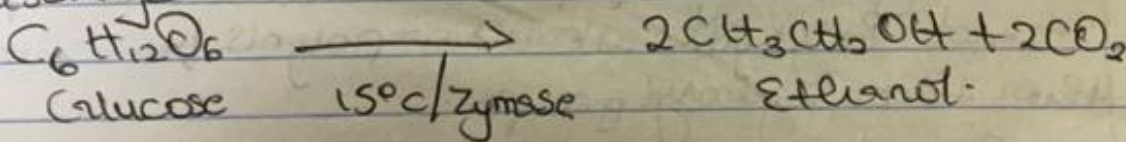
3.) The biological catalyst, enzymes found in yeast break down the carbohydrate molecule into ethanol to give a yield of 95%. The starch containing materials include molasses, potatoes, cereals, rice and on adding with malt to 60°C for a specific period of time or converted into maltose by the enzyme diastase contained in the malt.



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



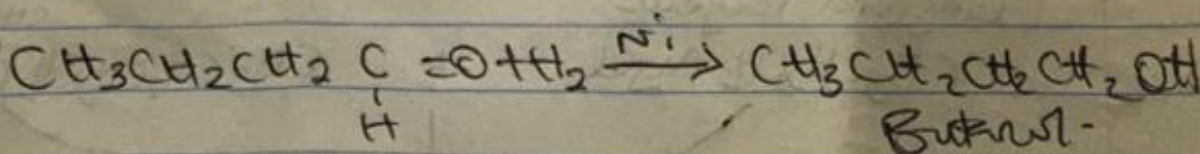
The glucose at constant temperature of 15°C is then converted into alcohol by the enzyme zymase contained in yeast.



4.) Alkanoes and alkenes are reduced to primary and secondary alcohol by hydrogenation of carbon-oxygen double bond in the presence of a catalyst such as platinum, nickel, palladium catalyst.

Examples:

- Reduction of an alkanoal yields a primary alcohol.

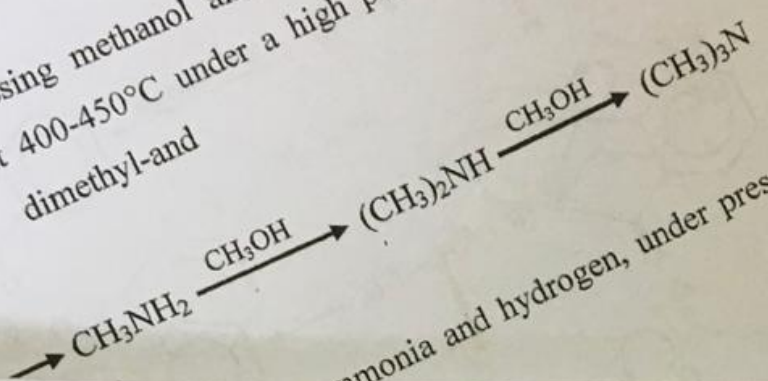


Butanol

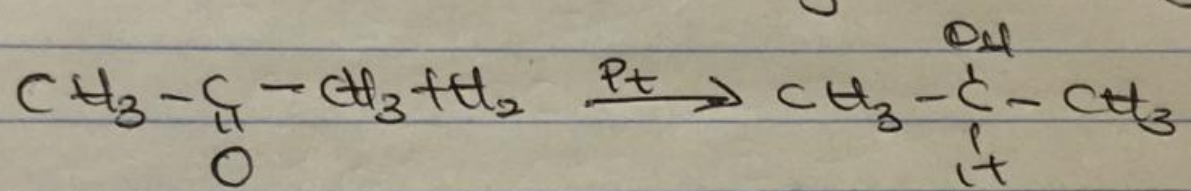
...icant for
 ... usual non-polar org...
 ... of the amines.
 ... highly toxic liquid. It is slightly soluble in water.
 ... The physical state of other aromatic amines is greatly
 ... further substituents on the ring.

INDUSTRIAL AND SYNTHETIC PREPARATIONS

... are manufactured by passing methanol and ammonia over trioxoaluminate (III) dimethyl- and trimethylamines.
 ... on an inert support at 400-450°C under a high pressure. Further methanolation
 ... ammonia and hydrogen, under pressure, over a



- Reduction of an alkanone yield secondary alcohol



2-propanone.

2-propanol.