

ONYEDINMA NZUBECHUKWU NMEOMA

NURSING

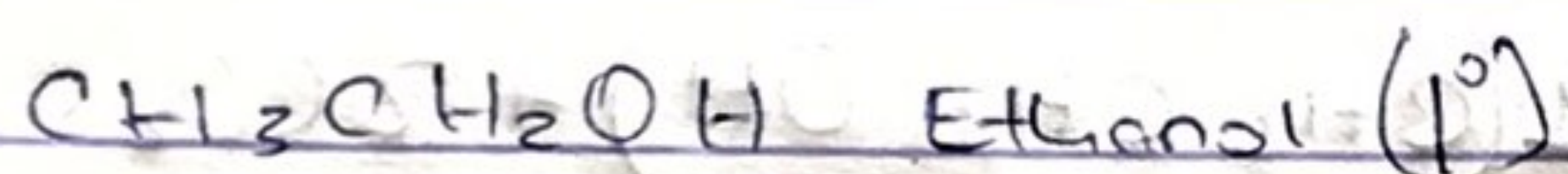
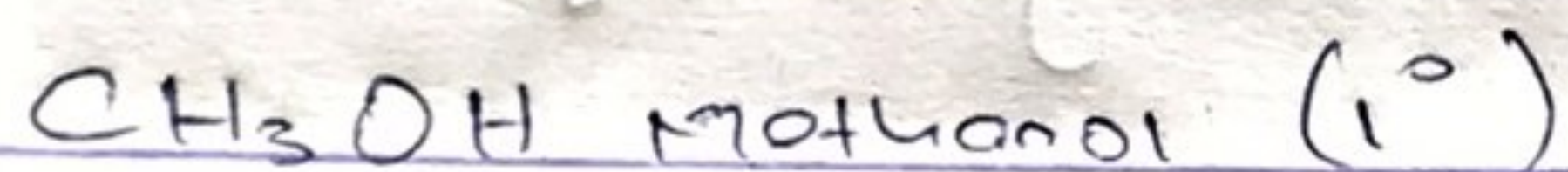
19/MAY/2021

CHEM 102 ASSIGNMENT

Solution

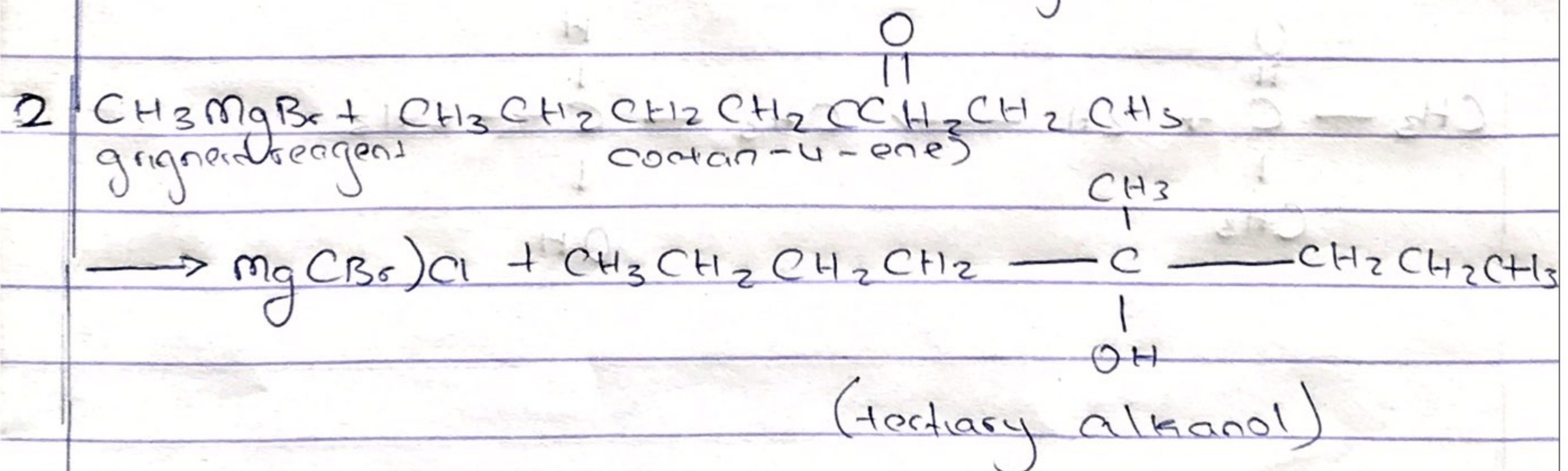
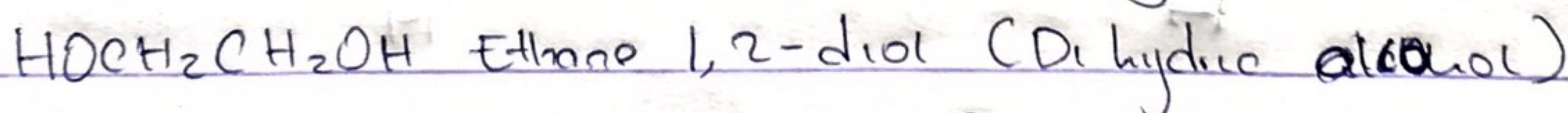
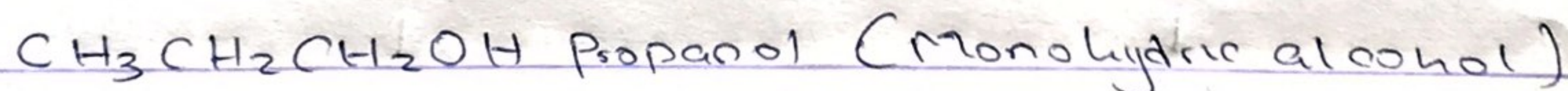
1a) Alkanols are classified based on the number of hydrogen atoms attached to the carbon atom containing the hydroxyl group. If the numbers of hydrogen atoms attached to the carbon atom bearing the hydroxyl group are three or two it is called a primary alcohol (1°). If it is a hydrogen atom, it is called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

Examples



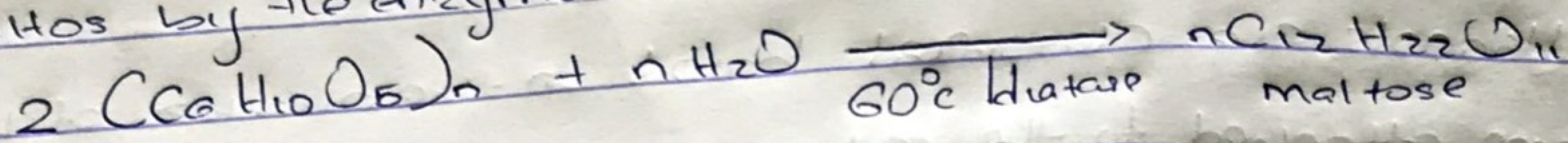
2. This classification is based on the number of hydroxyl groups they possess. Monohydric alcohols have one hydroxyl group present in the alcohol structure. Dihydric alcohols are also called Glycols have two hydroxyl groups present in the alcohol structure while trihydric alcohols or triols have three hydroxyl groups present in the structure of the alcohol. Polyhydric alcohols or polyols have more than three hydroxyl groups

Examples

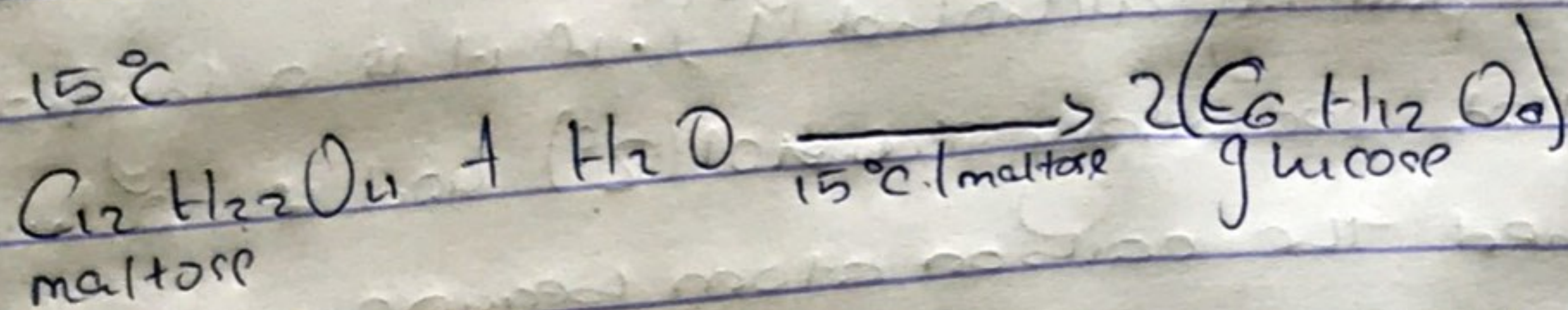


3.) The starch containing materials by warming with malt

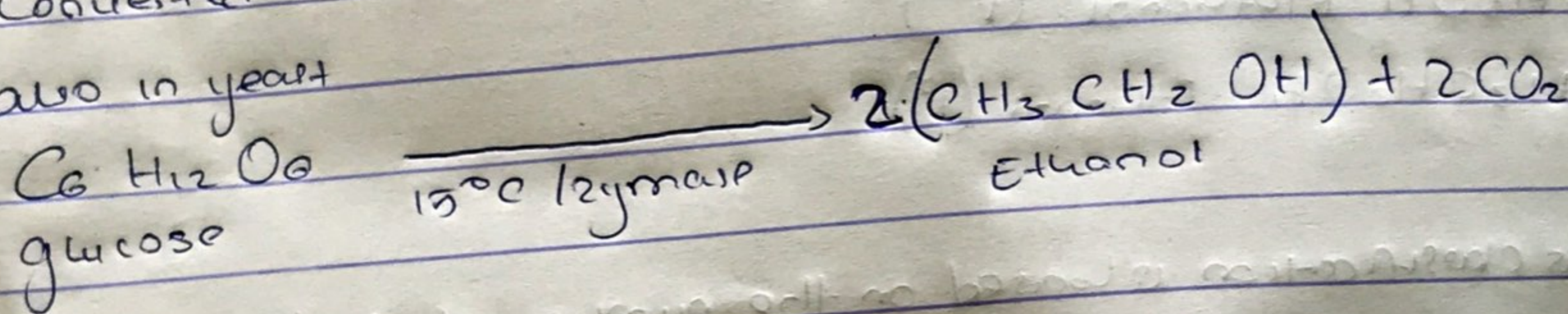
to 60°C for a specific period of time and converted into maltos by the enzyme diastase contained in the malt



The maltase is broken down into glucose on addition of that which contains the enzyme maltos, 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



4. Reduction of Alkanone leads to a secondary alcohol and the reduction of Alkanal leads to a primary alcohol. Hence the specific examples; The reduction of propanone leads to propan-2-ol and the reduction of ethanal leads to ethanol

