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**DEPT.: GEOLOGY**

**MATRIC NO. 19/SCI14/011**

**COURSE CODE: CHM 102**

**ASSIGNMENT**

1. IUPAC names of the following compounds

* CH3OCH3 – Methoxymethane
* CH3CH2OCH2CH3 – Ethyoxyethane
* (CH3CH2CH2CH2)2O – Butaoxymethane
* CH2CH2OCH3 – Ethyoxymethane
* CH­3CH2CH2OCH2CH3 – Propanoxyethane

1. PROPERTIES OF ETHERS

* They are less soluble in water than corresponding alcohols
* They are colourless and have a peasant odour.
* They are less dense in water, density increases with increasing molecules mass.

1. PREPARTION OF ETHERS

* Dehydration of Alcohols: In this process it will be heated with H2SO4. This process is called continuous etherification. If the temperature is as high as 170o – 180o. It will further lead to alkene.

H2SO4 heat

2ROH R-OR1 + H2O

* From haloalkene and Silver(II)Oxide

warm

2Rx + Ag2O R-OR + 2Agx

1. USES OF ETHYLENE OXIDE

* Ethylene Oxide is used in the production of nonimre emulsifying agents
* It is used as a gaseous sterilizing agent
* It is used as an intermediate hydrolytic manufacture of ethylene glycol.