

Ityoachimn faith

Mnena

19/MH501/210

MBBS

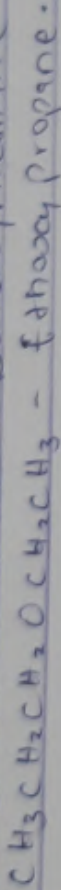
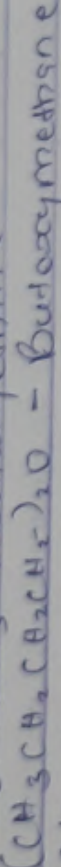
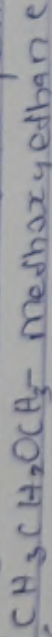
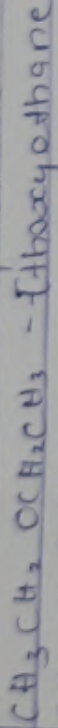
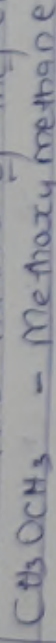
ITIYARACHIMMATHA MNEENA

19/MSO1/210

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CHM 102.

1. The IUPAC names of the following Organic Compounds,



2. Properties of ethers.

- Physical state: At room temperature, ethers are colourless, neutral liquids with pleasant odours. The lower aliphatic ethers are highly flammable gases or volatile liquids.

- Solubility: Ethers are less soluble in water than the corresponding alcohols. Lower molecular weight ethers such as methoxy methane are poorly soluble in water since the molecule is able to form hydrogen bonds with the water molecules.

- Reactivity: Ethers are inert at moderate temperatures. Their inertness at moderate temperatures leads to their wide use as reaction media.

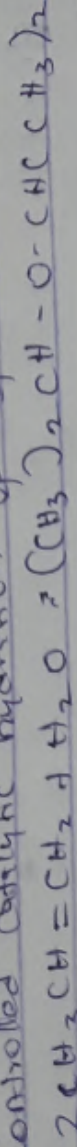
3. Methods of preparing ethers.

- Partial dehydration of alcohols

Simple ethers are prepared from alcohols by catalytic dehydration. The alcohol in excess and concentrated sulfuric acid is heated at a carefully maintained temperature of 140°C . This process is known as continuous dehydration.

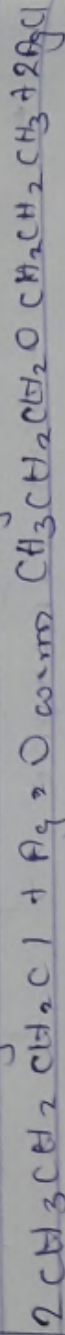
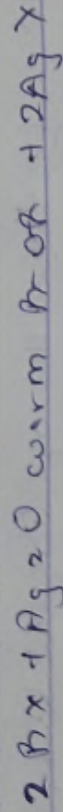


- Controlled catalytic hydration of olefins.



2-isopropoxypropane.

From haloalkanes and dry silver oxide.



4. Uses of ethylene oxide.

• It is made industrially by oxidation of ethylene with air over a

silver catalyst.

i) It is used as a intermediate in the hydrolytic manufacture of ethylene glycol.

ii) It is used in the preparation of nonionic emulsifying agents, plastics, plasticizers and several synthetic textiles.

iii) It is used as a gaseous sterilizing agent.