FADARE AYOMIDE IYANUOLUWA

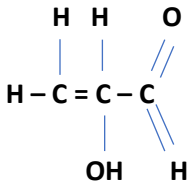
19/MHS09/008

DENTISTRY

CHEMISTRY ASSIGNMENT

1. Name the functional group present in each of the following molecules
   i. $CH_2=(OH)HCO$

The structural formula

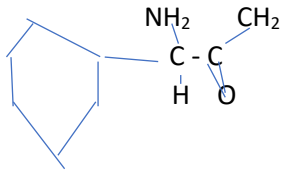


Functional parents

- **Double bond chain (Alkene)**
- **OH hydroxyl group**
- **Alkanol**

   ii. $C_6H_5CH(NH_2)\ COCH_3$

The structural formula

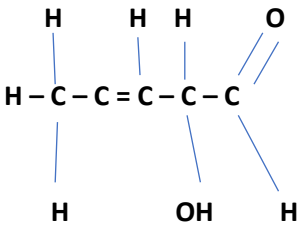


Functional groups present

- **Phenoyl group double bonds**
- **Amine**
- **Alkanone / ketone**

   iii. $CH_3C=CHCH(OH)CHO$

The structural formula



Functional groups present.

- **Alkene**

- **Hydroxyl group**
- **Alkanol**

2. **Recall,**

$[\alpha]^{T}_{\lambda} = \frac{\alpha}{I \times C}$

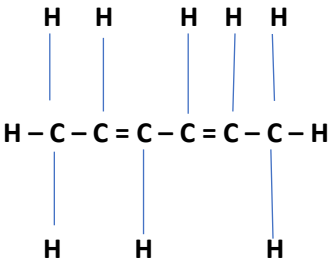
Where,
L =length of sample
C = $\frac{mass}{volume}$ $[\frac{g}{dm}]$ **or** $\frac{g}{mol}$
α = observed rotation

$S_{\gamma} = \frac{1.0}{1.0 \times \frac{0.856}{1.0}}$

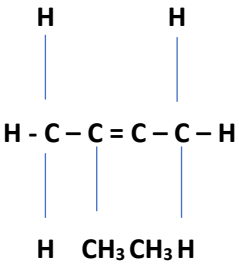
$S_{\gamma} = \frac{1}{0.0856} = 11.68$

3. **Draw the possible geometric isomers (where possible) for each of the following compounds**

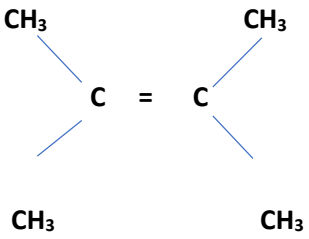
I. **Hexa-2,4-diene**



II. **2,3- Dimethylbut-2-ene**



OR


CH3
CH3
C
=
C
CH3
CH3