

MONDAY - JERUMEH IBUEBUE

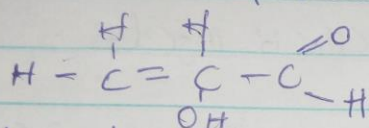
19/MTHSO1/246

MTHS MBBS (00LV)

CHM (02 assignmet)

1) i)  $\text{CH}_2 = \text{C}(\text{OH})\text{HCHO}$

The structural formula:

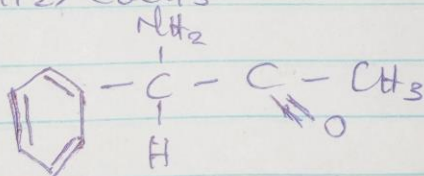


Functional groups present are:

- Double bond chain (=) Alkene
- -OH (hydroxyl group)
- $-\text{C}(=\text{O})-\text{H}$  (aldehyde)

ii)  $\text{C}_6\text{H}_5\text{CH}(\text{NH}_2)\text{COCH}_3$

Structure:

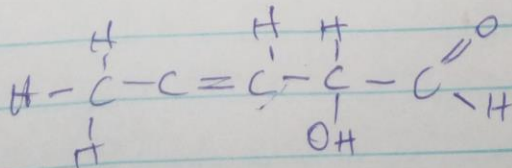


Functional groups present are:

- Phenyl group ( $\text{C}_6\text{H}_5$ ) with double bonds (=)
- Amine
- Alkanone Ketone ( $\text{C}(=\text{O})-\text{R}$ )

iii)  $\text{CH}_3\text{C}=\text{CHCH}(\text{OH})\text{CHO}$

Structure:



112 contd.

Functional groups present

- Alkene (C=C)

- Hydroxyl group (-OH)

- Alkanol (C-OH)

2) Recall,  $[\alpha]_D^{25} = \frac{\alpha}{l \times c}$

where:  $l$  = length of sample tube

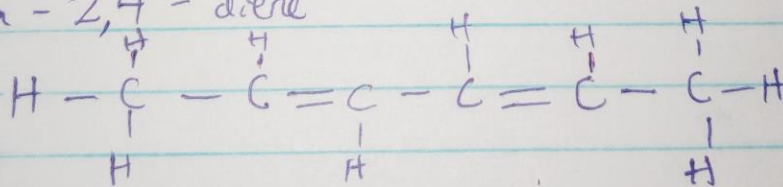
$c = \frac{\text{mass}}{\text{volume}}$  (g/dm<sup>3</sup>) or (g/ml)

$\alpha$  = observed rotation.

$$S_r = \frac{1.0}{1.0 \times \left(\frac{0.856}{10}\right)} = \frac{1}{0.0856} = 11.68$$

$S_r = 11.68$

3) Hexa-2,4-diene



i) 2,3-Dimethylbut-2-ene

