AFE BABALOLA UNIVERSITY

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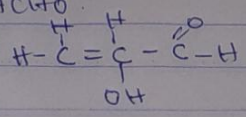
MATRIC NUMBER: 19/MHS01/315

CHEMISTRY ASSIGNMENT

1(i) $CH_2=C(OH)HCHO$

structural formula:

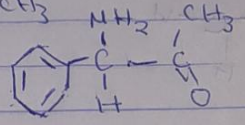


functional group present are;

- Double bond chain (Alkene)
- OH (Hydroxyl group)
- $-C(=O)-H$ (Alkanol)

(ii) $C_6H_5CH(NH_2)COCH_3$

structural formula;

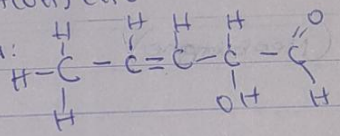


Functional group present are;

- Phenyl group (C_6H_5) with double bonds
- Amine
- Alkanone / Ketone ($-C(=O)-R$)

(iii) $CH_3CH=CHCH(OH)CHO$

structural formula:



Functional group present

- Alkene ($C=C$)
- Hydroxyl group (OH)
- Alkanol ($-C(=O)-H$)

2. Recall;

$$[\alpha]_\lambda^T = \frac{\alpha}{l \times c}$$

where

l = Length of sample tube

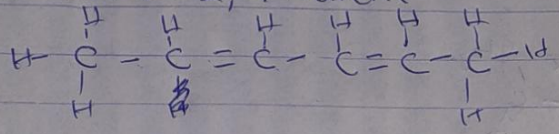
$c = \frac{\text{mass}}{\text{volume}}$ (g/dm) or (g/mol)

α = observed rotation

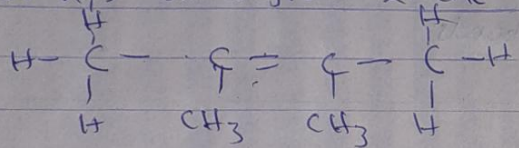
$$S_r = \frac{1.0}{1.0 \times \left(\frac{0.856}{10}\right)}$$

$$S_r = \frac{1}{0.0856} = 11.68$$

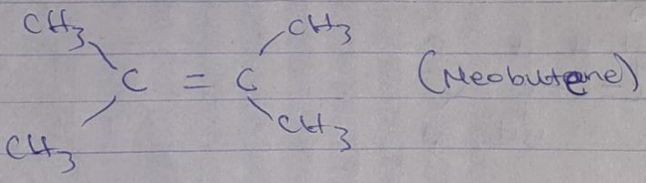
3(i) Hexa-2,4-diene



(ii) 2,3-Dimethylbut-2-ene



OR



(Neobutene)