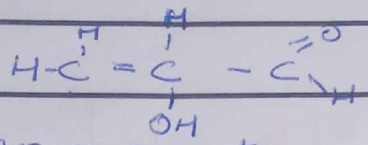
NAME: IBRAHIM OSAGBEMEH DEPT: CIVIL ENGINEERING.
CHM102 MATNO: 19/ENG03/012.

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



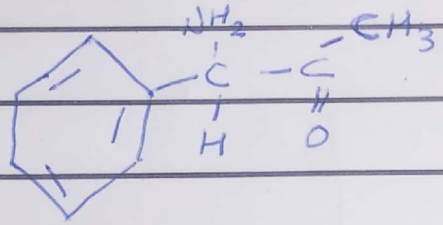
Groups present

a. Alkene

b. Alcohol

c. Hydroxyl

ii) $C_6H_5CH(NH_2)COCH_3$



functional groups

a. Phenyl group ($C_6H_5$) with double bonds

b. Amine

c. Alkanone/ketone ($C(=O)-R$)

iii) $CH_3C=CHCH(OH)CHO$

functional Present

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

2. Recall;

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

where.

$l$ = length of sample tube.

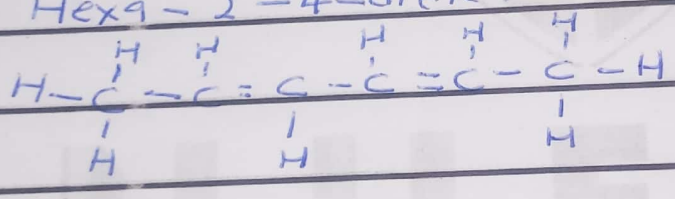
$c = \frac{\text{mass}}{\text{vol.}}$ $(g/dm)$ or $(g/mol)$

$\alpha$ = rotation

$$S_\gamma = \frac{1.0}{10 \times \left(\frac{0.256}{10}\right)}$$

$$S_\gamma = \frac{1}{0.0256} = 11.68$$

3) i, Hexa-2-4-diene.



ii) 2, 3 - Dimethyl but-2-ene.