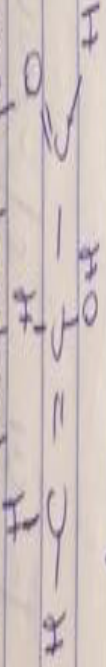


Name: Travis Victoria Isoruna
 Matric No: 191415021053
 Department: Nursing Science
 Course: Matric 1st Year Science
 Class: CP2 CHM 102

1) Name of the functional groups present in each of the following molecules



Functional groups

- Double bond $\text{C}=\text{O}$ = (Alkene)

- OH (Hydroxyl group)

- CH_3 (Alkyl group)

2) $\text{C}_6\text{H}_5\text{CH}_2\text{COCH}_3$
Structural formula



Functional groups

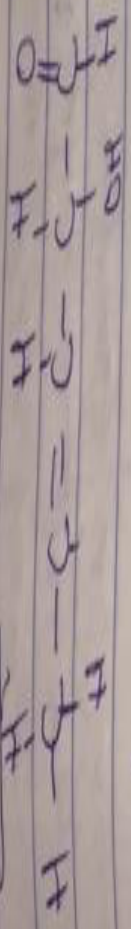
- Phenyl group (C_6H_5) with double bonds

- Ketone ($\text{C}=\text{O}$)

- Alkane (Ketone)

iii) $C_nH_{2n}C = CH_2CH(OH)CHO$

Structure



Functional group

Alkene ($C=C$)

Hydroxyl group (OH)

Alkyl group (CH_2)

2) Recall

$$\frac{\sum \alpha \sum T}{\sum N + C} = \frac{\alpha}{N + C}$$

where

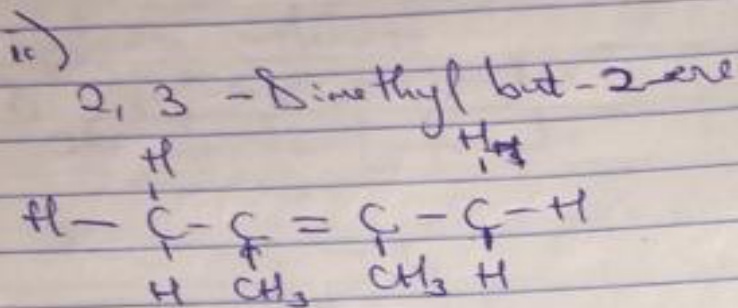
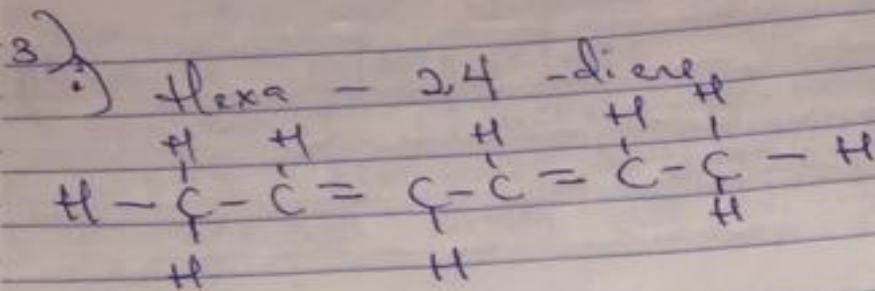
L - length of sample tube

C = $\frac{\text{mass}}{\text{volume}}$ (density) or (yield)

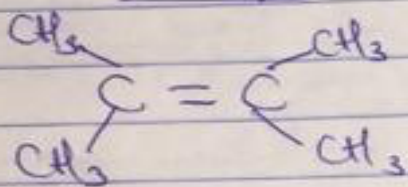
α = observed deflection

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

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



OR



(Neo-butene)