

NAME: OGUNBANWO OLUWAFOLAYO SIKEMI

MATRIC NO: 19/MH501/295

DEPARTMENT: MBBS

i) $\text{CH}_2 = \text{C}(\text{OH})\text{HCHO}$: alcohol (OH), Aldehyde ($\overset{\text{O}}{\parallel}\text{C}-\text{H}$) & Alkene (=)

ii) $\text{C}_6\text{H}_5\text{CH}(\text{NH}_2)\text{COCH}_3$: Amine (NH_2), Ketone ($\text{C}=\text{O}$) & phenyl group (C_6H_5) with double bond

iii) $\text{CH}_3\text{C}=\text{CH}(\text{CH}_2\text{OH})\text{CHO}$: Alkene (=), Alcohol (OH), Aldehyde ($\overset{\text{O}}{\parallel}\text{C}-\text{H}$)

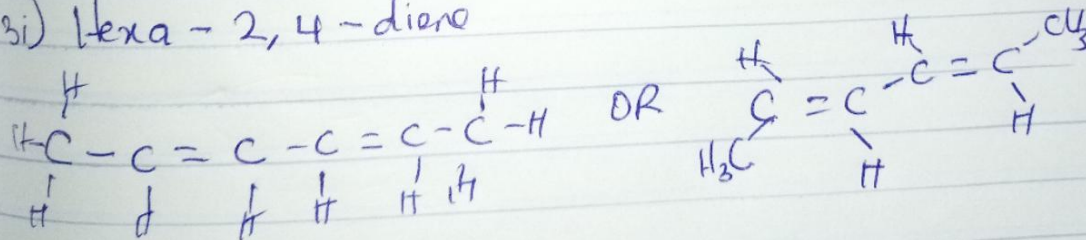
2) Specific rotation = $\frac{\text{Observed rotation (degrees)}}{(\text{Concentration g/cm}^3) \times \text{Path length of sample cell (dm)}}$

Observed rotation = 1°

conc in $\text{g/cm}^3 = \frac{0.856}{10} = 0.0856 \text{ g/cm}^3$

Specific rotation = $\frac{1^\circ}{0.0856 \text{ g/cm}^3 \times 1 \text{ dm}} = 11.68^\circ \text{ g}^{-1} \text{ cm}^3 \text{ dm}^{-1}$

3i) Hexa-2,4-diene



ii) 2,3-Dimethylbut-2-ene

