NAME: Otubusin Florence Adeola No Date . .

Matric no: 19/MHS01/367

Department: MBBS

1 i) $CH_2=C(OH)HCHO$: alcohol (OH), Aldehyde ($\overset{O}{\overset{\|}{C}}H$) & Alkene (=)

ii) $C_6H_5CH(NH_2)COCH$: Amine (NH_2), Ketone (C=O) & phenoyl group (C_6H_5) with double bond

iii) $CH_3C=CHCH(OH)CHO$: Alkene (=), Alcohol (OH), Aldehyde ($\overset{O}{\overset{\|}{C}}H$)

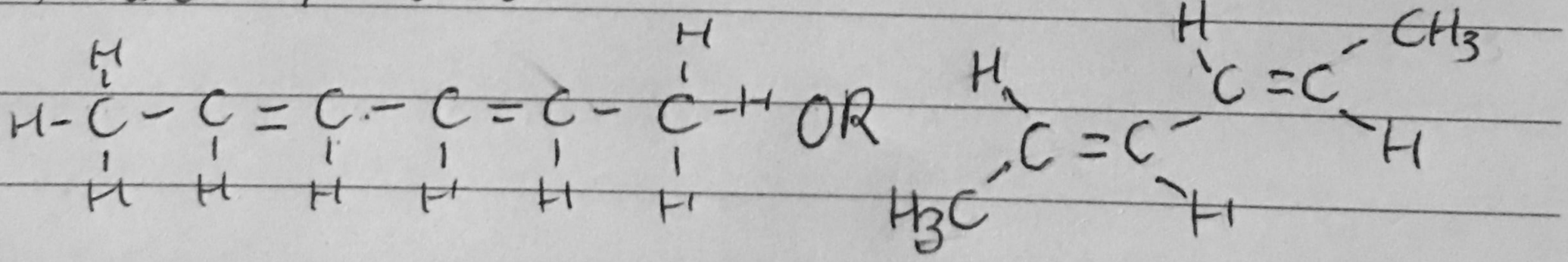
2) Specific rotation = $\frac{\text{observed rotation (degrees)}}{\text{(concentration g/cm}^3\text{)} \times \text{(path length of sample cell in dm)}}$

observed rotation = 1°

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

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

3 i) Hexa-2,4-diene



ii) 2,3-Dimethylbut-2-ene