

SHERIFF FATIMA
 19/MHSC01/398
 MBBS

1) Formyl group (aldehyde) group $[CHO]$
 Hydroxyl group (OH)
 Alkene group $(C=C)$

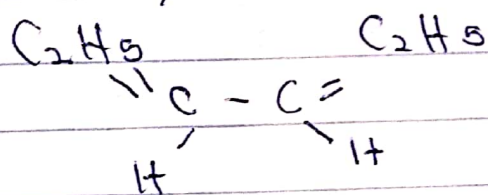
ii) Keto group (carbonyl group) $: C=O$
 Amino group (NH_2)
 Aromatic group (phenyl group)

iii) Aldehyde group
 Hydroxyl group
 double bond (alkene group)

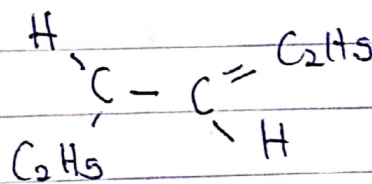
2) Recall $[\alpha]_D^T = \frac{\alpha}{c \times l}$ where l = length of the sample used
 $c = \frac{\text{mass}}{\text{volume}}$ (g/dm^3) or (g/mol)
 α = observed rotation

$$= \frac{1}{1 \times (0.856/w)} = \frac{1}{0.0856} = +11.68^\circ$$

3) Hexa-2,4-diene

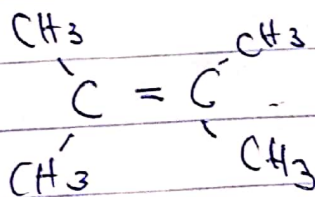
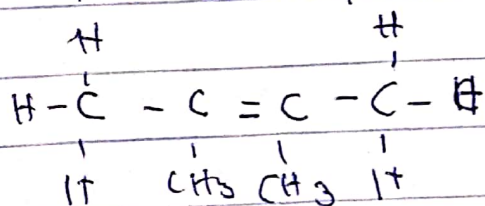


cis Hex-2,4-diene



Trans, Hex-2,4-diene

iv) 2,3-Dimethylbut-2-ene



No geometric isomer