ARIYO ENIOLA GRACE

19/MHS11/034

PHARMACY

ASSIGNMENT ON STEREOCHEMISTRY AND FUNCTIONAL GROUP

1.PRESENT FUNCTIONAL GROUPS

i) CH2=C(OH)HCHO

- -OH group (alcohol)
- -HC=O group (aldehyde)
- -C=C group(alkene)

ii) C2H5(NH2)COCH3

- -NH2 group(amine)
- -C=O group(ketone)

iii) CH3CH=CHCH(OH)CHO

- -C=C group (alkene)
- -OH group (alcohol)
- -HC=O group (aldehyde)

Mass of tartaric acid = 0.856g

Volume of water diluted in = $100cm^3$

recall,

$$\text{Mass conc.} = \frac{\text{mass}}{\text{volume}} = \frac{0.856g}{100cm^3} = 0.0856g$$

Volume of polarimeter tube = $1dm^3$

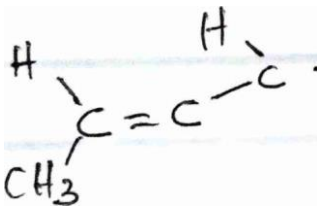
∴ length of tube = 1dm

observed rotation (α) = + 1.0° at 20°C

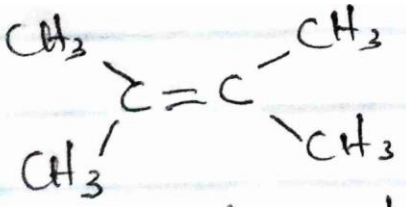
Specific rotation [α] = ?

$$[\alpha] = \frac{\alpha}{c \times l} = \frac{+1.0°}{0.0856gcm^{-3} \times 1dm}$$

$$[\alpha] = \frac{+1}{0.0856} = +11.6822°$$



-trans-hexa-2, 4-diene



2,3 dimethyl but-2-ene

Note:- It does not have a geometric isomers because the are two identical groups attached to the same carbon of the double bond.