

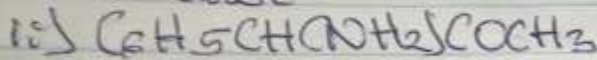
Name: Okafor Tochukwu Olufunmilayo
Department: Mechanical Engineering
Matric No: 19/ENG06/045
Course: CHM102

Assignment



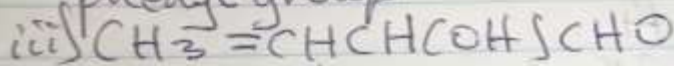
Functional groups present:

- Alkene (double bond)
- OH (hydroxyl group)
- Alkanol



Functional groups present:

- Amine
- Alkane
- phenyl group



Functional groups present:

- Alkene (double bond)
- Hydroxyl
- Alkanol

2) $\alpha = 1^\circ$

$$c = \frac{0.856\text{g}}{10\text{cm}^3} = 8.56 \times 10^{-2} \text{g cm}^{-3}$$

$$l = 1.0 \text{ dm}$$

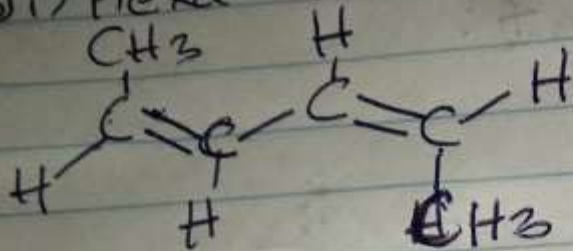
$$\text{Specific rotation } (\alpha_T) = \frac{\alpha}{c \cdot l}$$

$$= \frac{1}{1}$$

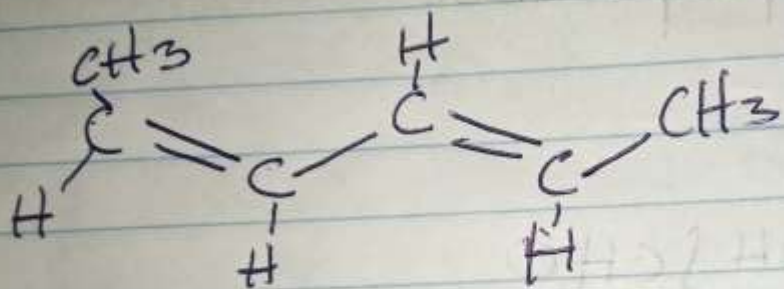
$$= 8.56 \times 10^{-2} \times 1$$

$$= 11.68 \text{ } ^\circ \text{ g}^{-1} \text{ cm}^3 \text{ dm}^{-1}$$

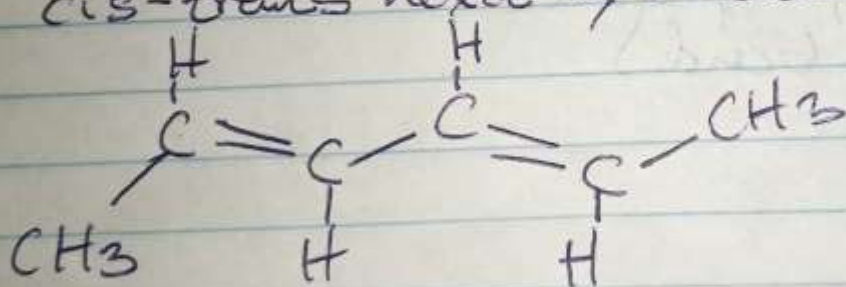
3i) Hexa-2,4-diene



cis-cis hexa-2,4-diene



cis-trans hexa-2,4-diene



trans-trans hexa-2,4-diene

ii) 2,3-dimethyl but-2-ene

