SALAWU-ERIH ELIZABETH
19/MHS01/393
MEDICINE AND SURGERY
CHM 102
29/04/2020

ASSIGNMENT

1. **Name the functional groups present in each of the following molecules:**
   I. $CH_2=C(OH)HCHO$ ——> -OH (Alkanol)
   II. $C_6H_5CH(NH_2)COCH_3$ ——> -C=O
   \ (Amide)
   NH_2

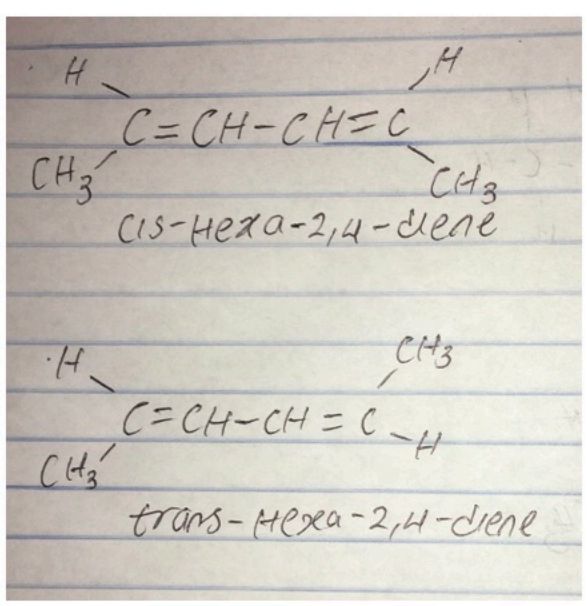
   III. $CH_3C=CHCH(OH)CHO$ ——> -OH (Alkanol) and -C=O
   \ (Alkanal)
   H

2. Specific rotation = $\frac{\text{observed rotation [in degrees]}}{([\text{con gcm}^{-3}] \times \text{path length of sample cal in dm})}$

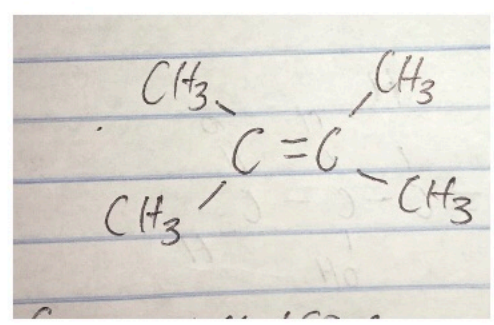
   Conc, $gcm^{-3} = \frac{0.856g}{10cm^3}$
   $= 0.0856gcm^{-3}$

   Observed rotation = +1.0°
   Path length of sample = 1 dm
   - Specific rotation = $\frac{+1}{[0.0856]\,[1]}$
   $= 11.68g^{-1}cm^3dm^{-1}$

3. **(I)** Hexa-2,4-diene



(II) 2,3-Dimethylbut-2-ene



Geometric isomerism is not possible for 2,3-Dimethylbut-2-ene