Shinku Williams Gwahemen
19/ENG05/059
Mechatronics
CHM 102

Functional group present per compound: | Aldehydes

1.(i) $CH_2=C(OH)HCHO \rightarrow (OH)$ alkanols or alcohols,

(ii) $C_6H_5CH(NH_2)COCH_3 \rightarrow (NH_2)$ Amines

(iii) $CH_3C=CHCH(OH)CHO$ – Aldehydes, alkanols.

2. 0.856g → mass 10cm³ – volume

Conc. $= \frac{0.865g}{10cm^3} = 0.0856g/cm^3$

absorption rotation = +1.0

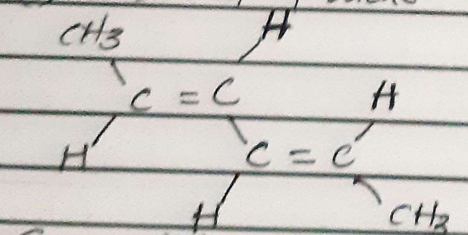
path length of sample cell in dm = 1dm

Specific rotation = $\frac{\text{observed rotation}}{\text{Conc in } g/cm^3 \times \text{path length of sample cell in dm}^3}$

$= \frac{+1}{(0.085) \times (1)}$

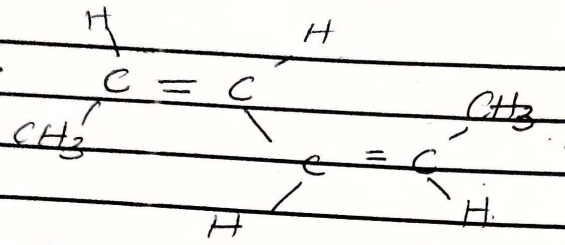
$= 11.6822 g^{-1} cm^3 dm^{-1}$

3.(i) Hexan 2, 4 diene

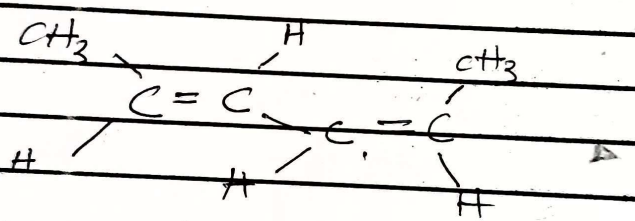


(2E, 4E) hexan 2, 4 diene

trans, - trans isomers

2. 

(2z, 4z) hexan 2, 4 diene
Cis – cis isomers.

3. 

(2z, 4E) hexan - 2, 4- diene
Cis-trans isomers.