NAME:ADENOPO DIVINE INIOLUWA
MATRIC NO:19/MHS08/001
DEPARTMENT:PUBLIC HEALTH
COURSE:CHM 102

ASSIGNMENT

(1) functional groups present in:

(i) $CH_2=C(OH)CHCHO$: Aldehyde ~~group~~ functional group.

(ii) $C_6H_5CH(NH_2)COCH_3$: Amide functional group

(iii) $CH_3C=CHCH(OH)CHO$: Aldehyde functional group.

2) Using Specific rotation = $\frac{\text{observed rotation (degrees)}}{\text{(conc. g/cm}^3\text{)} \times \text{(path length of sample cell in dm}}$

O.R = +1.0°C

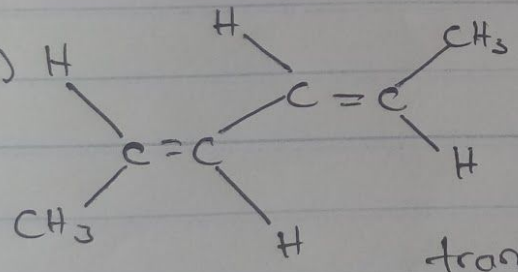
Conc $g/cm^3 = \frac{0.856g}{10cm^3} = 0.0856 g/cm^3$

length of sample cell = 1dm

∴ Specific rotation of (2R,3R)tartic acid = $\frac{+1.0°}{0.0856 \times 1dm}$

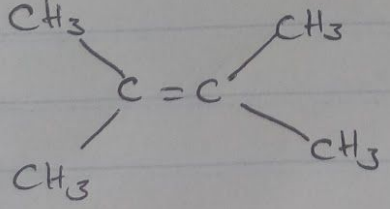
$= +11.68° g^{-1}cm^3dm^{-1}$

3) (a)



trans-hexa-2,4-diene.

(b)



2,3 dimethyl but-2-ene.