

NAME : BELLO MOYONINUOLUWA ESTHER

MAT.NO : 19/MHS02/035

DEPT : NURSING

COURSE : CHM102 [GENERAL CHEMISTRY II]

ASSIGNMENT TITLE : STEREOCHEMISTRY AND FUNCTIONAL GROUP

1. Name the functional groups present in each of the following molecules
2. CH2=C(OH)HCHO – ( Aldehyde)
3. C6H5CH(NH2)COCH3 - ( Methoxy)
4. CH3C=CHCH(OH)CHO – (Aldehyde)
5. A 0.856 g sample of pure (2R, 3R)-tatrtaric acid was diluted to 10cm3 with water and placed in a 1.0 dm polarimeter tube. the observed rotation at 200 C was +1.00. Calculate the specific rotation of (2R, 3R)-tatrtaric acid.

**Solution**

****

WHERE [α]= specific rotation

λ = wavelength

α= observed rotation [20$°]$

c= concentration[$\frac{0.856g}{10ml}=0.0856g/ml$]

conversion of 10$cm^{3 }$to ml=10ml

T=temperature

[α]=$\frac{20}{0.0856 ×10 }=\frac{20}{0.856}=23.4°$

Therefore specific rotation is 23.4$°$

1. Draw the possible geometric isomers (where possible) for each of the following compounds
2. Hexa-2,4-diene



1. 2,3-Dimethylbut-2-ene

