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Pharmacy

19/MHS11/028

Chemistry 102 Assignment Answers

1. The functional groups present in the following

i. CH2=C(OH)HCHO

The functional group present are

Double bond chain – Alkene

Hydroxyl group for OH

Alkanol

ii. C6H5CH(NH2) COCH3

The functional group present are

Amine(NH2)

Ketone

Phenol group with double bonds

iii. CH3C=CHCH(OH)CHO

The functional groups present are

Alkanol

Hydroxyl group for OH

2. 0.856g is the mass of tartaric acid

Volume of water = 10cm3

Volume of polarimeter tube = 1.0 dm

Mass concentration = mass of x/volume

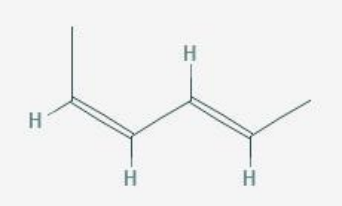
Therefore, 0.856g/10cm3= 0.0865g/cm3

Observed rotation at 20^{0C} is $+1.0^{0}$

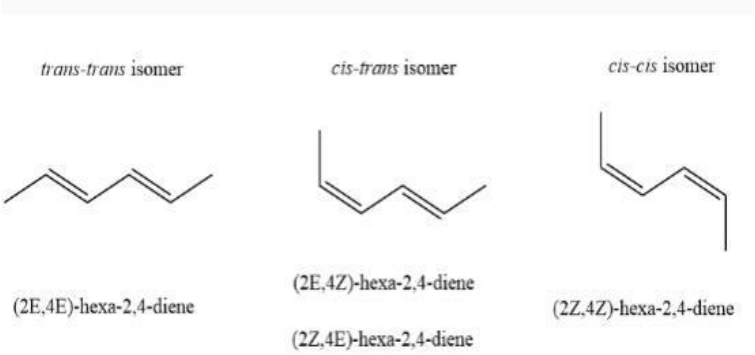
Therefore, specific rotation of (2R,3R)- tartaric acid = $=1.0^{0}/0.0856gcm^{-3}$ x 1dm

$=11.6822^0$

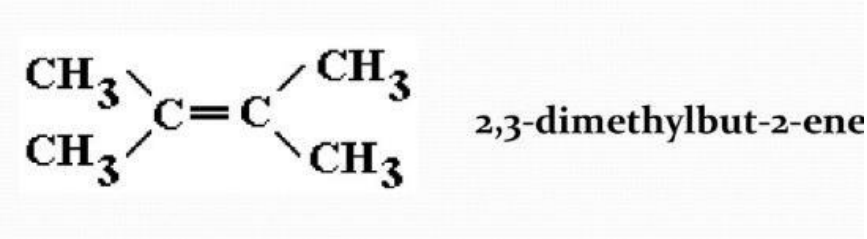
3. Hexa-2,4-diene – has only 3 isomers



Isomers



B. 2,3 dimethy but-2-ene. - does not have geometric isomers because there are two identical groups



attached to the same carbon of the double bond.