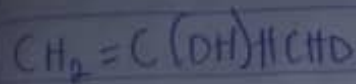


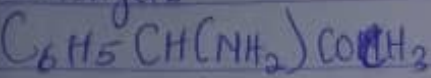
NAME: ABDULRAMAN, CHIZE JEMINA
MATIC NO: 19/MHS01/006
DEPARTMENT: MEDICINE AND SURGERY
CHEM 102 ASSIGNMENT



a alkene

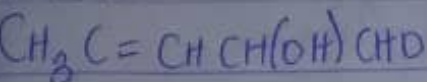
b alcohol

c aldehyde



a Amine

b Ketone



a alkene

b alcohol

c aldehyde.

2.
$$\text{Specific rotation} = \frac{\text{Observed rotation (degree)}}{(\text{Concentration } \text{g/cm}^3 \times \text{path length of sample cell in dm.})}$$

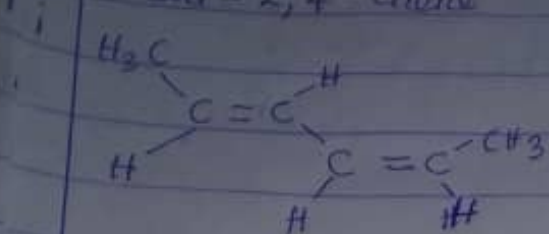
$$\begin{aligned} \text{Conc. in } \text{g/cm}^3 &= \frac{0.856 \text{g}}{10 \text{cm}^3} \\ &= 0.0856 \text{g/cm}^3 \end{aligned}$$

path length of sample cell in dm = 1.0 dm.

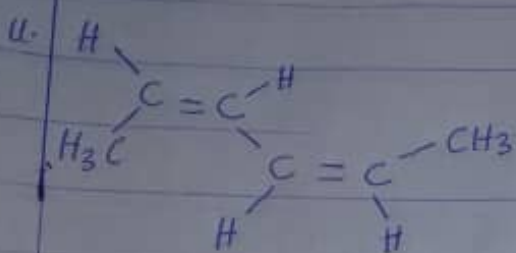
$$\begin{aligned} \text{Specific rotation of } (2R, 3R) \text{ tartaric acid} &= \frac{+1.0^\circ}{0.0856 \text{g/cm}^3 \times 1 \text{dm}} \\ &= +11.68^\circ \text{g}^{-1} \text{cm}^3 \text{dm}^{-1}. \end{aligned}$$

- 3) Possible geometric isomers for
- Hexa-2,4-diene
 - 2,3-dimethyl but-2-ene.

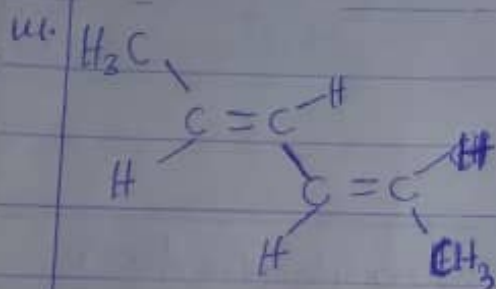
a. Hexa-2,4-diene



trans-cis hexa-2,4-diene

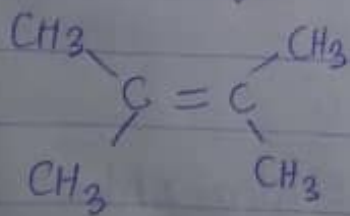


cis-cis hexa-2,4-diene



trans-trans hexa-2,4-diene

b. 2,3-dimethyl but-2-ene



cannot form geometric isomers. Each double bonded carbon has identical area.