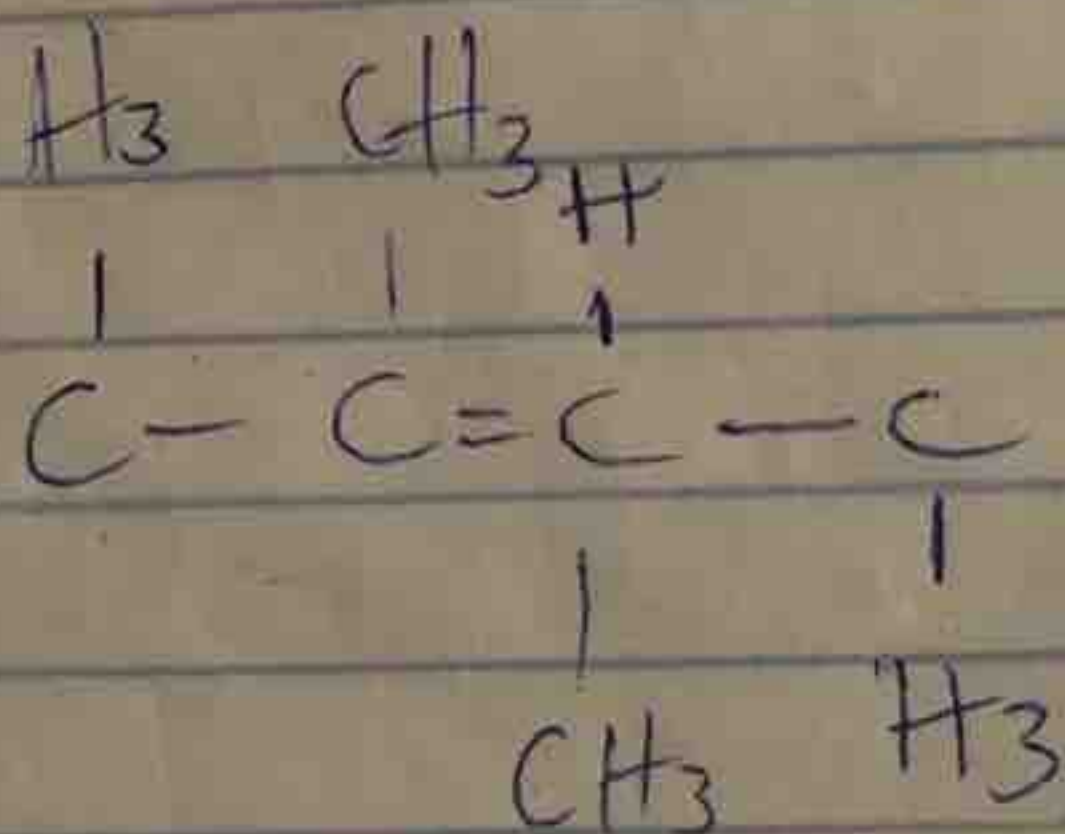


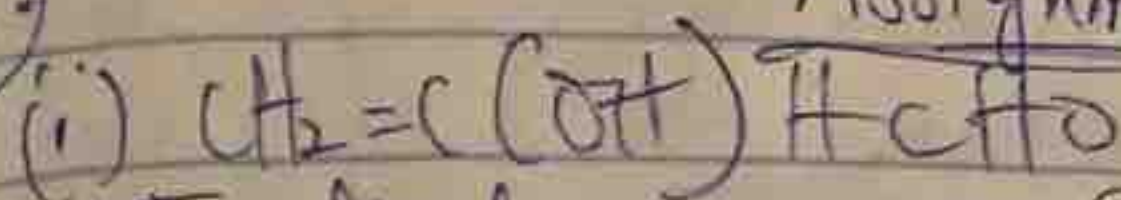
Cis 2,3-dimethylbut-2-ene



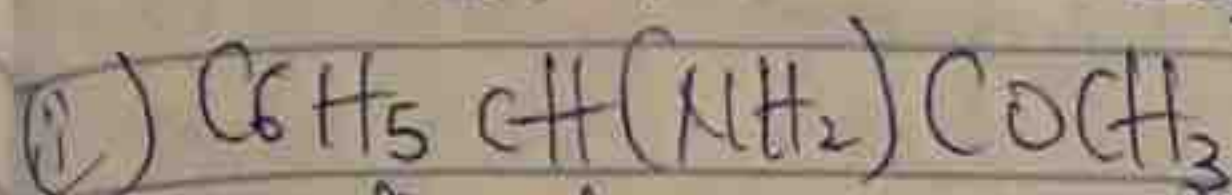
Trans 2,3-dimethylbut-2-ene

Name Okafor Chichebere Stanley  
 Matric No 19/MATHS01/308  
 Department Medicine and Surgery  
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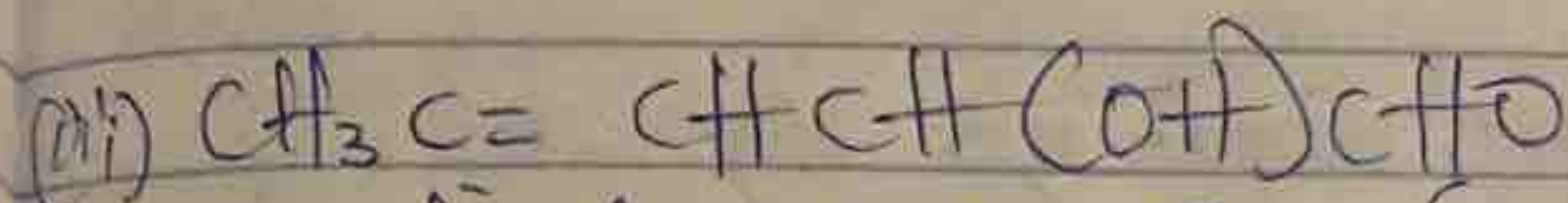
Assignment Stereochemistry & Functional group



Functional groups,  $-\text{OH}$  (Hydroxyl), double bond  $=$ ,  
 $\text{C}=\text{O}$  (Carbonyl)



Functional groups  $-\text{NH}_2$  (Amino),  $\text{C}=\text{O}$  (Carbonyl)



functional group  $-\text{C}=\text{O}$  (Carbonyl),  $\text{OH}$  (Hydroxyl)  
 $=$  Double bond

Given 0.856g Sample of (2R,3R) Tartaric acid

Volume of water =  $10\text{cm}^3$

length of polartube =  $1.0\text{dm}$

Observed rotation =  $+1.0^\circ$

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

$$= \frac{+1.0}{(0.856\text{g}/10\text{cm}^3) \times (1\text{dm})}$$

$$= \frac{+1}{0.0856 \times 1} = +11.682\text{g}^{-1}\text{cm}^3\text{dm}^{-1}$$

