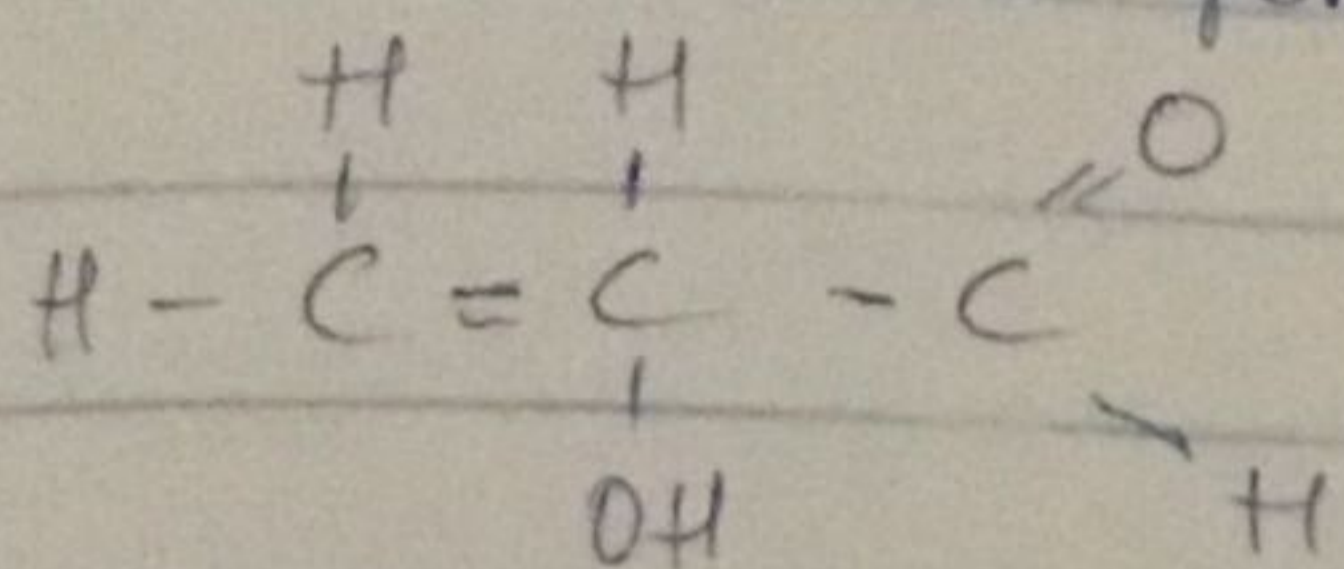


The Chidera  
Computer Engrs.

19/ENG 02/020

CHEM 102

i)  $\text{CH}_2 = \text{C}(\text{OH})\text{CH}_3$   
The structural formula



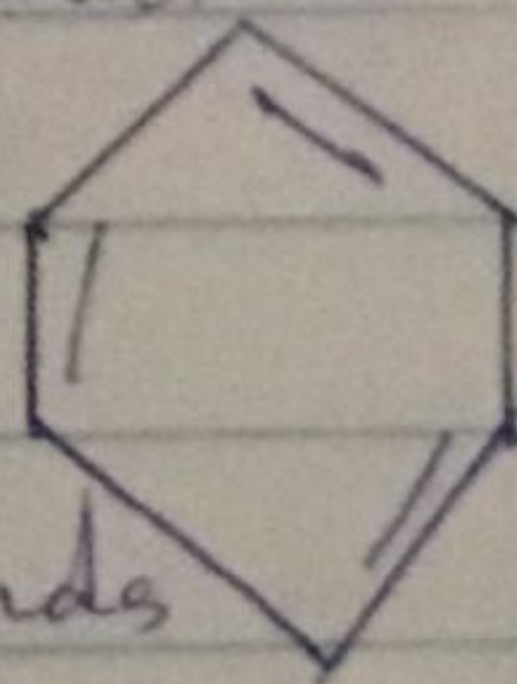
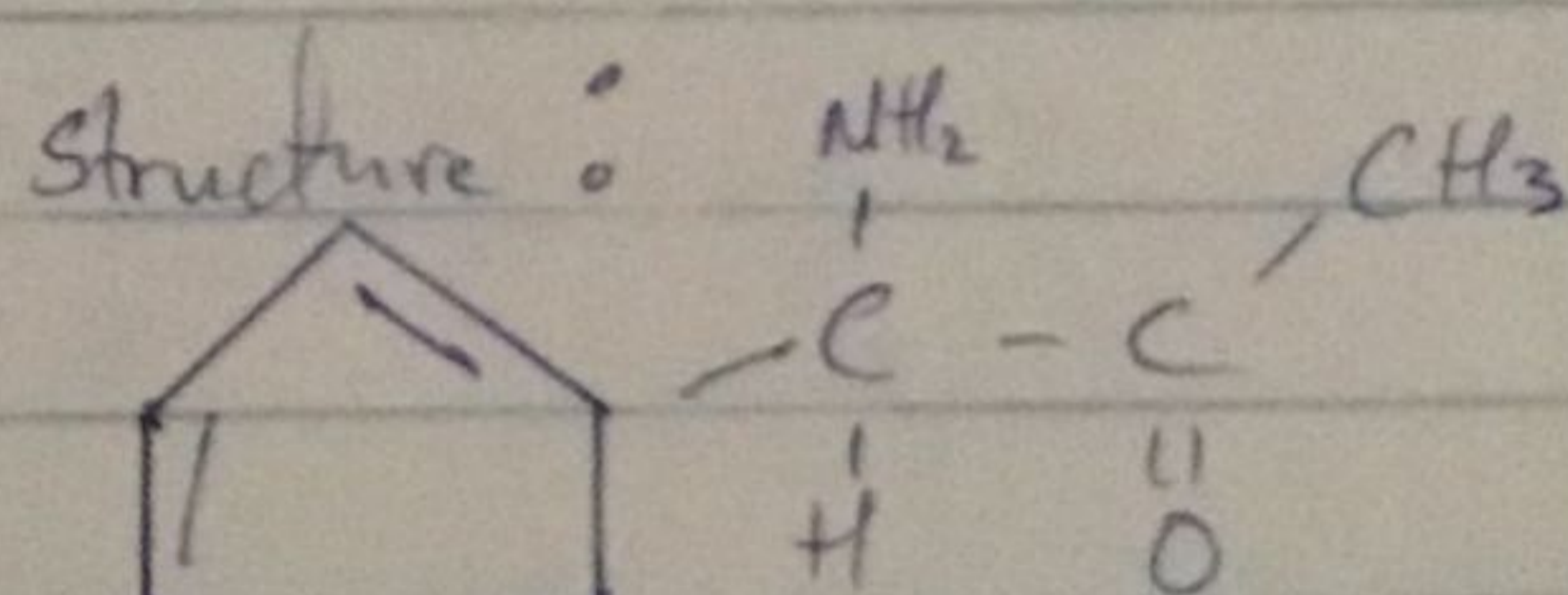
functional present are

Double bond chain = (Alkene)

OH (hydroxyl group)

$\text{C}=\text{O}$  (alcohol)

ii)  $\text{C}_6\text{H}_5\text{CH}(\text{NH}_2)\text{COCH}_3$



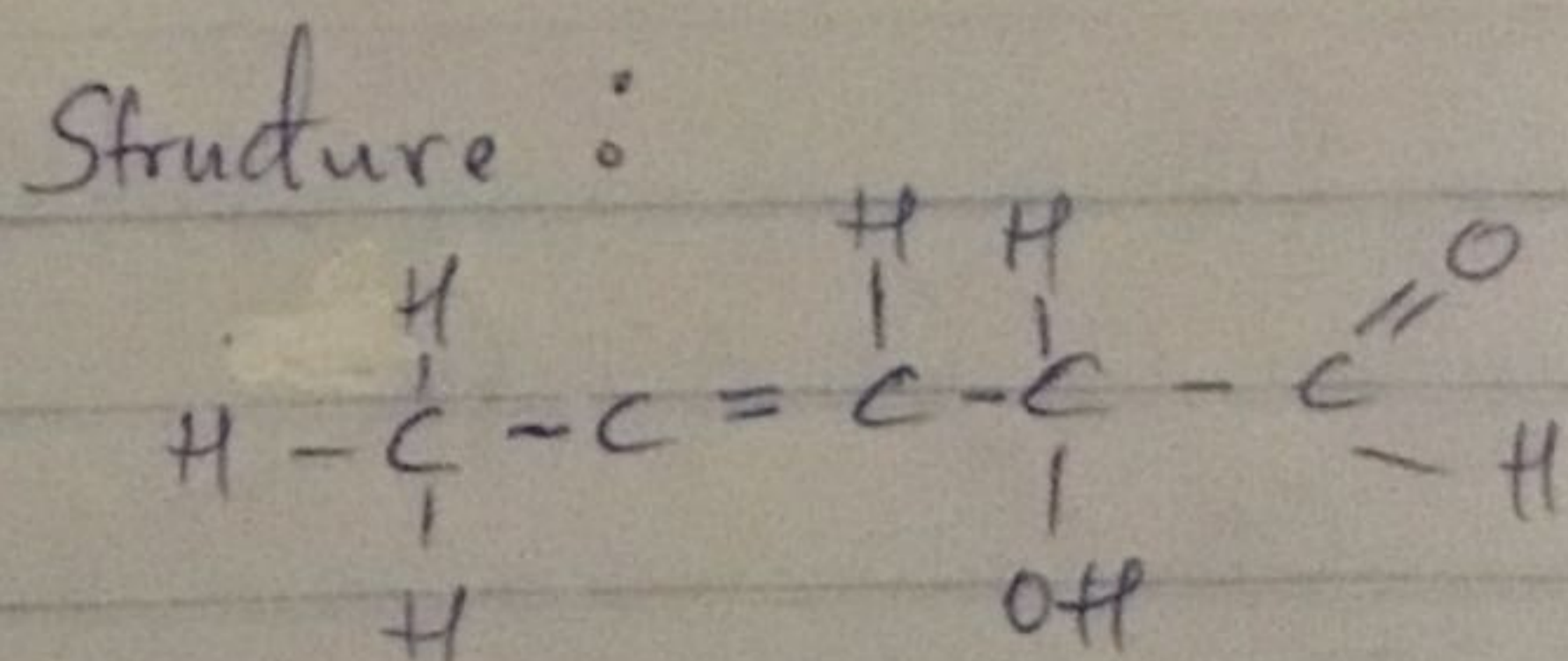
Functional present

Phenyl group ( $\text{C}_6\text{H}_5$ ) with double bonds

Amine

Alkanone / Ketone ( $\text{C}=\text{O}$ )

iii)  $\text{CH}_3\text{C} = \text{CHCH}(\text{OH})\text{CHO}$



Functional present

Alkene ( $\text{C}=\text{C}$ )

Hydroxyl group (OH)

Alcohol ( $\text{C}-\text{OH}$ )



2. Recall;

$$\left[ \alpha \right]_D^T = \frac{\alpha}{l \times c}$$

where

$l$  = length of sample tube

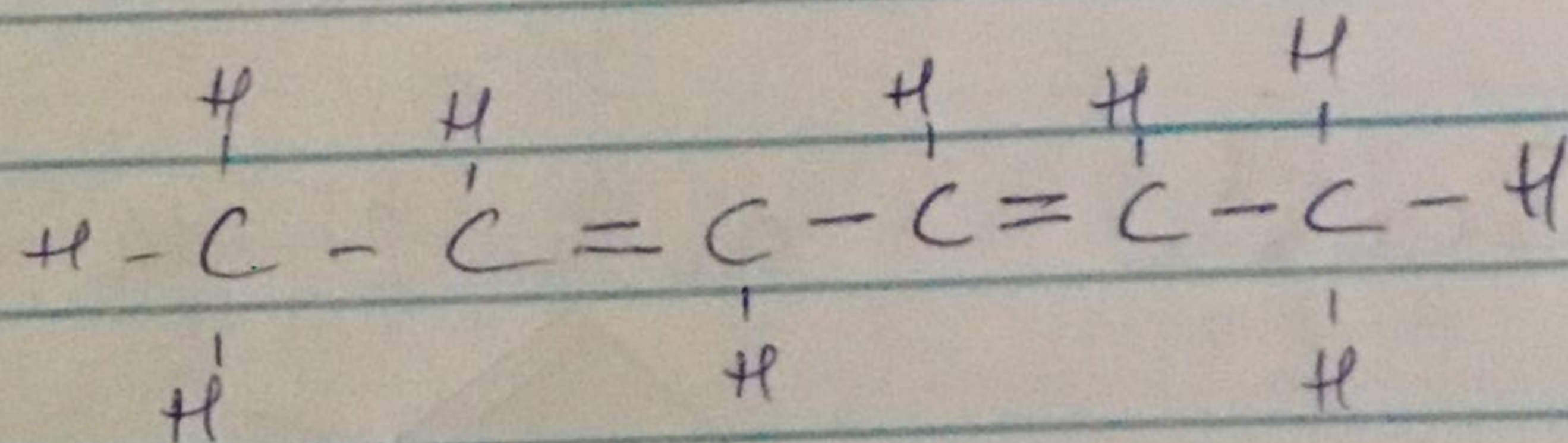
$c$  =  $\frac{\text{mass}}{\text{volume}}$  (g/dm) or (g/mol)

$\alpha$  = observed rotation

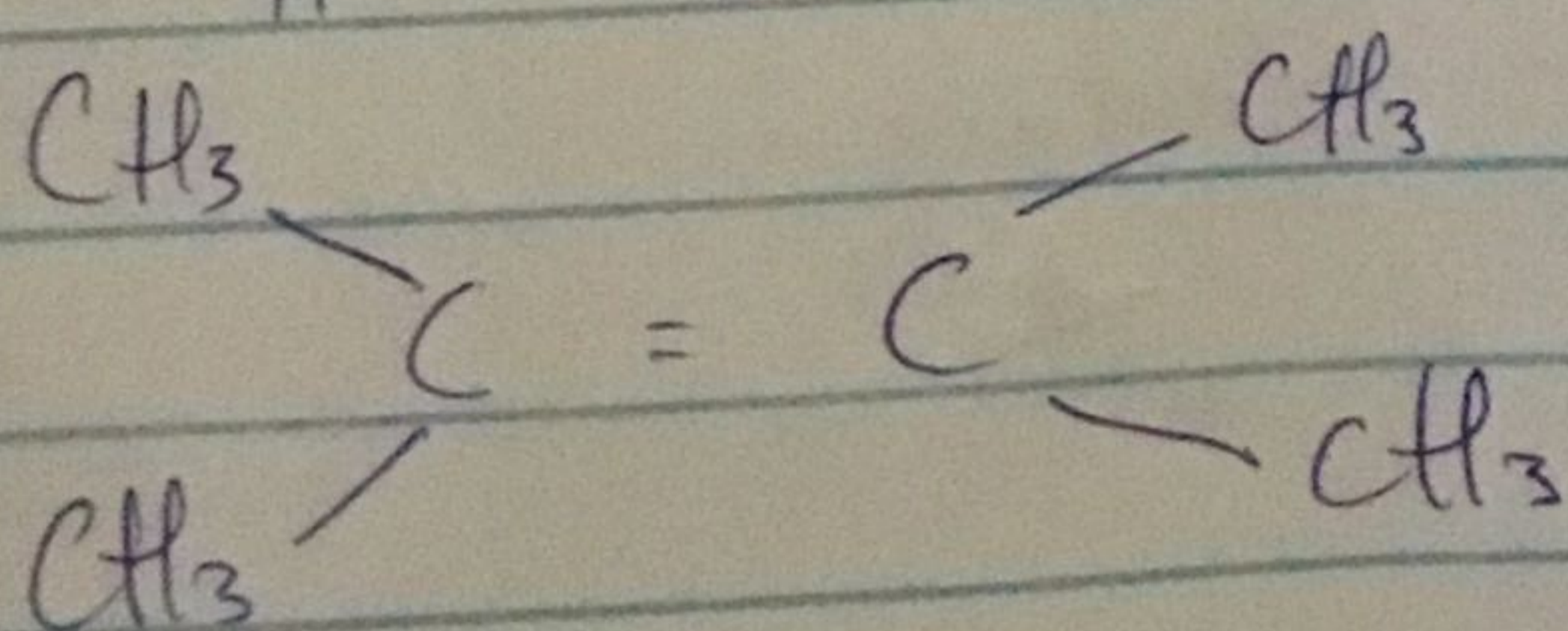
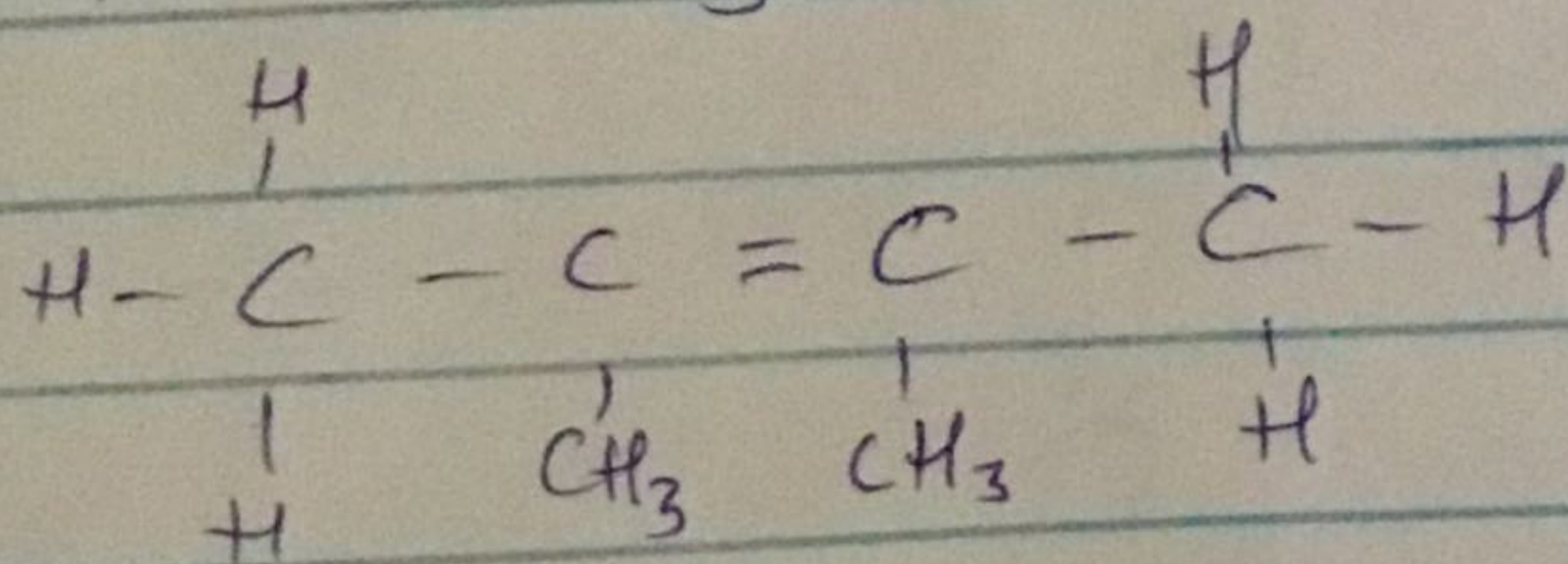
$$S_r = \frac{1.0}{1.0 \times \left( \frac{0.856}{10} \right)}$$

$$S_r = \frac{1}{0.0856} = \underline{\underline{11.68}}$$

3; Hexa-2-ene



iii 2,3-Dimethylbut-2-ene



OR

(2,3-Dimethylbut-2-ene)