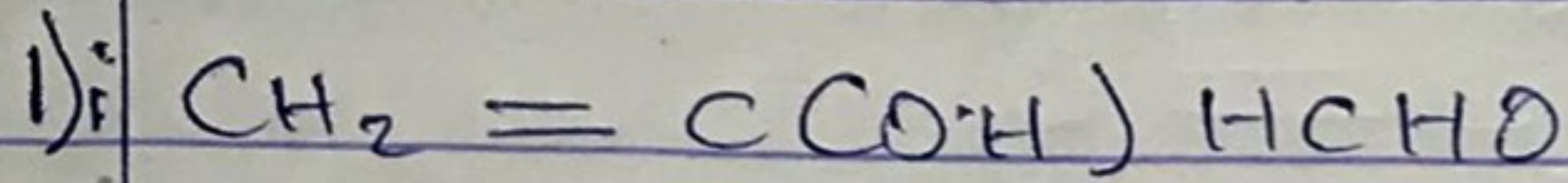


ONYEDINMA NZUBECHUKWU OMESOMA

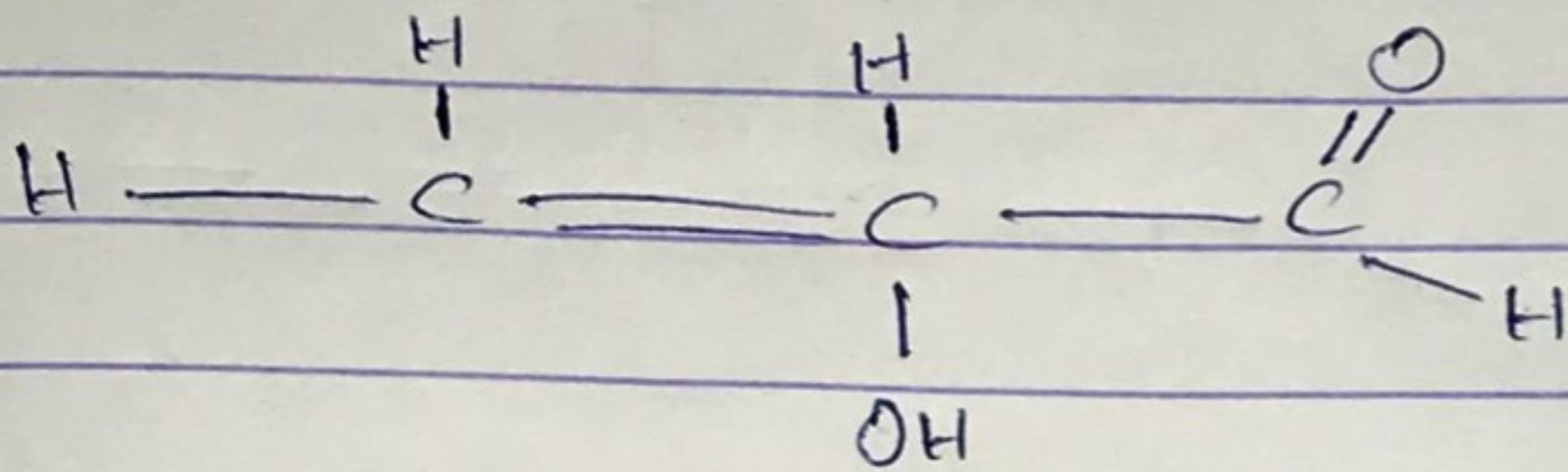
NURSING

19/11/2021

CHEM 102 ASSIGNMENT

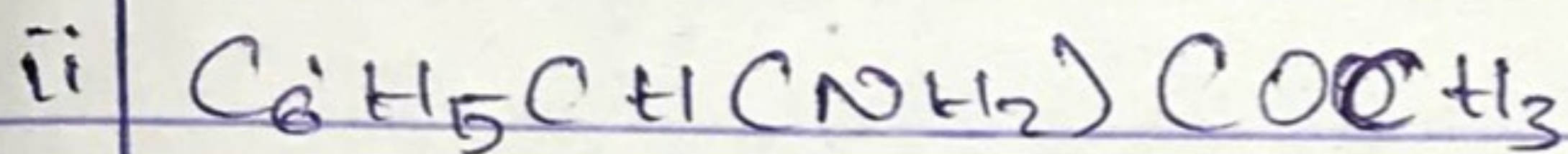


The structural formula

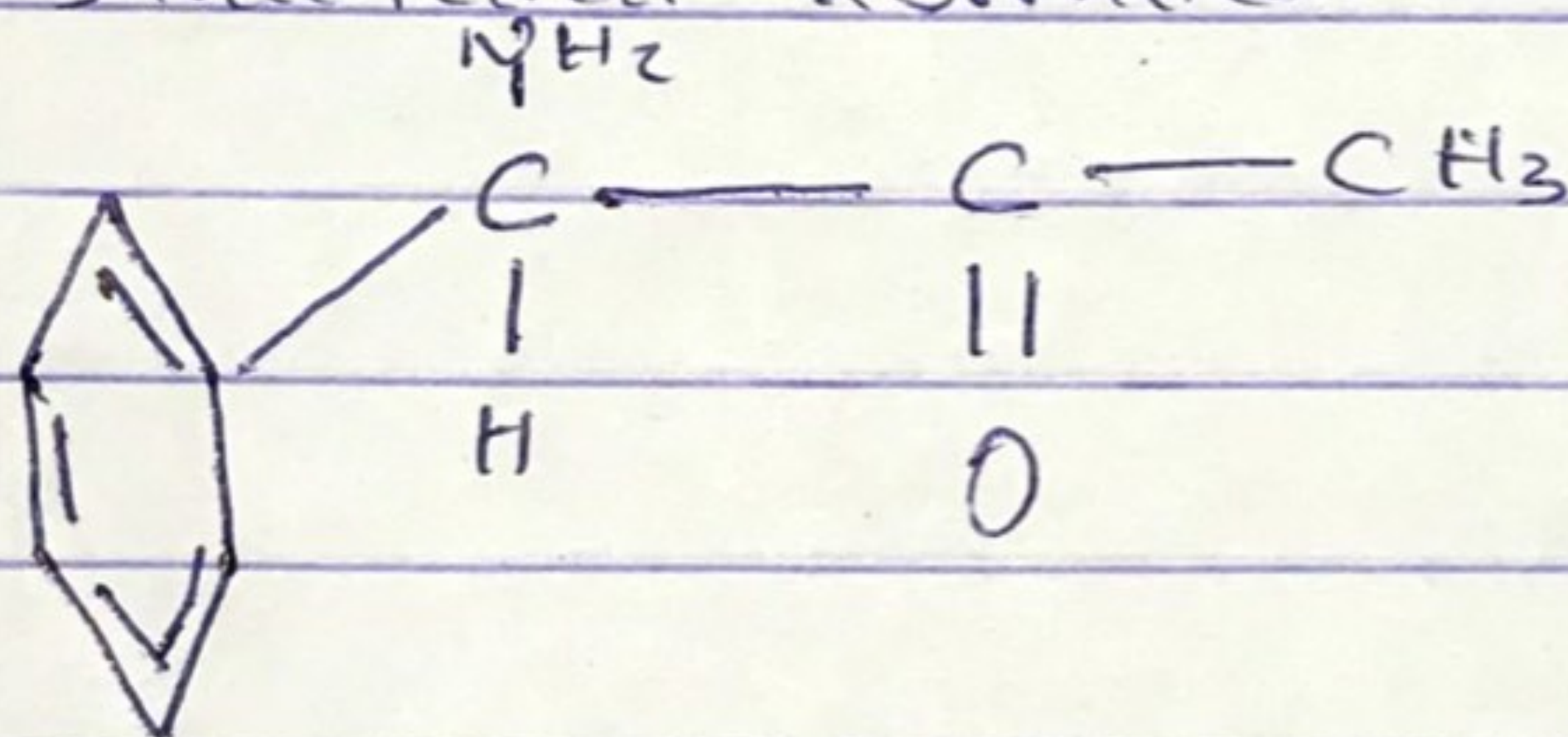


Functional groups present are

- Double bond chain = (Alkene)
- OH (hydroxy group)
- $\begin{array}{c} \text{O} \\ || \\ \text{C} \\ | \\ \text{H} \end{array}$ (Alkanol)

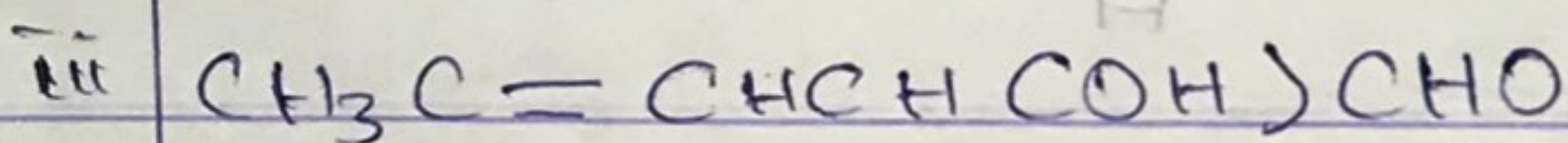


The structural formula

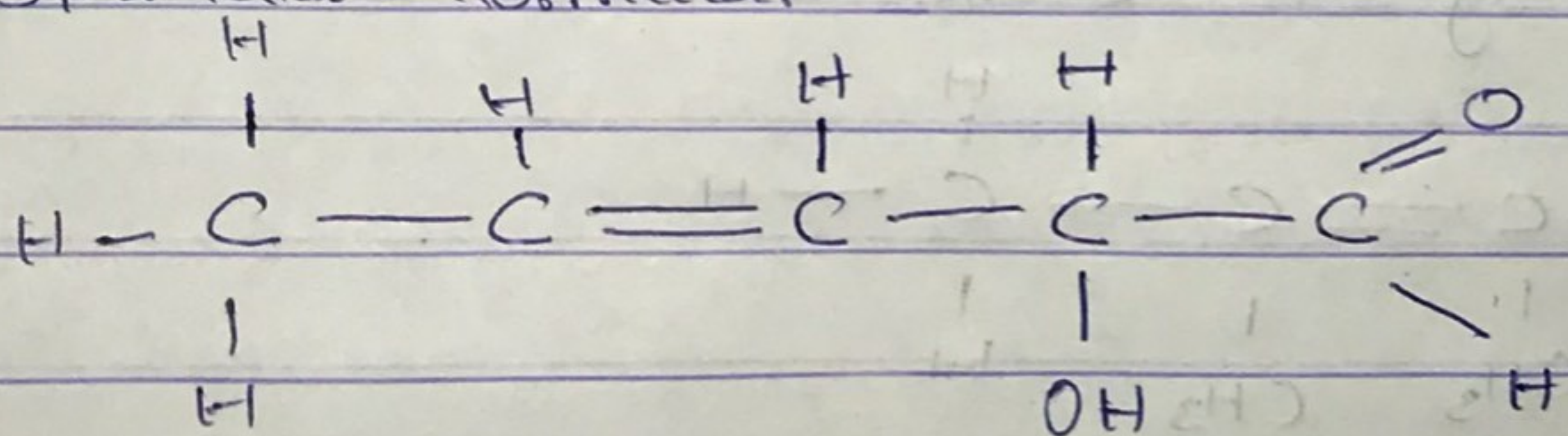


Functional groups present

- Phenyl group (C_6H_5) with double bond
- Amine
- Alkaneone / ketone ($\text{C}-\text{R}$)



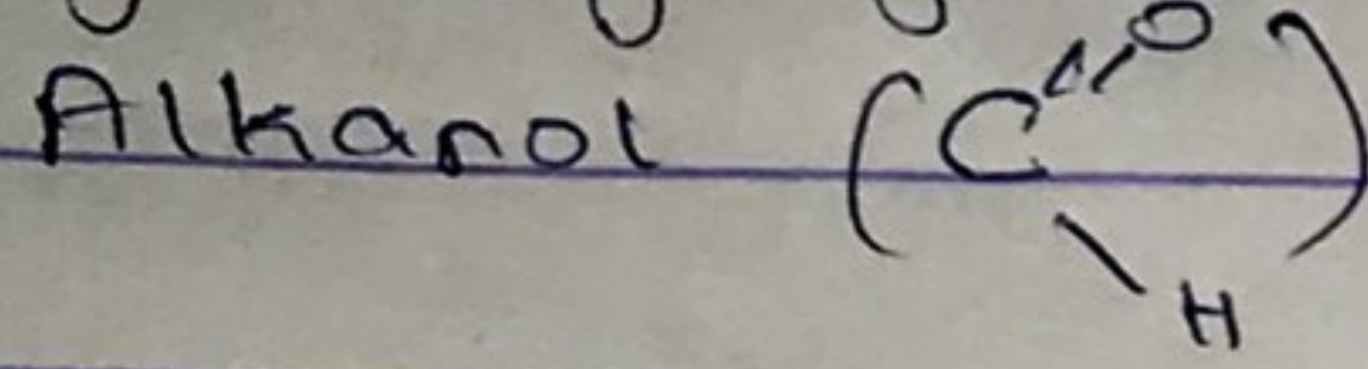
Structural formula



Functional group present

Alkene (C=C)

Hydroxyl group (OH)



2. Recall

$$[\alpha]_D^{25} = \frac{\alpha}{l \times c}$$

where

l = length of sample tube

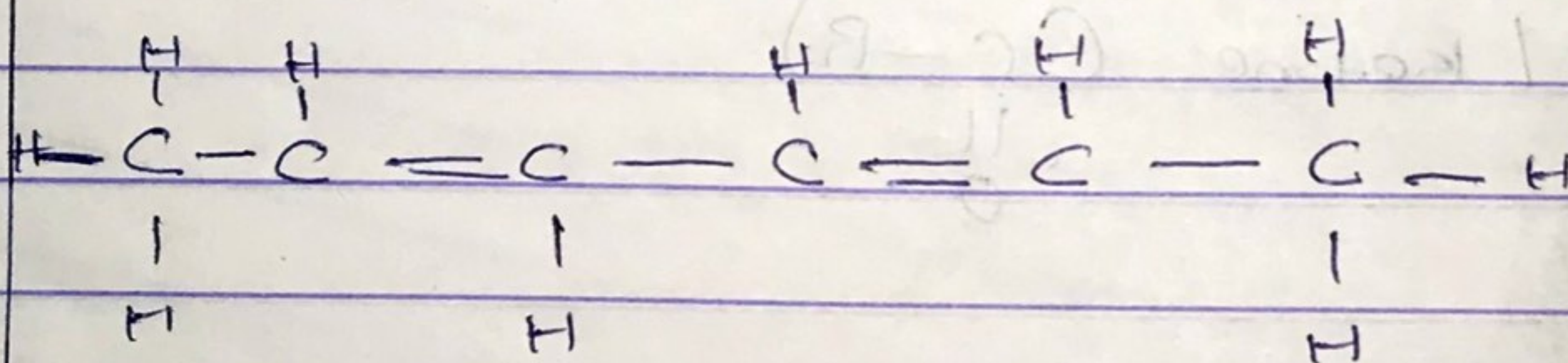
c = $\frac{\text{mass}}{\text{volume}}$ (g/dm^3) or (g/mol)

α = observed rotation

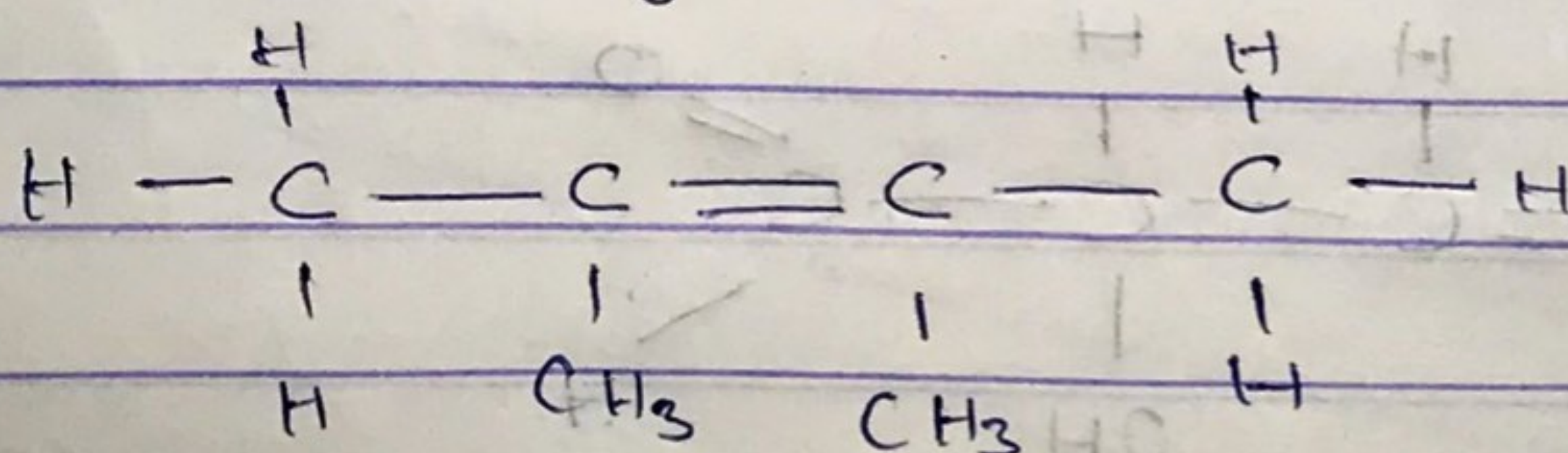
$$S_r = \frac{1.0}{1.0 \times \frac{0.856}{10}}$$

$$S_r = \frac{1}{0.856} = 11.68$$

3i) Hexa-2-ene



ii) 2,3-Dimethylbut-2-ene



or

