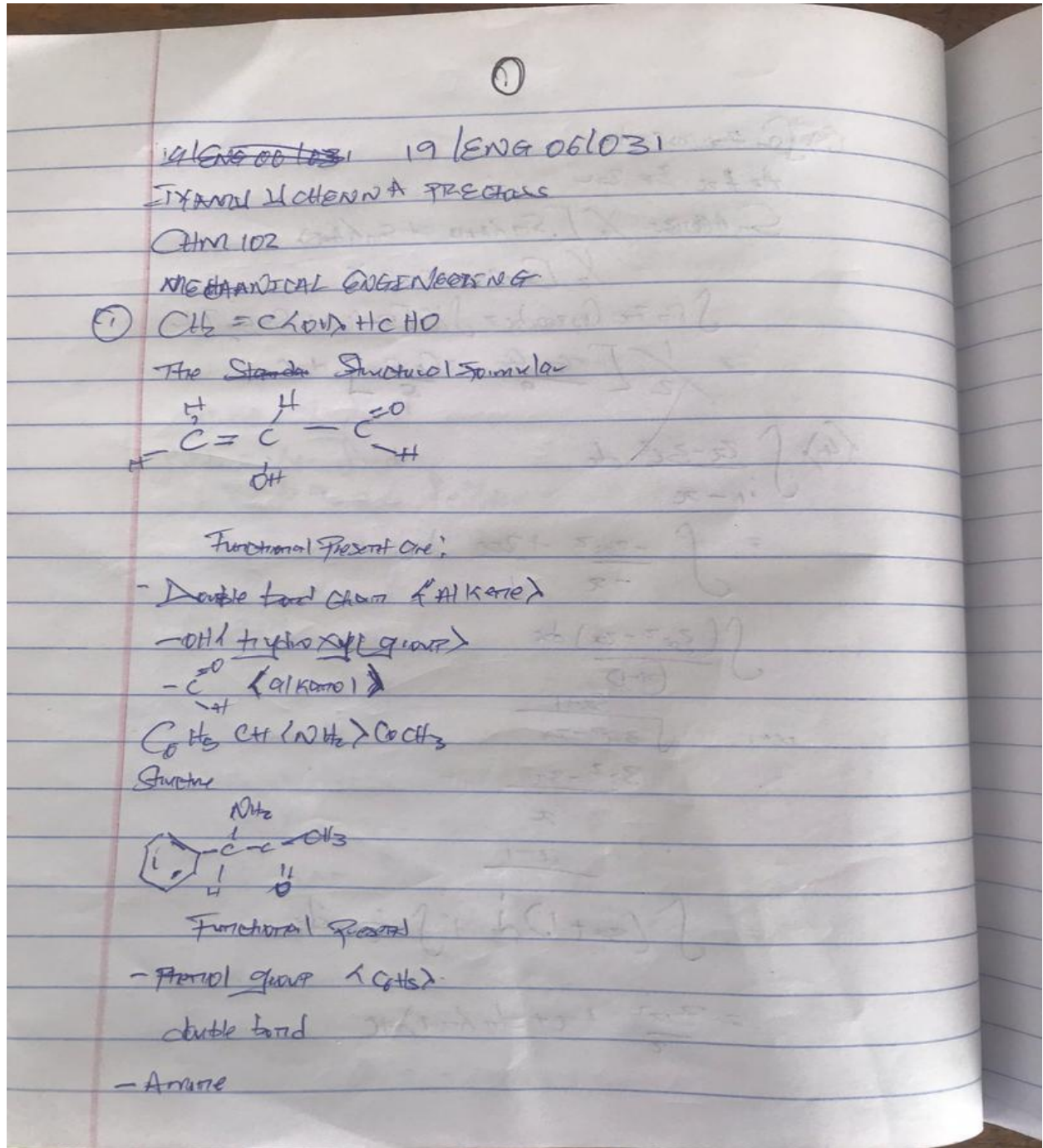


IYAMU UCHENNA PRECIOUS

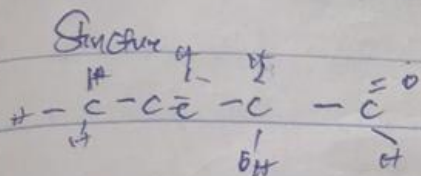
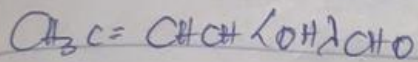
19/ENG06/031

MECHANICAL ENGINEERING

CHM 102



Alkane (Keton)  $\langle \text{C}=\text{O} \rangle$   
↑  
(iii)



Functional Group

Alkene  $\langle \text{C}=\text{C} \rangle$

Hydroxyl group  $\langle \text{OH} \rangle$

Alkane  $\langle \text{C}-\text{C} \rangle$

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

Where  $l$  = length of sample

$$c = \frac{\text{mass}}{\text{volume}} \quad \left( \frac{\text{g}}{\text{cm}^3} \right) \text{ or } \left( \frac{\text{g}}{\text{ml}} \right)$$

$\alpha$  = observed rotation

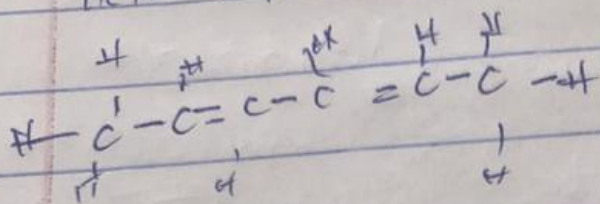
$$S_D = 1.0$$

$$1.0 \times \frac{0.886}{10}$$

$$S_D = \frac{1}{0.886} = 11.68$$

(B)

Hexa-2,4-diene



(C)

2,3-Dimethylbut-2-ene

