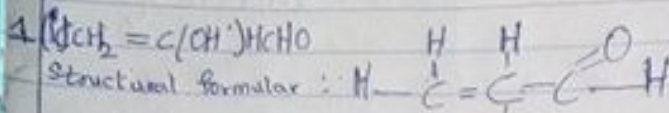
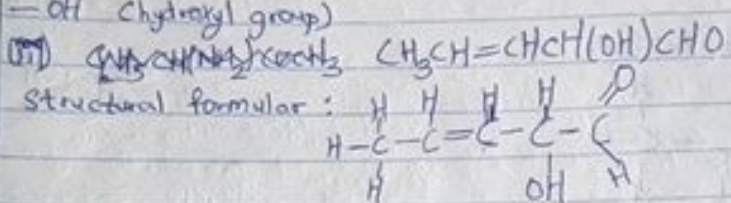


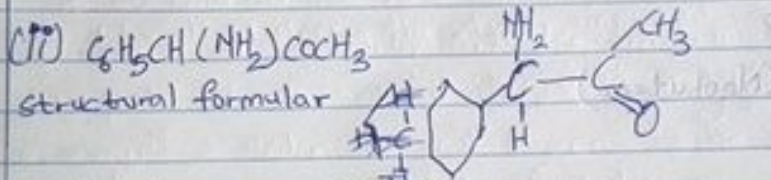
NAME: - MGBEZE BLESSING EBELECHUKWU
 Department: - MEDICINE AND SURGERY
 Matric no: - 19/MH501/244



Functional groups present are:
 - Double bond chain (Alkene)
 - $\text{C}=\text{O}$ (Alkanal)
 - OH (Hydroxyl group)



Functional group present
 - Alkene ($\text{C}=\text{C}$)
 - Hydroxyl group (OH)
 - Alkanol ($\text{C}-\text{OH}$)



Functional group present are:-
 - Amine
 - Alkanone / ketone ($\text{C}=\text{O}-\text{R}$)
 - Phenyl group (C_6H_5) with double bonds.

2. Recall that:
$$[\alpha]_D^T = \frac{\alpha}{l \times c}$$

 where l = length of sample
 $c = \frac{\text{mass}}{\text{Volume}}$ (g/dm) or (g/mol)

α = Observed rotation

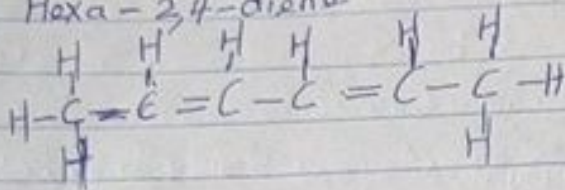
$$Sr = \frac{1.0}{1.0 \times \left(\frac{0.856}{10}\right)}$$

$$Sr = 1$$

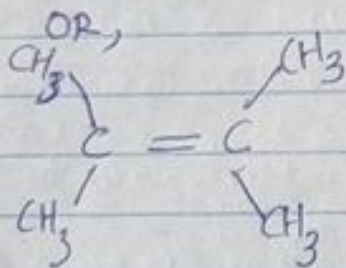
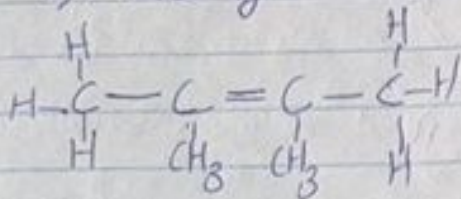
$$0.0856$$

$$Sr = 11.68$$

3 (i) Hexa-2,4-diene



(ii) 2,3-Dimethylbut-2-ene



(Neobutene)