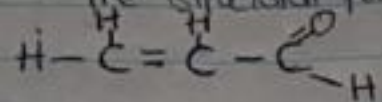
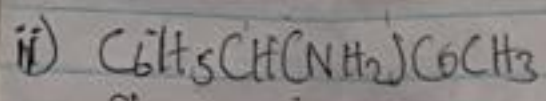


The structural formula

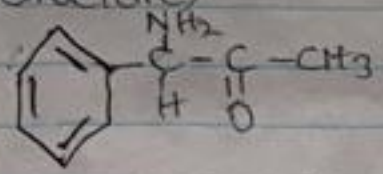


functional present are

- Double bond chain (Alkene)
- OH (hydroxyl group)
- $\text{C}=\text{O}$ (Alkanol)

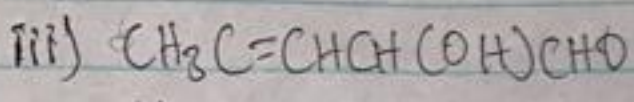


Structure

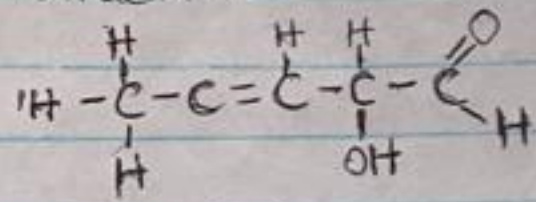


Functional present

- phenyl group (C_6H_5) with double bonds
- Amine
- Alkanone / ketone ($\text{C}=\text{O}$)



Structure



Functional present

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

2)

Recall:

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

where,

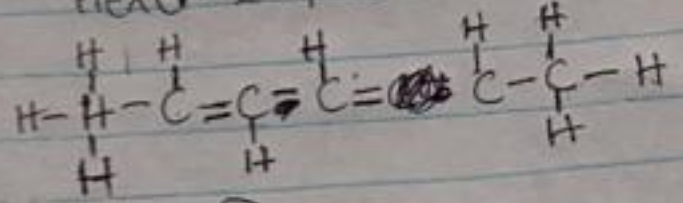
l = length of simple tube
 c = mass/volume ($\frac{g}{dm^3}$) or ($\frac{g}{mol}$)
 α = observed rotation

$$S_r = \frac{1.0}{1.0 \times \left(\frac{0.866}{10}\right)}$$

$$S_r = \frac{1}{0.0866} = 11.66g$$

3)
1)

Hexa-2-4 diene



ii)

2,3-Dimethyl but-2-ene

