

~~Name: FAGOYI~~

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19/mhs/02/054

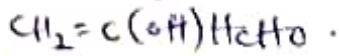
Nursing -

CHM 102

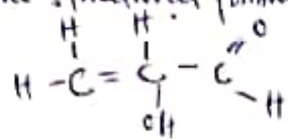
Solution

(1)

(i)



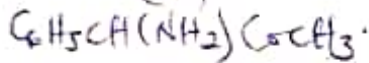
The structural formula:



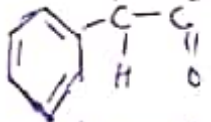
functional present are:

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

(ii)



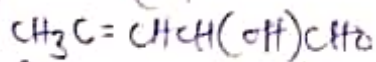
structure:



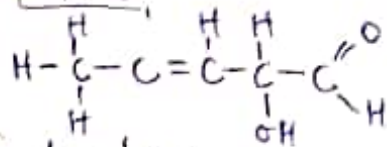
functional present

- phenyl group (C6H5) with double bonds.
- Amine.
- Alkaneone / ketone ($\text{C}=\text{O}$)

(iii)



structure:



functional present

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

(2)

Recall;

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

where

l = length of sample tube

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

α = observed rotation

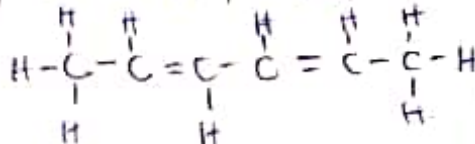
$$S_r = \frac{1.0}{1.0 \times \left(\frac{6.88}{11}\right)}$$

$$S_r = \frac{1}{0.625} = \underline{\underline{11.68}}$$

(2)

(i)

Hexa-2-4 diene



(ii)

2,3-Dimethylbut-2-ene

