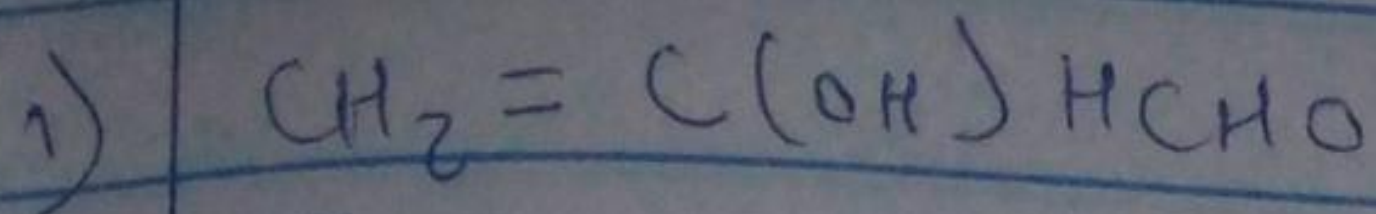


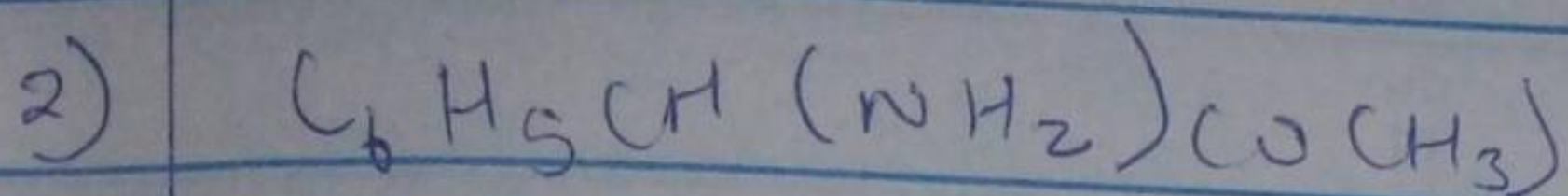
1) Name the functional groups present in each of the following molecules



Functional groups - Alkene (double bond chain)

- OH (hydroxyl)

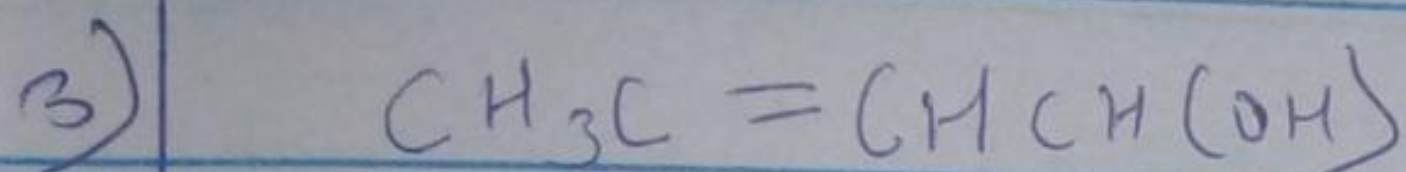
- CHO (Aldehyde)



functional group: Phenol group

Amine

Alkanone / Ketone



Functional group = Alkene

Hydroxyl (OH)

Alkanal

2) Recall;

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

where

$l$  = length of  $S$

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

volume

$\alpha$  = observed rotation

$$S_r = 1.0$$

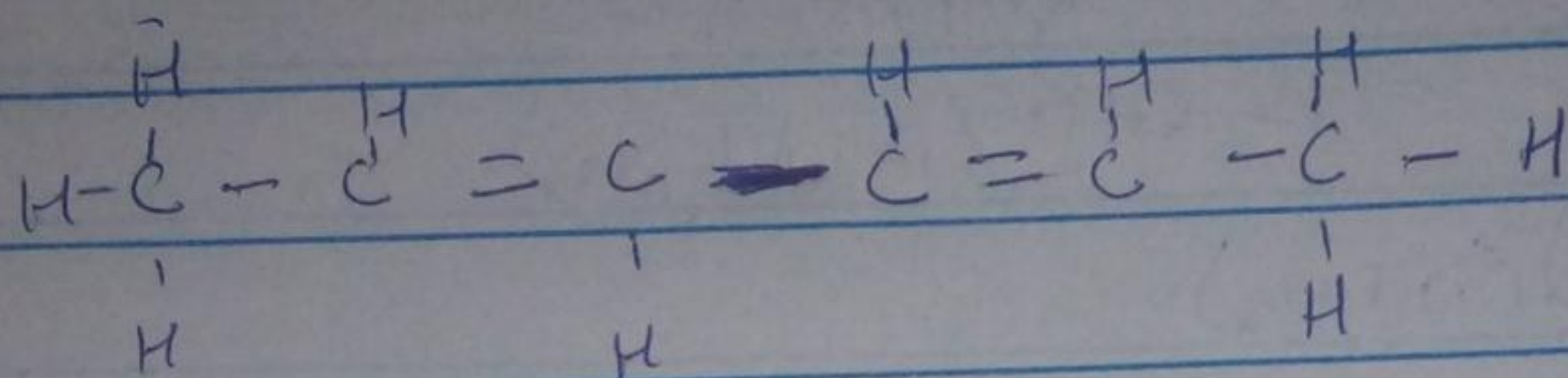
$$1.0 \times \left[ \frac{0.856}{1.0} \right]$$

$$Sr = 1 = 11.68$$

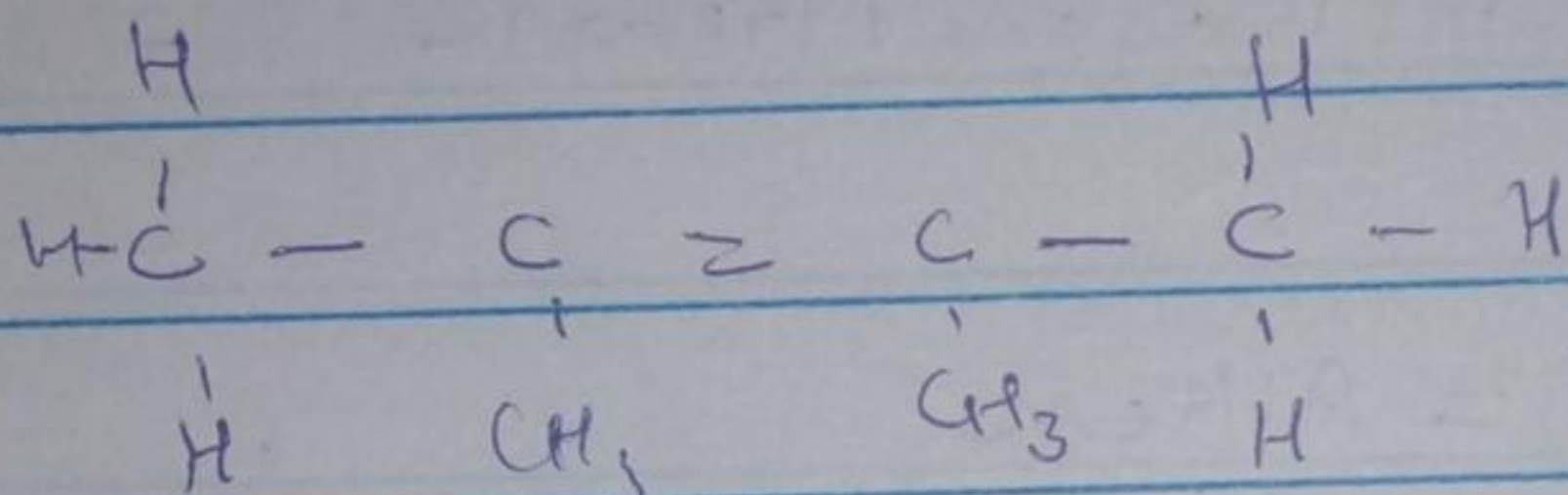
b. 0856

3

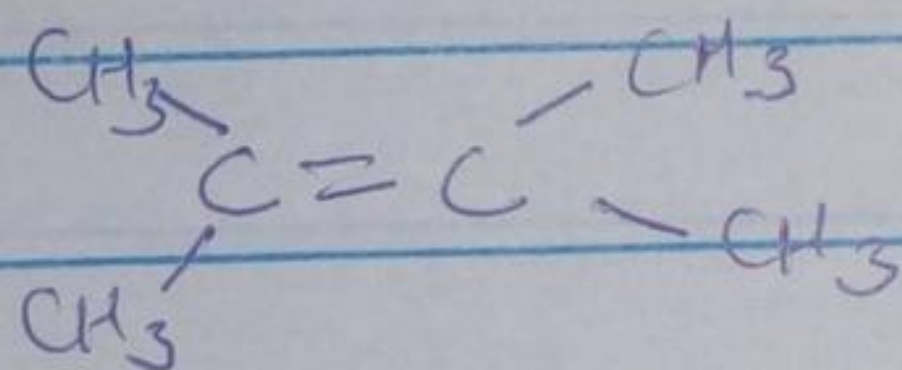
a) Hexa-2,4-diene



b) 2,3-dimethylbut-2-ene



or



Neobutane