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STEREOCHEMISTRY AND FUNCTIONAL GROUPS.

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

i)  $\text{CH}_2\text{C}(\text{OH})\text{HCHO}$ ----- Formyl group (aldehyde) group(CHO), Hydroxyl group(OH), Alkene group

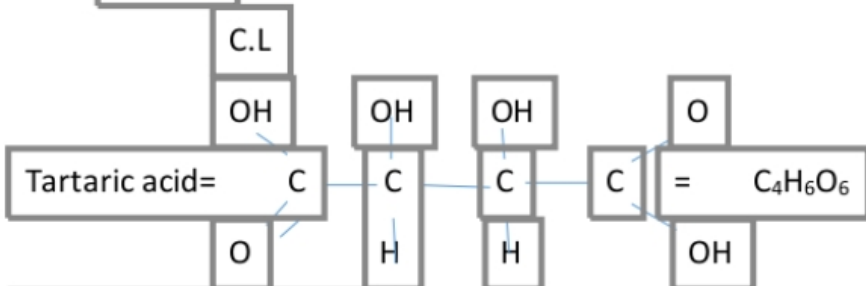
ii)  $\text{C}_6\text{H}_5\text{CH}(\text{NH}_2)\text{COCH}_3$ ----- Amines, carbonyl group, aromatic

iii)  $\text{CH}_3\text{C}=\text{CHCH}(\text{OH})\text{CHO}$ ----- Alkene, hydroxyl group, aldehyde group.

2. Concentration ( $\text{mol}/\text{dm}^3$ ) = conc. ( $\text{g}/\text{dm}^3$ )

molar mass ( $\text{g}/\text{mol}$ )

$[\alpha]_D^{25} = \alpha$



Molar mass = 150 g/mol

0.856g-----10cm<sup>3</sup>

Xg-----1000cm<sup>3</sup>

$0.856 \times 1000 = 85.6\text{g}/\text{dm}^3$

10

Concentration in  $\text{g}/\text{cm}^3$  = concentration in ( $\text{g}/\text{dm}^3$ )

1000

=  $\frac{85.6}{1000} = 0.0856\text{g}/\text{cm}^3$

1000

$[\alpha]_D^{25} = \alpha$

=  $4.10^\circ$

=  $11.68^\circ$

C.L

0.0856

