

$$\% \frac{w}{w} = \frac{\text{wt. of solute}}{\text{wt. of solution}} \times 100$$
$$\% \frac{w}{w} = \frac{w_A}{w_A + w_B} \times 100$$

$$\% \frac{v}{v} \text{ } \times \text{part of solute present in 100 ml solution.}$$
$$\% \frac{v}{v} = \frac{V_A \times 100}{V_A + V_B}$$

$$\% \frac{w}{v}$$

100ml
ng solute present in 100ml solution

present in 100ml solution only
then only (100-x)

$$\% \frac{w}{v} = \frac{\text{wt. of solute} \times 100}{\text{volume of soln}}$$

P.P.M - Part of Solute present per million by mass/ by volume.

$\times$ P.P.M

ng solute 10⁶ g soln

μ P.P.M

mg solute 10⁶ mg soln

mmol solute 10⁶ mmol soln

ul solute 10⁶ l soln.

P.P.M $\rightarrow \frac{\text{wt. of solute}}{\text{wt. of soln.}} \times 10^6$

$\frac{\text{wt of solute (g)}}{\text{volume in (L)}} \rightarrow \frac{\text{wt of solute (g)} \times 1000}{\text{volume in (L)}}$