**Formula used in solving numerical problems on volumetric analysis:**

    (1) Strength of solution = Amount of substance in g litre-1

    (2) Strength of solution = Amount of substance in g moles litre-1

    (3) Strength of solution = Normality × Eq. wt. of the solute

                                     =  molarity × Mol. wt. of solute

     

(6) Number of millimoles = Wt. in gm × 1000/mol.wt.
                                = Molarity × Volume in Ml.
(7) Number of equivalents
       =  Wt. in (gm/Eq. wt.) = x × No. of mole × Normality × Volume in litre

(8) Number of milliequivalents (meq.)
      = (Wt. in gm × 1000/Eq.wt.) = normality × Volume in ml.

(9) Normality = x× No. of millimoles
                         = x× Molarity = (Strength in gm litre-1/Eq.wt.)
  where x = (Mol. Wt./Eq.wt.), x = valency or change in oxi. Number.

(10) Normality formula, N1V1= N2V2

     

(16) Mol. Wt. = V.D × 2 (For gases only)