

Date Planned : __ / __ / __	Daily Tutorial Sheet - 11	Expected Duration : 90 Min
Actual Date of Attempt : __ / __ / __	Numerical Value Type for JEE Main	Exact Duration : _____

126. 2.0 g of polybasic organic acid (M.wt. = 600) required 100 ml of $\frac{M}{6}$ NaOH solution for complete neutralization. Find the basicity of organic acid
127. For how many of the following protic acids, mass of one gm equivalent is equal to molar mass.
HCl, HNO₃, H₂SO₄, H₃PO₄, H₃PO₃, H₃PO₂, H₃NO₃, CH₃COOH, H₂SO₃.
128. How many milliliters of 0.05M K₄[Fe(CN)₆] solution are required for titration of 60 ml of 0.01M ZnSO₄ solution, when the product of reaction is K₂Zn₃[Fe(CN)₆]₂? 
129. Hydrated sulphate of a divalent metal of atomic weight 65.4 loses 43.85% of its weight on dehydration. Find the number of molecules of water of crystallization in the formula of hydrated salt.
130. The number of mole of N₂O₄ in 276 g N₂O₄ are
131. 6 g of H₂ reacts with 14 g N₂ to form NH₃ till the reaction completely consumes the limiting reagent. The mass of other reactant (in g) left are
132. 0.98 g of a polybasic acid (molar mass 98) requires 30 mL of 0.5M Ba(OH)₂ for complete neutralization. The basicity of acid is
133. 100 mL solution of an acid (molar mass 82) containing 39 g acid per litre was completely neutralized by 95.0 mL of aqueous NaOH solution containing 40 g NaOH per litre. The basicity of acid is
134. In what volume ratio 0.1M Ca(NO₃)₂ and 0.2 M NaNO₃ solutions should be mixed, so that the concentration of negative ion is 50% greater than the concentration of +ve ions?
135. The molality of 49% by volume of H₂SO₄ solution having density 1.49 g/mL is.....
136. Two acid solutions A and B are titrated separately each with 25 mL of 1N Na₂CO₃ solution. The volume of each acid used for titration is 10 mL and 40 mL respectively for the complete neutralization. The volume ratio of V_B and V_A which is mixed to prepare one mL 1N solution is..... 
137. Chloride samples are prepared for analysis by using NaCl, KCl and NH₄Cl separately or as mixture. What minimum volume (in mL) of 5% by mass AgNO₃ solution (sp. Gravity 1.19 g/mL) must be added to a sample of 0.1498 g in order to ensure precipitation of chloride in every possible case? 
138. An inorganic compound ZnCr₂O_x contains 9.81g Zn, 1.8×10²³ atoms of Cr and 0.6 g-atom of O. The value of x is
139. How many of the following are temperature independent in case of solution. Meq. of solute, mole of solute, ppm (W/W), mole fraction, molarity, normality, % by strength, molality.
140. How many of the following are dilution independent in case of solution. Meq. of solute, mole of solute, % by mass, mole fraction, molarity, molality, % by strength, strength, normality. 