**Calculations**

***Calculation of solution concentration test***

1. 10 g salt and 70 g water are mixed and solution is prepared. Find concentration of solution by percent mass.
2. If concentration by mass of 600 g NaCl solution is 40 %, find amount of solute by mass in this solution.
3. Using 16 g NaOH, 200 ml solution is prepared. Which ones of the following statements are true for this solution?(Molar mass of NaOH is 40 g)

I. Concentration of solution is 2 molar

II. Volume of the water in solution is 200 ml

III. If we add water to solution, moles of solute decreases.

***Calculation of pH***

1. Find the pH of a 0.0025 M HCl solution.

2. What is the hydronium ion concentration in a solution that has a pH of 8.34?

3. What is the hydroxide ion concentration in a solution that has a pOH of 5.70?