**Name:**……………………………………………………………………………… **ID:** ………………………………………………………………………………

**Method and Calculations**:

**A. Preparation of solutions**:

**(1)You are provided with solid NaOH, Prepare 50ml with 0.08M NaOH solution.**

***Calculations:***

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**(2) You are provided with solid NaCl, Prepare 50ml with 1.5 w/v% solution of NaCl.**

***Calculations:***

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**(3)Prepare 100ml with 0.4 M HCl solutions starting with the concentrated HCl solution you are provided with. (w/w%= 36 , S.Gr =1.15 ).**

***Calculations:***

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**B. Solution dilutions**:

**(1) Prepare 50ml with 1:20 dilution using the 0.08M NaOH solution you previously prepared.**

***Calculations:***

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**(2) Prepare 50ml with 1:60 dilution using the 0.4M HCl solution you previously prepared.**

***Calculations:***

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**(3) Starting with a 2.0 M stock solution of hydrochloric acid, prepare four standard solutions**

**(1 to 4) of the following Molarity respectively 8.00×10-2 M , 3.20×10-3 M , 1.28×10-4 M ,5.12×10-6M.**

***Calculations:***

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**Note:**

**Atomic weights:**  **Na = 23**, **Cl= 35.5**, **O = 16**, **H = 1**