|  |  |  |
| --- | --- | --- |
| Description: http://3.bp.blogspot.com/_sHI1tz_SPvQ/TDl2vAHnimI/AAAAAAAAB6I/mWyQQqN3Q5M/s400/kolej+matriks.jpg | **EXPERIMENT 3**  **ACID-BASE TITRATION:**  **DETERMINATION OF THE CONCENTRATION OF**  **HYDROCHLORIC ACID SOLUTION** | **MARKS** |
|  |

|  |  |  |
| --- | --- | --- |
| **ITEM** | **CONTENT** | **MARKS** |
| **Title** |  |  |
| **Objective** | 1.  2.  3. |  |
| **Method /**  **Procedure** |  |  |
| **Result** | 1. **Preparation of a standard** oxalic acid **solution**   Exact mass of oxalic acid = **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ g**   1. **Standardisation of 0.2 M NaOH solution**  |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Burette reading / mL** | **Gross** | **1** | **2** | **3** | | **Initial reading** |  |  |  |  | | **Final reading** |  |  |  |  | | **Volume of NaOH used** |  |  |  |  |   Average volume of NaOH used = **\_\_\_\_\_\_\_\_\_\_\_\_\_\_ mL**   1. **Determination of the molar concentration of HCl solution**  |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Burette reading**  **(mL)** | **Gross** | **1** | **2** | **3** | | **Initial reading** |  |  |  |  | | **Final reading** |  |  |  |  | | **Volume of NaOH used** |  |  |  |  |     Average volume of NaOH used = **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ mL** |  |
| **Calculation** | 1. **Preparation of a standard solution** 2. Moles of oxalic acid = **\_\_\_\_\_\_\_\_\_\_\_\_ mol** 3. Molarity of oxalic acid =   = **\_\_\_\_\_\_\_\_\_\_\_\_ M**   1. **Standardisation of 0.2 M NaOH solution** 2. Chemical equation for the reaction between oxalic acid and   sodium hydroxide:  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  ii. Molarity of NaOH solution :    **C) Determination of the molar concentration of HCl solution**   1. Chemical equation for the reaction between hydrochloric acid and   sodium hydroxide:  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  ii. Molarity of HCl solution : |  |
| **Discussion** |  |  |
| **Conclusion** | 1. The molarity of NaOH is  **\_\_\_\_\_\_\_\_\_\_\_\_ M** 2. The molarity of HCl is **\_\_\_\_\_\_\_\_\_\_\_\_\_\_ M** |  |
| **Total Marks** |  |  |



**KEDAH TECHNICAL MATRICULATION COLLEGE**

**PRACTICAL REPORT**

**CHEMISTRY ENGINEERING**

**NAME:…………………………………………….**

**MATRIC NO:…………………………………….**

**COURSE CODE: TK015**

**CLASS:…………………………………………….**

**EXPERIMENTAL NO:………………………….**

**TITLE:…………………………………………….**

**DATE OF EXP:……………………………………**

**PARTNER’S 1.………………………...**

**NAME: 2…………………………**

**3…………………………**

**4…………………………**

**LECTURER’S NAME: ………………………………**