**JUJA GIRLS HIGH SCHOOL**

**TITRATION SAMPLE 1**

**ACID –BASE TITRATION**

**You are provided with:**

* 0.2M hydrochloric acid labeled as solution A.
* Sodium hydroxide solution labeled as solution B.

You are required to determine the molarity of solution B.

**Procedure**

1. Fill the burette with solution A.
2. Using a pipette and a pipette filler, pipette 25.0 cm3 of solution B and place in a conical flask.
3. Add two drops of phenolphthalein indicator and titrate with solution A until the pink colour disappears.
4. Record the results in the table below.
5. Repeat the titration two more times and complete the table below.(4mks)

|  |  |  |
| --- | --- | --- |
| **I** | **II** | **III** |
| Final burette reading(cm3) |  |  |  |
| Initial burette reading(cm3) |  |  |  |
| Volume of solution A used (cm3) |  |  |  |

1. Calculate the average volume of solution A used.(1mk)
2. Calculate the number of moles of solution A used.(2mks)
3. Calculate the molarity of solution B.(2mks)
4. Calculate the concentration of sodium hydroxide in grams per litre.(2mks)