

## CHEM101 Laboratory Exercise #2 Laboratory Notebook

### Moles, Concentration, Acid-Base Reactions and Quantitative Analysis by Titration

*Using Microsoft Word, students must write their in-lab notes below while completing the Laboratory exercise. The Laboratory notebook must be uploaded to the CHEM 101 Lab Brightspace site as a readable .pdf by the end of the lab period. Please see page 7 of the 202405 CHEM 101 Lab manual for all the information required in the in-lab notes. The documentation below must reflect the student's work without assistance from others.*

Name: Arfaz Hossain Lab Section: B12 Quad: 2 Date: May 28, 2024

#### In-lab Notes:

##### EXPERIMENT 1:

Experimental Procedure for standardising a solution of NaOH using a titration:

Initial Without NaOH Solution Volume: 200mL

Final with added NaOH Solution: 212mL

1st

KHP Amount: 0.502g

Burette Reading Initial: 45.7mL

Burette Reading Final: 32.8mL

Difference: 12.9mL

2nd

KHP Amount: 0.507g

Burette Reading Initial: 32.8mL

Burette Reading Final: 20.6mL

Difference: 12.2

3rd

KHP Amount: 0.501g

Burette Reading Initial: 20.6mL

Burette Reading Final: 8.4mL

Difference: 12.

##### EXPERIMENT 2 (Vineger):

1st

Vineger Amount: 5.00mL  
Burette Reading Initial: 48.5mL  
Burette Reading Final: 27.9mL

2<sup>nd</sup>

Vineger Amount: 5.00mL  
Burette Reading Initial: 27.9mL  
Burette Reading Final: 6.8mL

3<sup>rd</sup>

Vineger Amount: 5.00mL  
Burette Reading Initial: 37.8mL  
Burette Reading Final: 20.8mL

Experimental Procedure: We put NaOH in a beaker and KHC in 3 flasks, titrated and mixed and took note of the data. We also did the same thing with Vineger as well.