Experiment 7
Flame Photometry Report Sheet

Section number: ***Group number:*** ***Section number:***

❖ Objective:

❖ Method:

From the information provided on the ORS sachet packaging, Fill the expected concentrations of Na^+ and K^+ ions in the solution you made (show your calculation)

- The expected concentration of Na^+ is ..... (mM) & it equals ..... (ppm)

- The expected concentration of K^+ is ..... (mM) & it equals ..... (ppm)

❖ Calibration Curves Data:

Based on your standards analysis using the Flame Photometry, Answer the following:

- Fill the following table with the collected emission intensities and its corresponding concentration for Na^+ and K^+ standard solutions (standard calibration curve data).
  - Na^+ Standards Data:

Na^+ concentration (ppm)	Emission intensity (from the device)

  - Plot the standard calibration curve on a graph paper. (X-axis is Na^+ and Y-axis is the emission intensity). **Attach the graph paper to the report sheet after this page.**
    - **Show the line equation and the R^2**

- K^+ Standards Data:

K^+ concentration (ppm)	Emission intensity (from the device)

- Plot the standard calibration curve on a graph paper. (X-axis is Na^+ and Y-axis is the emission intensity). **Attach the graph paper to the report sheet after this page.**
  - **Show the line equation and the R^2**

❖ ORS solution analysis using the flame photometry:

Based on your ORS solution analysis using the Flame Photometry, Answer the following:

- Fill the following table with the information regarding the Na^+ and K^+ ions from the ORS solution.

Ion	Emission intensity
Na^+	
K^+	

- Using the equations obtained from the calibration curve for Na^+ and K^+, Answer the following (<u>show your calculation</u>):
  - The calculated (Actual) **Na^+** concentration in your ORS is…….**(ppm)**

  - The calculated (Actual) **K^+** concentration in your ORS is…….**(ppm)**

❖ Results Summary:

Based on your previous results, what is the **%Assay** for Na^+ and K^+ ions in the ORS (use the following equation). (<u>show your calculation</u>)

$$\%Assay = \frac{\textbf{\textit{Actual Concentration}}}{\textbf{\textit{Expected Concentration}}} * 100\%$$

- Na^+ ions **%Assay** is.....**%**

- K^+ ions **%Assay** is.....**%**

Do you agree or disagree with the packaging claim?

Experiment Report Workload Distribution Table

Coordinator for Current Experiment[1]:		
Section[2]	**Student Name[3]**	**Percentage of the Performed workload[4]**

[1]Mention the name of the student/ group member who did arrange the work related to the current experiment group report/work management.
[2]Section or part of the group report
[3]Mention the name of student/the group member who took responsibility of the specified group report section
[4]Relative to the whole workload used to prepare the current group report.