Experiment 2
UV-Vis qualitative analysis
Determination of λmax of KMnO4 Report Sheet

Section number: **Group number:**

Objective:

Method:

- Measurement wavelength range is ----------
- The Concentration of Potassium permanganate stock solution is ----------(unit)
- Calculate the theoretical concentration of the measured solution (show your detailed calculation).

Results:

1. Fill in the following peak table which represent the wavelength and the absorbance of each peak.

Peak number	Wavelength (nm)	Absorbance
1		
2		
3		
4		
5		

Graph Plotting (Wavelength vs. Absorbance):

Attach the picture or draw the plot that was shown on the instrument screen during the analysis of your sample; label **the X-axis** for the wavelength and **the Y-axis** for the absorbance.

(**Attach the graph paper to this report sheet)**

Results Summary:

The maximum absorbance is: ----------

The λ_{max} is: ----------

Discussion

Answer the following questions:

1. There is no need to scan your sample in the Ultraviolet (UV) range of wavelength. Why?

2. While using UV-Vis spectrophotometer to scan your sample over a range of wavelength, what could happen to spectrum results if you are mistakenly switch the place of your sample cell and the reference?

3. Explain why a suitable dilution of the sample must be obtained before measuring the absorbance using UV-Vis spectrophotometer device?

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.