**The Iodide-Persulphate Reaction:**

**The Effect of Concentration on Reaction Rate**

***(50 marks total)***

**Observations: *(2 marks)***

**Results and Calculations**:

Sample calculations from **trial #1** for the concentrations of S2O8-2, I-, S2O3-2 and -S2O8-2

***(4 marks)***

**Graphs to determine the exponents m and n: *3 marks each***

Sample calculations from **trial #4** for the reaction rate, rate constant (k), and ionic strength.

***(6 marks)***

**Results Table: *(4 marks)***

**Questions:**

1a) ***2 marks***

1b) ***2 marks***

2a) ***3 marks***

2b) ***3 marks***

3a) ***1 mark***

b) ***1 mark***

c) ***1 mark***

4a) ***1 mark***

b) ***1 mark***

c) ***1 mark***

**Conclusions: *4 marks***

**References:**

* *No marks are assigned for the references, however, if you have cited any sources in the report and not provided reference information -1*

**Clarity and Understanding: *3 marks***

**Pre-laboratory Questions**

1) ***(1 mark)***

2) ***(1 mark)***

3) ***(1 mark)***

**Experimental Procedure Summary: *2 marks***