Lab report:

**Introduction:** An overview of the experiment including the goal of the experiment

**Theory:** State and describe the relevant equation(s) connecting the experimental values and define all parameters

**Experimental Arrangement:** A description of the apparatus used (not cookbook style). A figure may be appropriate

**Results and Discussion:** This section should include text which explains to the reader what was done and refers the reader to tables and graphs as appropriate. A collection of equations, calculations and tables without any explanation is not sufficient. Take care with the following:

* *Tabulation of data:* Data is conveniently presented in tables headed with a number and title
* *Graph(s):* Ensure that a graph is correctly labelled with a title, has its axes described and numbered, that plotted points are clearly shown, and that the best fit straight line is drawn through the points where appropriate. Don’t ‘join-the-dots’.
* *Calculations:* Commence calculations by either stating or clearly indicating the relationship between the various parameters.   
  Show a sample calculation. Detailed step by step or repeated calculations are not necessary. Don’t combine values and their uncertainties into a single calculation. It is messy and confusing. Show a separate uncertainty calculation.
* *Uncertainties:* Quote and justify all raw uncertainties recorded during the measurements. All final results must be quoted with an uncertainty. The presentation for this can be brief, beginning with an uncertainty statement, and needs only to include sufficient detail to show how the uncertainty value (+- quantity) was obtained.
* When an experiment requires a number of quantities with their uncertainties to be obtained it is good practice to summarize all of these results at the end of the results section (or at the begging of the conclusion section).

**Conclusions:** A summary of the outcomes. Compare with the accepted values where possible.

**References:** A list of references (usage should be explicitly referred to in the text).