**Guidelines for preparing Laboratory reports.**

The laboratory reports are major written assignments and should be written in the form of a scientific paper. The laboratory reports should contain the following sections:

• Title Page

• Brief Introduction

• Materials and Methods

• Results/Discussion

• References

All laboratory reports are expected to be well written, typed in English. Follow the following guidelines for each section to write a lab report.

1.2.1 Abstract section:

The abstract is a short and yet thorough summary of the report so that one can get an idea about the experiment without reading your whole report. It should include the purpose of your experiment, the procedures you used to carry out the experiment, results you obtained from the experiments, and your conclusions. The abstract should be no longer than a small paragraph (10-12 lines).

1.2.2 Introduction section:

This part should consist of any theoretical background information pertinent to understand your report. This section should be around 30-40 lines.

1.2.3 Materials and Methods section:

In this section you will write the material and methods that you used, you must also mention exact volumes, amounts, incubation times, and any modifications from the procedure mentioned in the manual.

1.2.4 Results section:

In this section of your lab report, you should report all your results that you get from your experiment such as calculations, exact volumes, amounts, incubation times, etc.). You should present them in a tabulated form so it will be easy for quick reference. You must number and label all the tables and figures (graphs, diagrams). This way it will be easy for you to refer to them in your discussion section. You should also include your sample calculations (if any) in the result section.

1.2.5 Discussion section:

In this section you are required to give a thorough description of what happened in the experiment. The discussion section is also where you interpret your results and make conclusions. You should refer to your tables and diagrams while explaining your results. You should compare your results to expected values (calculated or from the literature). Even if you obtained unexpected results, the discussion section is the section to justify or explain the reasons why you have obtained such results. Please remember how you interpret your results carries more weight than the results themselves.

1.2.6 Conclusion section:

The conclusion section is just a quick overview of what was done and how. However, more importance is given to the results.

1.2.7 References section:

In this section, you will provide an alphabetical listing (by first author's last name) of the references which have been used in the report