

# Lab Report Writing Format

The lab report assessment will be based on the accuracy of the results and the contents (i.e. comments on the results taken), theory, discussion and the organization of the report. The report should include technical details and explanations about the experiment and the related subject. While preparing the report, every student must use the data they obtained during the experiment. All the necessary drawings must be done carefully with pencils/circuit drawing tools and students must pay attention to the units. The drawings and equations, which are not labeled carefully, will not be evaluated.

**Use A4 papers for writing the report. Leave scaled margins and write on both sides of the paper.**

A report should be composed of the following sections:

## Printed Cover Page

Follow the given cover page format.

## Objectives

In this section, the objective of the experiment should be mentioned, briefly.

## Theory

- a) Theory part should be research based and extensive. You should consult relevant text-books, lecture notes and online materials.
- b) Explain how the circuit works. Explain working principle, expected result/output of each block, why they are connected that way. **Don't explain how the circuit components are connected or connection procedures.**

**Please note that any direct copy paste from the manual or other groups will be rewarded with 0 marks.**

## Equipment List

This list should include the name of the equipment and model number (if available).

## Circuit Diagram

Circuit diagrams should be clearly drawn with pencils/circuit drawing tools and must be labeled.

## Data and Result

This is the main section of the report. In this section, the computed and/or measured values should be shown in tabular form. All curves (if required) must be drawn with suitable titles, units and scales on both axes. Also, compare the obtained data with the theoretical data and calculate %of error.

## Graphs

Add graphs to represent your data and result. Use graph paper for graph drawing. Axis and points should be properly labeled.

## Result Analysis and Discussion

Here, the students should write a brief analysis of the result. For example, write down what you've achieved from the experiment and you should also mention the differences between the theoretical and practical results, reason of errors and the methods of reducing them and personal opinions about the experiment. On your report, your result analysis should have following points:

- Comparison between theoretical and practical value
- Cause of errors

On your report, your discussion should have following points:

- Problems faced during experiment
- Troubleshooting
- Conclusion

## Question Answers

Number of questions will be provided in the lab manual. Please note that any direct copy paste from other groups will be rewarded with 0 marks.

## Attachments

Photocopy of the signed data sheet/s must be attached as the last page of your report.