**Guidance for report writing:**

After completion of a lab experiment, the Lab Report is due and should be submitted within 1 week during the next lab class. Each **Group should submit one lab report** per experiment and any late submissions will be penalized. Each group must also write the results and data (collected practically from conducting the experiment) in the datasheet provided with the manual and get it signed by the Lab Instructor. This paper will also contain the name and ID of the student and must be attached with the Lab Report. It shall act as a physical proof that the group completed their experiment successfully without manipulating any result. Below is a detailed description of what each Lab Report must contain:

1. **Cover Page with course and students’ details-** All lab reports should have a cover page and the same cover page should be used for all the lab reports. You can make photocopies of the cover page and use it or you can make a print out that looks similar to the cover page.
2. **Title** – Give the Title in the first page from the same as Lab manuals
3. **Objective** – You should briefly write what was the aim of the experiment. In other words, write what you intent to achieve by doing the experiment.
4. **List of Equipments–** A simple list of all the apparatuses and Equipment you used to do the lab experiment.
5. **Theory** – In this section of the Lab Report, you will specifically write the things taught during the lecture time of the class by the faculty. This section should be concise and to the point. Marks will be given based on your ability to explain what you understood during the class time. Copying anything from another lab report of a different group will earn your group and the group from which you have copied a straight **zero**. Copying anything from a lab report of a past semester will also earn you a straight **zero** if caught.
6. **Circuit Diagram** – Give the circuit diagram for the experiment; it may be computer composed or hand drawn but should be clean and legible.
7. **IC Diagram** - Give the circuit diagram for the experiment it maybe by hand drawing or Using Logisim IC Diagram.
8. **Data/Readings/Truth table** – This section of the lab report will contain the data that you have collected practically in lab Attached the Data/Reading in you Report.
9. **Questions and Answers**: For each experiment there is a set of questions in the Lab Manual, for each Lab Report there will be one set of Questions and Answers.
10. **Discussion** –This is one of the most important parts of the lab report. What you write here proves how attentive and careful you were during the lab class. Copying a single line from another person’s discussion or from a previous lab report will earn you a straight **zero** if you get caught. In your discussion, simply write what you did during the lab session (you may also write about small details), what you expected to see from the theoretical knowledge you had and what you eventually saw in practice. Suggest a legitimate reason for the possible fluctuation if any. You can also write about the limitations and drawbacks of the experiment. You can also put your personal suggestion

(If you have any) how we can improve our experimental setup. Your personal observation and the order at which you write them are of utmost importance to score good marks here.

1. **Attachment**: Finally, you must attach the Signed datasheets/manual in the lab (in which you have written your collected data) Circuit Diagram, IC Diagram, with the lab report. Marks might be deducted if this sheet is not found with the lab report.
2. Make Sure in Logisim Attachment the Truth Table Should Be visible– You can visualize the Truth Table in Logisim from Project Tab -> analyze Circuit -> Table

\*\*\* Arrange the documents papers/Attachments from 1-11 according to the order above. \*\*\*