

**NUST School of Electrical Engineering and Computer Science**

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| Faculty Member:\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Semester:\_\_\_\_\_\_\_\_\_\_\_\_\_ | Section: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Department of Electrical Engineering

EE-379: Control Systems

**LAB Name and Number :**

**Group :**

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| --- | --- | --- | --- | --- |
| Student Name | Reg. No. | Lab Report Marks / 10 | Viva Marks/ 5 | Total/15 |
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**Guidelines for Lab Report**

1. Title page of lab report **must** be as on page 1.
2. Lab reports must be submitted on time. In case of late submission, 7 marks will be deducted. It is your responsibility to submit your lab report in time. Emails related to LMS or Internet issues will not be entertained.
3. Lab report must include objectives, software used for simulation, results and conclusion.
4. All files which may include M-file, Simulink file, VIs and the lab report in MS Word format must be zipped and named as per following format “Lab no,Group no,BEE4,Section” e.g. if group no 1 of BEE4A is submitting lab report for lab 1 it should be named as “1G1BEE4A”.
5. Palagarism in lab report or Simulation files will not be accepted and both groups will be marked zero in whole lab.
6. Lab report will be submitted in Sub-Groups. Every group of four students contains two sub-groups A and B.
7. Detail about point 3 is as under
8. **Objectives**

Must be written in following format

* Pre-requsite of the lab (if any)
* What are your expectations from the lab
* Has the objectives been achevied
* If no what are the possible reasons

1. **Software Used for Simulation**

Must be written in following format

* Which software has been used for the lab
* What are the new commands you have learned
* Description of M-files/Simulink files with proper commenting and their results (only mathematical expressions)

1. **Results**

Must be in following format

* Graphical results with proper indication of the x-y axis
* Description about the graphical results/responses.
* Make table of values in order to check the results (if needed)
* Pre-lab results: Throughout all of the labs, we will ask you to keep record of everything you are doing. It will be handwritten and you should include everything in the lab report which you feel is important and not part of this handout. Maintaining this record is a good practice for professionals whether engineers or not. It helps you to remember things when you are trying to recall them later or when you are preparing a typed report. Some of the things you can include in the logbook are:

i. Any observations that you may have

ii. Derivations

iii. Solution of exercises

iv. Responses observed on the oscilloscope, with proper labeling. (For responses observed on the computer you can save an image)

v. Anything that you do not understand and want to ask a faculty member.

vi. If done properly, you will feel that this is for your benefit and is a nice practice to follow in any professional work.

1. **Conclusion**

Must be in following format

* The relation of the new commands learned with lectures in progress
* Comparison of the therotical results with actual results
* Difficulty level of the lab and take away lessons.

**NOTE:** If you are absent, you will not get any marks for the lab report and viva. However, if you have a genuine reason for being absent, then you will be allowed to perform the lab in your spare time. Viva will be taken after every lab. If a student leaves the lab without permission of the Lab Engineer, he will get zero marks in viva.