Digital Systems Lab Rubrics

Fall 2020

CLOs:

1. Implement Boolean functions and demonstrate techniques for simplification of functions
2. Design combinational circuits using a software tool
3. Design sequential circuits using software tool
4. Show a practical implementation of a digital system

Performance	Exceeds Expectations (0.9-1.0)	Meets Expectations (0.5-0.8)	Does not meet Expectations (0.0-0.4)	Marks
Conducting Experiment [20] CLO1, CLO2, CLO3	Selects relevant equipment and/or Verilog commands for the experiment, and ensures smooth operation and complete the experiment in lab timing.	Needs guidance to select relevant equipment and/or Verilog commands, and conducts the experiment with minor error in due time or performs the experiment after the due time.	Have very low knowledge about appropriate equipment and/or Verilog commands, or doesn't show interest in the experiment or doesn't perform the lab at all.	
Open Ended Lab [5]	As per the rubrics attached			
Lab Manual [30] CLO1, CLO2, CLO3	Submit the lab manual (Including circuit diagram, procedure and observations/graphs) on due time.	Submit the complete lab (Including circuit diagram, procedure and observations/graphs) manual with minor errors or after the due time.	Submit the incomplete lab manual after due time or did not submitted the manual.	
Mid and Final Assessment [25] CLO1, CLO2, CLO3	Knows the complete theory of the experiments and effectively provide the solution to the instructor	Knows the theory of the experiments with lack of confidence and does not effectively provide the solution to the instructor	Doesn't know the theory of the experiment and unable to solve the problem	
Project [20] CLO4	Knows the theory well, performs well in the project phase and makes it functional in due time with an effective project report	Knows the theory and/or performs well in the project phase but unable to make it functional in due time and/or with average project report	Doesn't know the theory and/or doesn't perform in the project phase and also unable to make it functional in due time and/or does not submit the report	
[100]				**Total=**

Rubrics for Open Ended Lab

Components	Excellent (4)	Good (3)	Basic (2)	Just Acceptable (1)	Unacceptable (0)
Understanding of Problem	Have a complete knowledge along with proper calculations to carry the lab	Have satisfactory knowledge along with proper calculations to carry the lab	Have satisfactory knowledge along with errors in the calculations to carry the lab	Unsatisfactory knowledge or wrong calculations.	Doesn't know anything about the lab.
Performance	Relevant selection of equipment/ instructions to achieve desired objective	Satisfactory selection of equipment/ instructions to achieve desired objective	Satisfactory selection of equipment/ instructions to achieve desired objective with errors	Unsatisfactory selection of equipment/ instructions to achieve desired objective	No use of equipment/ instructions leading towards major errors in the objective
Accuracy of Results	Appropriate data collected and correctly completed lab in time as per the problem statement	Appropriate data collected and completed lab as per the problem statement with little help.	Appropriate data collected and partially completed lab.	Inappropriate data collected and lab experiment with errors.	No data collected, and no lab performed.
Report writing	Report meets all requirements and it is prepared in original and creative way.	Report meets all prescribed requirements.	The requirements of report writing are not properly addressed.	The report submitted but not according to requirements.	Report was not prepared or have not required elements.

Marks Obtained = _____ out of 16

Marks in absolute = _____ x 5/16 = _____

Teacher Signature with Date: _____