**CPE166 Advanced Logic Design**

**Lab 3 Report**

**Student Name:**

**Date:**

**California State University, Sacramento**

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**Lab Report Evaluation**

Lab Instructor Name: \_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_

Student Name: \_\_\_\_\_\_\_\_\_\_\_\_\_ Final Lab 3 Grade: \_\_\_\_\_\_\_\_\_\_\_\_\_

Evaluate each component based upon the following criteria.

Your final lab grade = 100 –( total of grade deduction ).

**If more than 100 points are deducted, your lab grade will be 0.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Poor** | **OK** | **Weight** | **Grade Deduction** |
| Title Page , Table of Contents | [ ]  Missing or not Following Guideline | [ ]  Fully Following Guidelines  | 2 |  |
| Spelling and Grammar | [ ]  Many Errors | [ ]  Minor or  No Errors | 6 |  |
| Introduction | [ ]  Many Errors[ ]  No Introduction | [ ]  Minor or  No Errors | 3 |  |
| Conclusion | [ ]  Many Errors[ ]  Missing  Conclusion | [ ]  Minor or  No Errors | 3 |  |
| Note:Each spelling or grammar error will result in a deduction of 1 point.The lab instructor needs to list the page numbers and paragraph numbers below to indicate the source of spelling and grammar errors, and copy the source of the errors.1. Page #, Paragraph #, Error Source: “ …………..”
2. Page #, Paragraph #, Error Source: “ …………..”
3. Page #, Paragraph #, Error Source: “ …………..”
4. Page #, Paragraph #, Error Source: “ …………..”
5. Page #, Paragraph #, Error Source: “ …………..”
6. Page #, Paragraph #, Error Source: “ …………..”

If there are more than 6 errors listed above, the lab instructor will select the "poor" button above and stop checking for any other spelling and grammar errors in the report, then fill out the deduction point as 6.If there are only 5 or fewer spelling or grammar errors, the lab instructor will copy the error sources and list them above, then select the button listed above as "OK" and fill out the score deductions above.Missing "Introduction" section in the report will result in a 3-point deduction.Missing "Conclusion" section in the report will result in a 3-point deduction. |
| Project 1 : 1MHz BCD Counter Design and Logic Analyzer | Project 1 Demo    | Project 1 Report | Weight | Deduction |
|  | [ ]  No Demo [ ]  Demo On Time [ ]  Demo Late By \_\_\_\_\_weeks | [ ]  No Report [ ]  Report On  Time [ ]  Report Late By \_\_\_\_weeks | 33 |  |
| Note:Demo late by 1 week: 3-point deduction.Report late by 1 week: 5-point deduction.If you request lab demo later than lab3 report submission deadline, the lab instructor will not check your lab demo and mark “No Demo” above. If you delay the submission of the lab3 report for more than 2 weeks, your report will not be accepted and the lab instructor will mark "No Report" above it.If the lab instructor marks “No Demo” or “No Report” above, the lab instructor will neglect your lab report, and mark 33-point deduction above. |
| Project 1 Report Errors:1. Code Errors:

Page # , Module Name #, Error Source: “……………”Reason of Error: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.1. Logic Analyzer Waveform Errors:

Page # , Reason of Error: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.1. Missing Logic Analyzer Simulation Waveform
2. Missing Result Discussion of Simulation Waveform
3. Missing Code 1
4. Missing Code 2, etc.
5. Missing FPGA Constraint File
6. Error in the FPGA Constraint File

Each of the above errors will result in a 3-point deduction.If all design codes are missing, the lab instructor will directly mark deduction points of 33 in this worksheet without checking for more errors.If the deduction is less than 33 points, the lab instructor will list all errors and fill out deduction points in this worksheet.If more than 33 deduction points are listed above, the lab instructor will stop checking for more project 1 report errors and fill out the deduction points as 33. |
| Project 2 : Pseudorandom Number Generator and Hamming Code Display on LEDs  | Project 2 Demo    | Project 2 Report | Weight | Deduction |
|  | [ ]  No Demo [ ]  Demo On Time [ ]  Demo Late By \_\_\_\_\_weeks | [ ]  No Report [ ]  Report On  Time [ ]  Report Late By \_\_\_\_weeks | 33 |  |
| Note:Demo late by 1 week: 3-point deduction.Report late by 1 week: 5-point deduction.If you request to show lab demo later than lab3 report submission deadline, the lab instructor will not check your lab demo and mark “No Demo” above. If you submit lab3 report later than 2 weeks, your report will not be accepted and the lab instructor will mark “No Report” above.If the lab instructor marks “No Demo” or “No Report” above, the lab instructor will neglect your lab report, and mark 33-point deduction above. |
| Project 2 Report Errors:1. Code Errors: Page # , Module Name #, Error Source: “……………”

Reason of Error: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_1. Simulation Waveform Errors:

Page # , Reason of Errors: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_1. Missing Simulation Waveform
2. Missing Result Discussion of Simulation Waveform
3. Missing FPGA Constraint File
4. Error in the FPGA Constraint File
5. Missing Picture of Implementation Result on FPGA Board
6. Missing Code:
7. Missing Testbench:

Each of the above errors will result in a 3-point deduction.If all design codes are missing, the lab instructor will directly mark deduction points of 33 in this worksheet without checking for more errors.If the deduction is less than 33 points, the lab instructor will list all errors and mark deduction points in this worksheet.If more than 33 deduction points are listed above, the lab instructor will stop checking for more project2 report errors and fill out the deduction points as 33. |
| Project 3 : Calculator Design with Multiplexed Seven Segment Displays | Project 3 Demo    | Project 3 Report | Weight(Extra Credit) | Deduction |
|  | [ ]  No Demo [ ]  Demo On Time [ ]  Demo Late By \_\_\_\_\_weeks | [ ]  No Report [ ]  Report On  Time [ ]  Report Late By \_\_\_\_weeks | 25 |  |
| Note:Demo late by 1 week: 3-point deduction.Report late by 1 week: 5-point deduction.If you request lab demo later than lab3 report submission deadline week, the lab instructor will not check your lab demo and also mark “No Demo” above. If you submit lab report later than 2 weeks, your report won’t be accepted and the lab instructor will mark “No Report” above.If the lab instructor marks “No Demo” or “No Report” above, the lab instructor will neglect your lab report, and mark 25-point deduction above. |
| Project 3 Report Errors:1. Code Errors: Page # , Module Name #, Error Source: “……………”

Reason of Error: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_1. Simulation Waveform Errors:

Page # , Reason of Errors: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_1. Missing Simulation Waveform
2. Missing Result Discussion of Simulation Waveform
3. Missing FPGA Constraint File
4. Error in the FPGA Constraint File
5. Missing Picture of Implementation Result on FPGA Board
6. Missing Code:
7. Missing Testbench:

Each of above errors results in a 3-point deduction.If all design codes are missing, the lab instructor will directly mark deduction points of 25 in this worksheet without checking for more errors.If the deduction is less than 25 points, the lab instructor will list all errors and mark deduction points in this worksheet.If more than 25 deduction points are listed above, the lab instructor will stop checking for more project 3 report errors and fill out the deduction points as 25. |
| Project 4 : RAM Design and Logic Analyzer | Project 4 Demo    | Project 4 Report | Weight | Deduction |
|  | [ ]  No Demo [ ]  Demo On Time [ ]  Demo Late By \_\_\_\_\_weeks | [ ]  No Report [ ]  Report On  Time [ ]  Report Late By \_\_\_\_weeks | 34 |  |
| Note:Demo late by 1 week: 3-point deduction.Report late by 1 week: 5-point deduction.If you request to show lab demo later than lab3 report submission deadline, the lab instructor will not check your lab demo and mark “No Demo” above. If you submit lab3 report later than 2 weeks, your report will not be accepted and the lab instructor will mark “No Report” above.If the lab instructor marks “No Demo” or “No Report” above, the lab instructor will neglect your lab report, and mark 34-point deduction above. |
| Project 4 Report Errors:1. Code Errors:

Page # , Module Name #, Error Source: “……………”Reason of Error: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_1. Simulation Waveform Errors:

Page # , Reason of Errors: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_1. Missing FPGA Constraint File
2. Missing FPGA implementation on the FPGA board picture
3. Error in the FPGA Constraint File

Reason of Error: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_1. Missing code:
2. Missing testbench:
3. Missing Result Discussion of Simulation Waveform

Each of these errors results in a 3-point deduction.If all design codes are missing, the lab instructor will directly mark deduction points of 34 in this worksheet without checking for more errors.If the deduction is less than 34 points, the lab instructor will list all errors and mark deduction points in this worksheet.If more than 34 deduction points are listed above, the lab instructor will stop checking for more project 3 report errors and fill out the deduction points as 34. |

The lab 2 grade = 125 – (Total subtraction points listed on the above table).