Examination Feedback for EEE119 – Digital System Engineering Spring Semester 2015-16 – Neil Powell

Feedback for EEE119 Session: 2015-2016

<u>Feedback:</u> Please write simple statements about how well students addressed the exam paper in general and each individual question in particular including common problems/mistakes and areas of concern in the boxes provided below. Increase row height if necessary.

General Comments:

| A good attempt at the exam this year, | all questions equal | lly popular and a | good individual | average for each |
|---------------------------------------|---------------------|-------------------|-----------------|------------------|
| one. | | | | |

Question 1:

- a. Generally ok, many students could not subtract the hex numbers. Remember to add 1 for an inclusive address range, before multiplying by 4 bits.
- b. Well attempted.
- c. Remember to define the states it is worth marks. Many students were penalized for putting Mealy type I/O on the Moore machine diagram.

Question 2:

- a. A surprisingly bad attempt at this bookwork, particularly setup/hold time and metastability.
- b. A good attempt, many high marks here. As always, some students mistakenly add up all of the delays for the four flip-flops when calculating the speed.

Question 3:

- a. Poor attempt at the dual, but very good for the truth table.
- b. Generally well attempted, all of the select line labeling must be clear and complete for full marks.
- c. Very poor attempt this year, students usually pick up at least half marks on this one.

Question 4:

- a. Good attempt by most.
- b. The question asks you to show the Boolean algebra. If you just put the diagram, you lose marks.
- c. A reasonable attempt, you need to clearly describe the states to get full marks or any marks for incorrect diagrams.