

Feedback for EEE119 Session: 2014-2015

General Comments:

A good attempt at the exam. Remember, it is not sufficient to just practice past papers and tutorial questions. You must understand the topics presented and know your notes. This is best done by engaging with the course early on and making best use of the problem classes to clear up problems in your understanding. It is important to remember that you are not just trying to pass the exam but to lay the foundations for year2.

Question 1:

- a. Most students gained full marks on (i), in part (ii) some students used a SOP instead of POS.
- b. Poor attempt by many who gave the sequence for loading a shift register from an unknown state and not the sequence for a ring counter. For full marks you need to continue until the pattern repeats. Many students only gave the speed for one of the counters and not the other.
- c. A few students gained the marks for this. Any sensible ideas towards a solution gained marks.

Question 2:

- a. A good attempt by some, these definitions needed to be exact especially the Mealy/Moore difference.
- b. Reasonable attempt. Many confused this with a Mealy machine, it is important to know the differences between the two.
- c. Not many spotted that this is a case of decoding from the shift register. Again this highlights the importance of understanding the course and not just practicing papers.

Question 3:

- a. Generally a good attempt.
- b. Well attempted.
- c. Generally well attempted. Marks lost for not correctly labelling the multiplexer.

Question 4:

- a. Well attempted. You need to practice this derivation in order to get the classic equations for the sum and carry.
- b. (i) and (ii) well attempted. (iii) Was tricky and meant to test your understanding of going from a state table to a circuit without it just being a mechanical process.