

# CSCI 2321 (Principles of Computer Design), Spring 2013

## Homework 5

**Credit:** 10 points.

### 1 Reading

Be sure you have read all assigned sections of appendix C.

### 2 Problems

Do the following problems. You may write out your answers by hand or using a word processor or other program, but please submit hard copy, either in class or in my mailbox in the department office.

1. (5 points) Do problems C.7 and C.8 from the textbook. (The definition of parity is in the section titled “Error Correction”.)
2. (5 points) Do problems C.37 and C.38 from the textbook. For C.37 you are to produce something analogous to the diagram in Figure C.10.2; for C.38 you are to produce something analogous to the Boolean expressions in the text following Figure C.10.2 (except that you will need a separate expression for each bit of the output state, assuming you have more than two, which you almost certainly will). *Hint:* You might need more than three states.