Exam 2 Topics – Exam will be Fri. March 30

Topics

- Given a logic circuit, determine its corresponding output equation.
- Given a function description, construct a corresponding truth table and determine a logic equation that will implement the function.
- An understanding of half-adders, full-adders, adder/subtractors, and overflow.
- Small binary multipliers.
- Magnitude comparators.
- Decoders and demultiplexers.
- Priority encoders and multiplexers.
- Implementing a binary function using multiplexers.
- Understand and explain the difference between latches and flip-flops.
- Given a state graph, construct an appropriate state transition table.
- Given a state transition table and specific flip-flop types, determine appropriate equations to apply to the input of the flip-flops (the flip-flop excitation tables will be given, e.g. Table 5-12 in the text).
- Any material covered in lab may be tested.
- Design systems using the above concepts.