

The final exam will assess your ability to:

- Apply DeMorgan's theorem to Boolean equations.
- Derive the SOP equation from a Karnaugh map.
- Represent binary numbers as hex numbers.
- Convert a binary number to a decimal number.
- Represent both positive and negative binary numbers in two's complement notation.
- Write the Verilog behavioral description that will implement a given state diagram.
- Write the Verilog behavioral description for frequency division and time delay circuits.
- Complete the timing diagram given a circuit containing flip-flops that have both synchronous and asynchronous inputs.
- Associate the correct definition with the different vocabulary words discussed in class during the memory lecture.
- Draw the state diagram given the description of the intended functionality of a circuit.
- Draw the state diagram for a finite state machine (FSM) given the Verilog behavioral description of the FSM.