

**UNC Charlotte, Department of Electrical and Computer Engineering**  
**ECGR 2181, Spring 2006, Homework #12, Due: 5/2/06, at the beginning of class (20 points)**  
**Turn in hard copy in class AND send assignment (MS Word doc or text) to [jmconrad@uncc.edu](mailto:jmconrad@uncc.edu)**

It should be obvious, but you may NOT use questions based on questions from previous tests or that have been submitted by other students!!!

Write four multiple-choice questions suitable for the final exam. The requirements:

1. They must be typed.
2. There must be **five choices** for answers.
3. Only one answer should be possible. Identify the answer by "**bolding**" it.
4. Ensure the questions and answer-choices are clear.

The scoring for each question will be:

- 1 point: Clear question, from material covered since the start of semester
- 1 point: Clear and reasonable answer-choices, answer correct and **bolded**
- 1 point: Quality of question and answer-choices (spelling, grammar, adherence to class material)
- 1 point: Likelihood it will be selected for the final exam
- 1 point: Difficulty of question (determined by Dr. Conrad)

Hints:

- You can include a drawing or VHDL/Verilog code listing, and ask several questions related to the drawing or code listing.
- You can provide several supporting lines or identify a problem, and then ask several questions related to the problem you set up.
- ENSURE there is only one correct answer.

Example:

1. The 8-bit two's-complement number 0xF4, when sign-extended to a 16-bit two's complement number, would be:
  - A) 0x00F4
  - B) 0xFFFF4**
  - C) 0x0000F4
  - D) 0x000C
  - E) None of the above