

>>> Chapter 5 quiz for *Foundations of Engineering* <<<

>>> SOLUTIONS <<<

Welcome to the very last quiz in *Foundations of Engineering*. This is a short answer quiz. Please put your answers in the designated answer areas. The questions from this quiz come from the lecture and the book (chapter 5). Each problem is worth 12 points (4 points are for free). This quiz is open notes, but not open book. Your notes may only contain handwritten material generated by you. You have 20 minutes.

- 1) Complete the sentence with one or more words, "Quality education is more than **just taking courses**"

- 2) There are three kinds or flavors of engineering-related organizations to get involved in. What are they?
Professional, honors, and gender/minority.

- 3) There are many engineering-related student projects that you can get involved in. List at least three such projects (e.g., as described in Landis). **ASCE concrete canoe, ASME (SAE) mini Baja, ACM programming contest, and many more.**

- 3) What is the undergraduate research program at USF called? **Research Experience for Undergraduates (REU).**

- 4) Complete the sentence with one or more words, "A job interview is like a **final exam**, you must **study** for it."

- 5) You should always put something back into the system. Always leave it better than you found it is a well known saying. Another well known saying is from J F Kennedy, finish it (with one or more words), "Ask not **what your country can do for you, ask what you can do for your country.**"

- 6) State Ohm's Law **$V = IR$ (or Voltage = Current x Resistance)**

- 7) Why do electricians work with their left hand in their pocket? **If they accidentally touch a live circuit the grounding through their body will less likely through their heart (on the left side of the body). A current through the heart will likely cause death.**

- 8) The course is almost over. I have had fun. I hope that you have too. Please give me some feedback on the textbook. If you did not think the text book was very good, please recommend a book (or type of book) that you think would be better suited to a "freshman engineering" class.
Any answer with some insight and exhibiting intelligence will count for full points.