

MEEN 2210 Electromechanical Engineering Systems Spring 2011

Studio Quiz #2 Studio Period # 5 February 1, 2011

Name: _____ Session: _____

1. (10 points) The nominal value of a $\frac{1}{4}$ watt, 5% tolerance resistor is 1 K Ω . A digital multimeter is used to measure the resistance and the meter reads 946 Ω . Is the resistor within tolerance? Show your work.

2. (40 points) Draw the experimental set-up used in studio last week: 5-Volt DC Power Supply, Voltage Divider with two 1 K Ω resistors, and a Digital Multimeter reading the output voltage from the voltage divider. Assume ideal power supply and meter.

3. (40 points) Draw the experimental set-up used in studio last week: 5-Volt DC Power Supply, Voltage Divider with two 1 K Ω resistors, and a Digital Multimeter reading the current through the voltage divider resistors. Assume ideal power supply and meter.

4. (10 points) Explain the statement: **Never measure before you predict!**