

ECE 2100 Safety Quiz

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Record answers for questions 1-15 (starts on next page) in table. Answer question 16 in the provided space. Submit this completed page to your laboratory instructor via the designated Elearning Dropbox as a PDF FILE.

Question	Answer
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16 Read the “**What is RoHS?**” section at <https://www.nist.gov/standardsgov/compliance-faqs-rohs>. Find one component at <https://www.jameco.com/> that IS and IS NOT listed as RoHS compliant. List those components:

	Name	Part Number
RoHS complaint		
Not RoHS complaint		

My signature indicates that I have carefully reviewed the **ECE 2100 Circuit Analysis Laboratory: Safety and Rules** document and the associated **online Electrical Laboratory Safety** lecture.

Printed Name	Signature	Date

1. I may remove my safety glasses when finished with my experiment and after turning off circuit power.
 - a. TRUE
 - b. FALSE
2. Where are the fire extinguisher and circuit breaker panel located?
 - a. Both are in the lab.
 - b. There is a fire extinguisher in the hallway and the circuit breaker panel is at the front of the lab.
3. If a multimeter fuse blows, should another fuse be installed in case the first one was defective, or should the circuit be checked for a fault before another fuse is installed?
 - a. The circuit should be checked first.
 - b. The fuse should be replaced.
4. You are done using a multimeter. Turn the multimeter off and configure the meter as a(n)
 - a. ohmmeter.
 - b. voltmeter.
 - c. ammeter.
5. At the conclusion of an experiment, I will:
 - a. Ensure that power is off.
 - b. Thoroughly wash my hands.
 - c. Both (a) and (b).
6. If a wire or component in a circuit comes loose while power is on, should the power be switched off before the wire is reconnected, or is it better to quickly reconnect the wire without switching off power in order not to damage the rest of the circuit?
 - a. The power must be switched off.
 - b. Quickly reconnect the wire or component to avoid damaging the circuit.
7. It is safe practice to touch an energized wire or component in a circuit as long as you keep one hand behind your back.
 - a. TRUE. A dangerous current cannot flow.
 - b. FALSE. Never touch an energized wire or component.
8. When should you use water on an electrical fire?
 - a. Never, a dry type extinguisher should be used.
 - b. If you only see smoke, but no flames.
 - c. Always
9. If someone is being seriously shocked by electricity and is unconscious, what should you do?
 - a. Turn power off first, then help the victim, and have someone call emergency services (typically 911).
 - b. Time is short. Try and separate the person from the circuit without turning off power first.

10. What should be done first if an electrical device overheats?
 - a. Grab it and try to remove it from the circuit as quickly as possible.
 - b. Pour water on it.
 - c. Immediately remove power from the circuit.

11. Where should the stools be kept when not in use?
 - a. In the middle of the room.
 - b. All should be against the wall.
 - c. Under the laboratory benches.
 - d. In front of the cabinets.

12. Can you eat and drink in the ECE 2100 laboratory?
 - a. Yes, as long as you are careful.
 - b. Yes, as long as you keep food and drink away from the circuit.
 - c. Never

13. What type of footwear is acceptable as you work in the ECE 2100 laboratory?
 - a. Sandals
 - b. Flip-flops
 - c. Substantial footwear that completely covers your feet.

14. When using a voltmeter or ammeter, the proper procedure is to:
 - a. Make a random guess at the proper range to use.
 - b. Start at the lowest possible range.
 - c. Begin with the highest range and work your way down to a suitable range.

15. Proper laboratory behavior is to:
 - a. Lunge for falling parts of live circuits.
 - b. Touch two pieces of equipment simultaneously.
 - c. Never handle wet, damp, or ungrounded electrical equipment.

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Adapted from material developed by current and former ECE faculty, including S. Durbin, J. Kelemen, and D. Miller.

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