Write 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.

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

16 Read the “What is RoHS?” section at [https://www.nist.gov/standardsgov/compliance-faqs-rohs](https://www.nist.gov/standardsgov/compliance-faqs-rohs). Identify components in the ECE 2100 Circuit Analysis Laboratory Parts Kit that are NOT listed as RoHS compliant (you can do that by searching on the part number at [https://www.jameco.com/](https://www.jameco.com/)). List those components here:

My signature indicates that I have carefully reviewed the ECE 2100 Circuit Analysis Laboratory: Safety and Rules document and the associated online safety lecture. I understand that if I have any concerns about a laboratory procedure I will contact an instructor before proceeding. I also understand that I may not work on at-home labs until approved via email.

<table>
<thead>
<tr>
<th>Printed Name</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
</table>

Page 1 of 3
1. Since the at-home experiments are only powered by 9V batteries, I can work on a circuit without removing power.
   a. TRUE  
   b. FALSE

2. Since the at-home experiments are only powered by 9V batteries, I can connect a voltmeter or ammeter to the circuit without removing power.
   a. TRUE  
   b. FALSE

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. Before connecting a battery to an at-home circuit, what is MORE important:
   a. Measure the resistance between nodes where the battery will be connected to be sure the resistance is the expected value.  
   b. Measure the battery voltage to be sure it is fully charged.

5. At the conclusion of an at-home 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 you have the power on, should the power be switched off before the wire is reconnected, or is it better to quickly reconnect the wire without switching off the 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 the circuit off first, and 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. When should safety glasses be worn when working on your at-home circuits?
    a. At all times.
    b. Only when circuit power is on.
    c. Only when working with very high voltages.

12. Can you eat and drink in the area where you are conducting an at-home experiment?
    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 on your at-home experiments?
    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.

Credits and Copyright

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

© 2020 Damon A. Miller. All rights reserved. For use by current ECE 2100 students only.