

## **Electrical Fundamentals:**

1. Voltage is:
  - a. Current flow.
  - b. Electrical resistance.
  - c. Electrical pressure.
  - d. All of the above.
2. Amperage is:
  - a. Current flow.
  - b. Electrical resistance.
  - c. Electrical pressure.
  - d. All of the above.
3. If voltage is constant but resistance increases, current will:
  - a. Increase.
  - b. Decrease.
  - c. Remain the same.
  - d. Stop.
4. List the (4) main electrical tests you can perform with a multimeter and an example of when you might use each test while troubleshooting:

**Test Name**

**Example**

5. What is the name of the electrical test you would perform with a multimeter to verify that a component is electrically open??

---

## **Microprocessor Fundamentals:**

1. Which part of a microprocessor controlled system looks at information from inputs and makes logical decisions about the outputs? \_\_\_\_\_
2. To diagnose a unit with an alarm code, go to section number \_\_\_\_\_ of the SR-4 Green Book.
3. What are the four types of alarm codes that can be generated by an SR-4 Single temp unit as listed in the Green Book?
  - a) \_\_\_\_\_
  - b) \_\_\_\_\_
  - c) \_\_\_\_\_
  - d) \_\_\_\_\_
4. On an SR-4 equipped unit, how are "Pretrip Alarm" codes displayed to show that they are different from normal operation alarm codes?  
\_\_\_\_\_  
\_\_\_\_\_
5. Which test mode will lock the unit into a mode of operation for 15 minutes?  
\_\_\_\_\_
6. Which test mode will energize individual components?  
\_\_\_\_\_
7. Which test mode can be used for diagnosis with the unit not running **or** running?  
\_\_\_\_\_
8. Which test mode can **only** be used with the unit not running?  
\_\_\_\_\_
9. Which test would you choose to verify the full operation of a unit, perhaps before putting the unit back into service?  
\_\_\_\_\_

10. To keep the unit running and save a load during extremely hot days, the SR-4 controller goes into Prevent mode.

*What are the inputs that the controller monitors?*

a) \_\_\_\_\_

b) \_\_\_\_\_

11. An SR-4 controlled unit senses a hard sensor failure of the control Discharge air temperature sensor and shifts over to the display sensor.

*What codes will be shown?*

a) \_\_\_\_\_

b) \_\_\_\_\_