Automotive Technology 7th Edition
Chapter 37
Multiple Choice Quiz A

Name: _____ Date: _____

1. What is included in a complete electrical circuit?
A. A power source
B. A resistor
C. A capacitor
D. A diode

2. What is the difference between a short-to-voltage and a short-to-ground?
A. Location of the short
B. Resistance value
C. Voltage drop
D. Current flow

3. Which of the following is NOT a feature of a short circuit?
A. It involves the power side of the circuit.
B. It involves a copper-to-copper connection.
C. It always results in a blown fuse.
D. It is a complete circuit.

4. What does Ohm's law help determine if the voltage (E) and resistance (R) are known?
A. Power
B. Frequency
C. Current (I)
D. Capacitance

5. Which of the following is a unit of electrical power?
A. Ohm
B. Volt
C. Ampere
D. Watt

6. How many watts are consumed by a lightbulb if 1.2 amperes are measured when 12 volts are applied?
A. 14.4 watts
B. 144 watts
C. 10 watts
D. 0.10 watt

7. High resistance in an electrical circuit can cause:
A. Dim lights
B. Slow motor operation
C. Clicking of relays or solenoids
D. All of the above

8. If the voltage increases in a circuit, what happens to the current (amperes) if the resistance remains the same?
A. Increases
B. Decreases
C. Remains the same
D. Cannot be determined

9. If 200 amperes flow from the positive terminal of a battery and operate the starter motor, how many amperes will flow back to the negative terminal of the battery?
A. Cannot be determined
B. Zero
C. One half (about 100 amperes)
D. 200 amperes

10. What is the symbol for voltage used in calculations?
A. R
B. E
C. EMF
D. I

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Answer Key

1. A

2. A

3. C

4. C

5. D

6. A

7. D

8. A

9. D

10. B