Automotive Technology 7th Edition
Chapter 37
Multiple Choice Quiz B

Name: _____ Date: _____

1. Which circuit failure is most likely to cause the fuse to blow?
A. Open
B. Short-to-ground
C. Short-to-voltage
D. High resistance

2. What happens when a power path wire accidentally touches a return path wire or conductor?
A. Short-to-voltage
B. Open circuit
C. Short-to-ground
D. High resistance

3. What is the result of a short-to-ground in a circuit?
A. Increased voltage
B. Blown fuse
C. Increased resistance
D. Decreased current

4. What is the relationship between current (amperes) and voltage (potential) in a circuit?
A. As current increases, voltage decreases.
B. As current decreases, voltage increases.
C. Current and voltage are not related.
D. Current and voltage are directly proportional.

5. What is the primary purpose of a fuse in an electrical circuit?
A. To increase voltage
B. To decrease resistance
C. To prevent possible overheating damage in the event of a short circuit
D. To amplify the current

6. What is the result of a short circuit in which the current bypasses some or all of the resistance?
A. Increased resistance
B. Decreased voltage
C. Increased voltage
D. Decreased resistance

7. What is the primary purpose of an electrical switch in a circuit?
A. To increase voltage
B. To decrease resistance
C. To open or close the circuit
D. To amplify the current

8. Which of the following is NOT a cause of an open circuit?
A. Broken wire
B. Blown fuse
C. Short-to-ground
D. Corroded connection

9. What is the relationship between power (watts), current (amperes), and voltage (volts) in a circuit?
A. P = I * E
B. P = I / E
C. P = E / I
D. P = I + E

10. What is the result when a circuit is not complete or lacks continuity?
A. Short-to-voltage
B. Open circuit
C. Short-to-ground
D. High resistance

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Answer Key

1. B

2. C

3. B

4. A

5. C

6. D

7. C

8. C

9. A

10. B