Automotive Technology 6th Edition
Chapter 40 - Electrical Circuits and Ohm's Law
Quiz 40B

Name_____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) An electrical circuit uses 12 volts and has a current flow of 2 amps. What is the wattage? 1) _____
A) 24 watts
B) 6 watts
C) 12 watts
D) None of these

2) A sheet metal screw holding a metal body panel has pierced the insulation of a wire and is touching the copper wire. This would cause a _____. 2) _____
A) short to ground
B) short to power
C) high resistance
D) none of these

3) In an open circuit _____. 3) _____
A) no current will flow
B) no voltage is present
C) both A and B
D) neither A nor B

4) A complete circuit that is continuous from source through loads and back to ground has _____. 4) _____
A) continuity
B) congruency
C) both A and B
D) neither A nor B

5) If 12 volts are being applied to a resistance of 3 ohms, _____ amperes will flow. 5) _____
A) 12
B) 3
C) 4
D) 36

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

7) A circuit with excessive current flow _____. 7) _____
A) may create excess heat in conductors
B) may cause a fuse to blow
C) both A and B
D) neither A nor B

8) An open electrical circuit has zero ohms resistance. 8) _____

A) True

B) False

9) A circuit with a short to voltage may cause _____. 9) _____

A) other circuits to malfunction

B) improper operation of loads in the circuit

C) both A and B

D) neither A nor B

10) Excessive corrosion on an electrical connector _____. 10) _____

A) can cause a fuse to blow

B) can cause lights to be dim

C) both A and B

D) neither A nor B

Answer Key
Testname: AT6_40B

1) A
Page Ref: 466
2) A
Page Ref: 463
3) A
Page Ref: 463
4) A
Page Ref: 462
5) C
Page Ref: 465
6) A
Page Ref: 466
7) C
Page Ref: 463
8) B
Page Ref: 463
9) C
Page Ref: 463
10) B
Page Ref: 464