

Automotive Electrical and Engine Performance 9th Edition
Chapter 8 – Wiring Schematics and Circuit Testing
Multiple Choice Questions Quiz A

1. What does the symbol “0.8 BRN/BLK” indicate in a wiring schematic?
 - a) A connector with 0.8 mm² brown wire
 - b) A splice of a brown wire with a black stripe, with a 0.8 mm² size
 - c) A 0.8-gauge wire under the hood
 - d) Circuit 0.8 in the passenger compartment

2. When a relay has terminals marked 85 and 86, what are these terminals connected to?
 - a) The switch contacts within the relay
 - b) The power and ground sides of the coil
 - c) The normally open and normally closed outputs
 - d) The main power and auxiliary power feeds

3. Technician A says a single-pole, double-throw (SPDT) switch directs current to two circuits. Technician B says it only turns a single circuit on or off. Who is correct?
 - a) Technician A only
 - b) Technician B only
 - c) Both Technician A and Technician B
 - d) Neither Technician A nor B

4. What is the main function of a diode in a relay circuit?
 - a) Amplify the current flowing through the relay
 - b) Eliminate the relay’s induced voltage spike when deactivated
 - c) Act as a secondary ground for the relay coil
 - d) Control the relay’s switching speed

5. In automotive wiring, which of the following would indicate a 2.0 mm² wire with a green color and yellow stripe?

- a) 2.0 GRN/YEL
- b) 2.0 YEL/GRN
- c) GRN 2.0/YEL
- d) YEL 2.0/GRN

6. Technician A suggests starting troubleshooting at the relay to check for voltage at terminal 30 if the circuit is open. Technician B suggests starting at the component level. Who is correct?

- a) Technician A only
- b) Technician B only
- c) Both Technicians A and B
- d) Neither Technician A nor B

7. Which tool would best help locate a short circuit by generating a magnetic field that can be detected through the vehicle body?

- a) A tone generator
- b) A Gauss gauge
- c) An ohmmeter
- d) A fused jumper wire

8. When using an ohmmeter to locate a short circuit, what procedure should be followed?

- a) Attach the ohmmeter across the fuse terminals
- b) Connect one lead to ground and the other to the load side of the fuse holder
- c) Insert it between terminal 85 and 86 on the relay
- d) Place it directly across the battery terminals

9. A momentary switch that sends a signal only when pressed, such as a horn switch, is categorized as:

- a) SPST switch
- b) DPDT switch
- c) Normally closed
- d) Normally open momentary

10. If a test light connected to both sides of a fuse socket lights up, what does this likely indicate?

- a) A functioning circuit
- b) A short-to-ground downstream
- c) An open circuit
- d) A short-to-voltage upstream

Automotive Electrical and Engine Performance 9th Edition
Chapter 8 – Wiring Schematics and Circuit Testing
Answer Key Quiz A

Correct Answers:

1. b
2. b
3. a
4. b
5. a
6. a
7. b
8. b
9. d
10. b