

Manual Drivetrains and Axles 9th Edition

Chapter 14

Multiple Choice Quiz A

Name: \_\_\_\_\_ Date: \_\_\_\_\_

1. What is electricity fundamentally described as?
  - A. The movement of protons
  - B. A chemical reaction
  - C. The movement of electrons
  - D. A magnetic field
  
2. What must be present for current to flow in a circuit?
  - A. A resistor
  - B. An excess and deficiency of electrons
  - C. A transformer
  - D. Mechanical movement
  
3. What theory does automotive electricity primarily use for current flow?
  - A. Electron theory
  - B. Quantum theory
  - C. Conventional theory
  - D. Relativity theory
  
4. What unit is used to measure the flow of current?
  - A. Ampere
  - B. Watt
  - C. Ohm
  - D. Volt
  
5. What does voltage in an electrical circuit represent?
  - A. Resistance
  - B. Electrical pressure
  - C. Power
  - D. Speed of current
  
6. What is an ohm a measure of?
  - A. Electrical current
  - B. Power
  - C. Electrical resistance
  - D. Voltage
  
7. What does a short-to-voltage fault in a circuit typically involve?
  - A. A break in the circuit
  - B. Copper-to-copper connection
  - C. Resistance increase
  - D. Battery failure

8. What components are necessary for a complete electrical circuit?

- A. A power source and a load
- B. A switch and a resistor
- C. A fuse and a ground path
- D. All of the above

9. What happens in a short-to-ground fault?

- A. Increase in resistance
- B. Circuit overload
- C. Fuse blows
- D. Current bypasses the load

10. What is the purpose of an ammeter in an electrical circuit?

- A. To measure resistance
- B. To measure voltage
- C. To measure current
- D. To control current flow

Manual Drivetrains and Axles 9th Edition

Chapter 14

Multiple Choice Quiz A

Answer Key

1. C

2. B

3. C

4. A

5. B

6. C

7. B

8. D

9. C

10. C