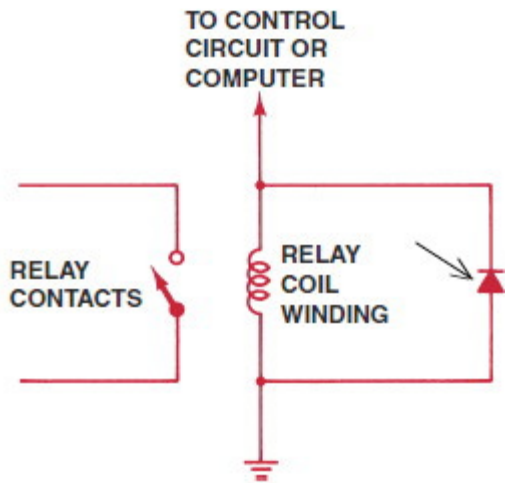


Name \_\_\_\_\_

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

- 1) An LED can be used in a \_\_\_\_\_. 1) \_\_\_\_\_
- A) Headlight
  - B) Taillight
  - C) Brake light
  - D) All of the above

- 2) What is the purpose of this component (arrow) in this schematic? 2) \_\_\_\_\_



- A) To control voltage spikes
  - B) To hold the relay on once it is energized
  - C) To protect the ground connection
  - D) To protect the relay incase of reverse polarity
- 3) Another name for a computer ground is \_\_\_\_\_. 3) \_\_\_\_\_
- A) Logic low
  - B) Zero
  - C) Reference low
  - D) All of the above
- 4) The arrow in a symbol for a semiconductor device \_\_\_\_\_. 4) \_\_\_\_\_
- A) Points toward the negative
  - B) Points away from the negative
  - C) Is attached to the emitter on a transistor
  - D) Both A and C are correct
- 5) "Breakdown voltage" is the voltage at which a Zener diode will do which of these? 5) \_\_\_\_\_
- A) Allow reverse current to flow
  - B) Stop the flow of reverse current
  - C) Sustain damage as a result of current overload
  - D) Stop the flow of either forward or reverse current

6) When the positive lead of a diode is connected to the positive side of a circuit, it is called \_\_\_\_\_ 6) \_\_\_\_\_  
A) Forward bias  
B) Negative bias  
C) Reverse bias  
D) None of these

7) In automotive applications, an inverter is used to convert \_\_\_\_\_ . 7) \_\_\_\_\_  
A) DC voltage to a lower DC voltage  
B) DC current to BC current  
C) AC current to higher AC current  
D) DC current to AC current

8) Static electricity can build up on the technician's body. Before handling electronic components discharge the static charge by \_\_\_\_\_. 8) \_\_\_\_\_  
A) Touching a ground point on the vehicle  
B) Holding a large metal flashlight  
C) Sitting on the drop light cord  
D) Gripping the steering wheel

9) P-type material is silicone doped with which of these? 9) \_\_\_\_\_  
A) Boron  
B) Indium  
C) Either A or B  
D) Neither A nor B

10) What does this symbol represent? 10) \_\_\_\_\_



- A) A zener diode
- B) A diode
- C) An LED
- D) A resistor

## Answer Key

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1) D

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2) A

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3) D

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4) D

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5) A

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6) A

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7) D

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8) A

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9) C

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10) A

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