

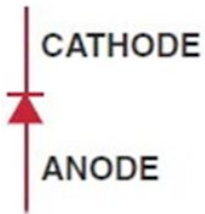
Name _____

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

- 1) Technician A says to avoid touching the electrical terminals of a component to reduce the chances of electrostatic discharge. Technician B says that as long as rubber-soled shoes are worn, there is no danger of ESD damage. Which technician is correct? 1) _____
- A) Technician A only
 - B) Technician B only
 - C) Both technicians
 - D) Neither technician

- 2) When testing a transistor set the DVOM to _____. 2) _____
- A) Diode check
 - B) AC volts
 - C) DC volts
 - D) Hertz

- 3) What does this symbol represent? 3) _____



- A) A diode
 - B) A relay
 - C) A zener diode
 - D) An LED
- 4) The forward-bias voltage required for an LED is _____. 4) _____
- A) 0.3 to 0.5 volt
 - B) 0.5 to 0.7 volt
 - C) 1.5 to 2.2 volts
 - D) 4.5 to 5.1 volts
- 5) N-type material is silicone doped with which of these? 5) _____
- A) Phosphorous
 - B) Arsenic
 - C) Antimony
 - D) Any of these

- 6) P-type material is silicone doped with which of these? 6) _____
A) Boron
B) Indium
C) Either A or B
D) Neither A nor B
- 7) Technician A says that circuits using semiconductors may also be known as solid state circuits. Technician B says that the process of introducing a precise amount of impurity to a pure semiconductor material is known as doping. Which technician is correct? 7) _____
A) Technician A only
B) Technician B only
C) Both technicians
D) Neither technician
- 8) "Breakdown voltage" is the voltage at which a Zener diode will do which of these? 8) _____
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
- 9) A semiconductor is a material _____. 9) _____
A) With fewer than four electrons in the outer orbit of its atoms
B) With more than four electrons in the outer orbit of its atoms
C) With exactly four electrons in the outer orbit of its atoms
D) Determined by other factors besides the number of electrons
- 10) To forward bias a silicon diode, _____. 10) _____
A) The voltage at the anode must exceed the voltage at the cathode by 0.5 to 0.7 volt
B) The voltage at the cathode must exceed the voltage at the anode by 0.3 to 0.5 volt
C) The voltage at the anode must exceed the voltage at the cathode by 0.3 to 0.5 volt
D) The anode must be connected to a resistor (300-500 ohms) and 12.0 volts, with the cathode also connected to 12.0 volts

Answer Key

Testname: AEE6_15A

- 1) A
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- 2) A
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- 3) A
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- 4) C
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- 5) D
Page Ref: 171
- 6) C
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- 7) C
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- 8) A
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- 9) C
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- 10) A
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