

Name: _____ Date: _____

1. What are the two examples of semiconductor materials mentioned in the chapter?

- A. Carbon and Oxygen
- B. Germanium and Silicon
- C. Hydrogen and Nitrogen
- D. Iron and Copper

2. What is the process called when another material is added to a semiconductor material in very small amounts?

- A. Fusion
- B. Doping
- C. Bonding
- D. Merging

3. What are the doping elements in a semiconductor referred to as?

- A. Additives
- B. Catalysts
- C. Impurities
- D. Agents

4. What is the primary function of a diode?

- A. To act as an electrical switch in a circuit
- B. To act as an amplifier of current in a circuit
- C. To regulate the current in a circuit
- D. To store electrical energy

5. Which of the following is NOT a type of gate mentioned in the chapter?

- A. AND gate
- B. XOR gate
- C. OR gate
- D. NAND gate

6. What is the purpose of an integrated circuit (IC)?

- A. To combine multiple semiconductor devices into one group of circuits
- B. To amplify electrical signals
- C. To store electrical energy
- D. To convert AC to DC

Answer: a

7. Which of the following is NOT a cause of faults or failures in electronic components as mentioned in the chapter?

- A. Loose connector terminals
- B. A loose alternator belt
- C. Jumper cables reversed when jump-starting
- D. A voltage spike

8. What is the term used to describe the transfer of current across a resistor?

- A. Diode
- B. Resistor
- C. Transistor
- D. Capacitor

9. Which of the following is NOT a key term related to semiconductors as mentioned in the chapter?

- A. Anode
- B. Base
- C. Cathode
- D. Electrolyte

10. What causes the movement in P-type semiconductors?

- A. Excess of electrons
- B. Absence of electrons (holes)
- C. Balanced electrons and protons
- D. External voltage source

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Chapter 45

Multiple Choice Quiz A

Answer Key

1. B

2. B

3. C

4. A

5. B

6. A

7. B

8. C

9. D

10. B