

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

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

1. In which type of semiconductor does electrical conduction occur mainly as a result of electrons?
  - A. P-type
  - B. N-type
  - C. Both P-type and N-type
  - D. Neither P-type nor N-type
  
2. What is the direction of hole current in relation to the conventional direction of current flow?
  - A. Opposite
  - B. Perpendicular
  - C. Agrees with
  - D. No specific direction
  
3. What is the significance of the arrow in a transistor symbol?
  - A. Indicates the direction of current flow
  - B. Points towards the N-type material
  - C. Represents the P-N junction
  - D. Both a and c
  
4. Which of the following is NOT a function of a transistor as mentioned in the chapter?
  - A. Convert AC voltage to DC voltage
  - B. Act as an electrical switch in a circuit
  - C. Act as an amplifier of current in a circuit
  - D. Regulate the current in a circuit
  
5. What is the term used for the voltage applied to the base of a transistor that is used to control current?
  - A. Base voltage
  - B. Control voltage
  - C. Gate voltage
  - D. Threshold voltage
  
6. Which of the following is NOT a characteristic of semiconductors?
  - A. They are neither good conductors nor good insulators
  - B. They contain exactly four electrons in the outer orbit of their atom structure
  - C. They can conduct electricity due to their atomic structure being stable
  - D. Electrical current in semiconductors is caused by the movement of electrons
  
7. What is the term used for the plastic housing that encases integrated circuits?
  - A. Enclosure
  - B. Shell
  - C. CHIP
  - D. Casing

8. Which of the following is NOT a type of transistor mentioned in the chapter?

- A. PNP transistor
- B. NPN transistor
- C. Bipolar transistor
- D. Tri-polar transistor

9. What is the primary purpose of doping in semiconductors?

- A. To increase the resistance of the material
- B. To make the material electrically conductive
- C. To change the color of the material
- D. To increase the weight of the material

10. Which of the following is NOT a function of a diode?

- A. Act as an electrical one-way check valve
- B. Amplify electrical signals
- C. Convert AC voltage to DC voltage
- D. Regulate voltage in a circuit

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Chapter 45

Multiple Choice Quiz B

Answer Key

1. B

2. C

3. D

4. A

5. D

6. C

7. C

8. D

9. B

10. B