

Fundamentals of Electrical Engineering

Electrical Engineering · Answer Key · 12 Questions

1. What unit is used to measure electrical resistance?

- A) Ampere
- B) Volt
- C) Ohm**
- D) Watt

2. Which of the following is a conductor of electricity?

- A) Rubber
- B) Glass
- C) Copper**
- D) Plastic

3. What component in an electrical circuit opposes the flow of current?

- A) Battery
- B) Resistor**
- C) Switch
- D) Wire

4. What is the basic unit of electric charge?

- A) Volt
- B) Joule
- C) Coulomb**
- D) Ampere

5. What is a device that converts electrical energy into mechanical energy?

- A) Generator
- B) Transformer
- C) Motor**
- D) Diode

6. Which law states that the voltage across a resistor is directly proportional to the current flowing through it and the resistance?

- A) Newton's Law
- B) Ohm's Law**
- C) Faraday's Law
- D) Ampere's Law

7. What is the term for the rate at which electrical energy is transferred or used?

- A) Voltage
- B) Current
- C) Resistance

D) Power

8. Which of these is an insulator?

- A) Aluminum
- B) Silver

C) Wood

- D) Gold

9. What is a simple switch designed to do in a circuit?

- A) Store energy
- B) Generate voltage

C) Control the flow of current

- D) Increase resistance

10. Which unit measures electrical potential difference?

- A) Watt
- B) Ampere
- C) Ohm

D) Volt

11. What is the primary function of a fuse in an electrical circuit?

- A) To regulate voltage
- B) To provide a path for current

C) To protect against overcurrent

- D) To store electrical energy

12. What is the basic unit of electrical current?

- A) Volt
- B) Ohm
- C) Watt

D) Ampere