

Foundations of Electrical Engineering

Electrical Engineering · Answer Key · 8 Questions

1. What is the SI unit for electric current?

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

2. Which law describes the relationship between voltage, current, and resistance in a simple circuit?

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

3. What component opposes the flow of electric current?

- A) Capacitor
- B) Inductor
- C) Resistor**
- D) Diode

4. What is the SI unit for electric potential difference (voltage)?

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

5. What is the fundamental particle responsible for electric current in most conductors?

- A) Neutron
- B) Proton
- C) Electron**
- D) Photon

6. Which type of electrical circuit allows current to flow through multiple paths?

- A) Series circuit
- B) Parallel circuit**
- C) Short circuit
- D) Open circuit

7. What is the SI unit for electric resistance?

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

8. What device converts electrical energy into mechanical energy?

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