

Fundamentals of Electrical Engineering

Electrical Engineering · Practice Test · 15 Questions

1. What is the standard unit of electrical resistance?

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

2. Which law defines the relationship between voltage, current, and resistance?

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

3. What component is used to store electrical energy in an electric field?

- A) Resistor
- B) Capacitor
- C) Inductor
- D) Transistor

4. Which material is commonly used as a conductor in electrical wiring due to its high conductivity?

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

5. What is the SI unit for electric current?

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

6. Which device is used to transform voltage levels in AC circuits?

- A) Transformer
- B) Diode
- C) Resistor
- D) Battery

7. What does the abbreviation 'DC' stand for in electrical circuits?

- A) Dual Current
- B) Direct Current
- C) Digital Circuit
- D) Dynamic Charge

8. Which component allows current to flow in only one direction?

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

9. What is the unit of electrical power?

- A) Volt
- B) Joule
- C) Watt
- D) Henry

10. Which of these is considered an electrical insulator?

- A) Aluminum
- B) Gold
- C) Rubber
- D) Silver

11. What is the potential difference between two points in a circuit measured in?

- A) Amperes
- B) Volts
- C) Ohms
- D) Watts

12. Which particle carries a negative electrical charge?

- A) Proton
- B) Neutron
- C) Electron
- D) Nucleus

13. What type of circuit provides only one path for current to flow?

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

14. What property of a material opposes the flow of electric current?

- A) Conductance
- B) Resistance
- C) Capacitance
- D) Inductance

15. Which element is frequently used to make semiconductors?

- A) Silicon
- B) Iron
- C) Gold
- D) Lead