

Foundations of Electrical Engineering

Electrical Engineering · Practice Test · 10 Questions

1. In what year did Alessandro Volta invent the first battery, known as the voltaic pile?

- A) 1780
- B) 1800
- C) 1820
- D) 1840

2. What is the SI unit of electrical resistance named after Georg Ohm?

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

3. The magnetic flux unit 'Weber' is named after which German physicist?

- A) Wilhelm Eduard Weber
- B) James Clerk Maxwell
- C) Michael Faraday
- D) Nikola Tesla

4. How many volts constitute one kilovolt?

- A) 10
- B) 100
- C) 1,000
- D) 10,000

5. Who is credited with the discovery of electromagnetic induction in 1831?

- A) Thomas Edison
- B) Michael Faraday
- C) Benjamin Franklin
- D) Heinrich Hertz

6. What is the value of the elementary charge, represented by 'e', approximately in coulombs?

- A) 1.602×10^{-19}
- B) 6.626×10^{-34}
- C) 9.109×10^{-31}
- D) 1.380×10^{-23}

7. Which company did Thomas Edison co-found in 1892 that later became a major electrical conglomerate?

- A) Westinghouse
- B) General Electric
- C) Siemens
- D) Bell Labs

8. The unit 'Ampere' measures the flow of what in a conductor?

- A) Voltage
- B) Resistance
- C) Electric Current
- D) Capacitance

9. In which decade was the transistor invented at Bell Labs?

- A) 1920s
- B) 1930s
- C) 1940s
- D) 1950s

10. What is the standard frequency of alternating current (AC) power in Australia, measured in Hertz?

- A) 50 Hz
- B) 60 Hz
- C) 100 Hz
- D) 120 Hz