

Foundations of Electrical Engineering

Electrical Engineering · Answer Key · 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