

Fundamentals of Advanced Physics

Physics · Answer Key · 8 Questions

1. What is the SI unit of electric potential difference?

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

2. Which fundamental force is responsible for holding the nucleus of an atom together?

- A) Strong nuclear force**
- B) Electromagnetism
- C) Gravity
- D) Weak nuclear force

3. What is the speed of light in a vacuum approximately equal to?

- A) 300,000 km/s**
- B) 150,000 km/s
- C) 1,000,000 km/s
- D) 30,000 km/s

4. According to the laws of thermodynamics, what is the theoretical temperature where all molecular motion ceases?

- A) 0 degrees Celsius
- B) 0 Kelvin**
- C) -273.15 degrees Fahrenheit
- D) 100 Kelvin

5. Which subatomic particle carries a negative electric charge?

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

6. In physics, what does the term 'hertz' measure?

- A) Force
- B) Frequency**
- C) Energy
- D) Pressure

7. Which scientist is credited with formulating the three laws of motion?

- A) Albert Einstein
- B) Niels Bohr
- C) Isaac Newton**
- D) Max Planck

8. What is the primary particle that mediates the electromagnetic force?

- A) Gluon
- B) Photon**
- C) Graviton
- D) Neutrino