

Electricity - Class X - Paper Set 3

1. Which physical quantity is represented by the rate of flow of charge?
A) Voltage B) Current C) Resistance D) Power
2. What is the SI unit of resistance?
A) Volt B) Ampere C) Ohm D) Coulomb
3. According to Ohm's Law, the ratio of voltage to current is constant for which type of conductor?
A) Superconductor B) Non-ohmic conductor
C) Ohmic conductor D) Semiconductor
4. Which device is used to measure electric current in a circuit?
A) Voltmeter B) Ammeter C) Galvanometer D) Rheostat
5. In a series circuit, the total resistance is equal to the:
A) Reciprocal of the sum of individual resistances
B) Sum of the individual resistances
C) Square of the largest resistance
D) Product of the resistances
6. In a parallel circuit, the voltage across each component is:
A) Different B) The same C) Twice the total voltage D) Zero
7. What is the commercial unit of electrical energy?
A) Joule B) Watt C) Kilowatt-hour D) Ampere
8. What happens to the resistance of a conductor if its length is doubled?
A) Remains the same B) Doubles
C) Halves D) Becomes four times
9. What is the power consumed by a device operating at 220 V and drawing a current of 5 A?
A) 440 W B) 1100 W C) 550 W D) 2200 W
10. Which material is commonly used for making heating elements in electric heaters?
A) Copper B) Aluminum C) Tungsten D) Nichrome

Answers - Paper Set 1

1. B
2. C
3. C
4. B
5. B
6. B
7. C
8. B
9. D
10. D