

Electricity - Class X - Paper Set 4

1. Which instrument is used to measure potential difference across two points in a circuit?
A) Ammeter B) Voltmeter C) Galvanometer D) Multimeter
2. The reciprocal of resistance is known as:
A) Conductance B) Inductance C) Capacitance D) Impedance
3. In a parallel circuit, the total resistance is:
A) The same as the smallest resistance B) Less than the smallest resistance
C) Equal to the sum of all resistances D) Greater than the largest resistance
4. Which law is used to calculate the net current entering and leaving a junction?
A) Ohm's Law B) Kirchhoff's Voltage Law
C) Kirchhoff's Current Law D) Joule's Law
5. If the resistance of a wire is R , and its radius is halved, the new resistance will be:
A) $2R$ B) $R/2$ C) $4R$ D) $R/4$
6. Electric power is the product of:
A) Voltage and resistance B) Current and resistance
C) Voltage and current D) Resistance and capacitance
7. What is the SI unit of electric charge?
A) Ampere B) Joule C) Coulomb D) Watt
8. Which combination of resistors will have the highest equivalent resistance?
A) Two resistors in parallel B) Two resistors in series
C) One resistor only D) Infinite resistors in parallel
9. An electric fuse works on the principle of:
A) Thermal effect of current B) Magnetic effect of current
C) Chemical effect of current D) None of the above

10. A current of 3 A flows through a resistor of 5 Ω . What is the power dissipated in the resistor?
A) 15 W B) 30 W C) 45 W D) 60 W

Answers - Paper Set 2

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