SANJEEVANI PUBLIC SCHOOL, UTTAM NAGAR

CLASS- X (SCIENCE)

ELECTRICITY

(BY RUPESH GUPTA SIR)

Very short answer questions carrying 1 mark each:-

1. Define electric current & write its S.I. unit.
2. What is the S.I. unit of charge? Define it.
3. How many electrons are there in one coulomb of charge?
4. Define potential difference (P.D.) & write its S.I. unit.
5. What is resistance? Give its S.I. unit.
6. Two wires of same material and cross – sectional area of length 10cm & 20cm. Which will have more resistance and resistivity?
7. Name the instrument used for measuring (i) Potential Difference (ii) Current.
8. Name the instrument used to change the resistance of the circuit.
9. Name the component used to regulate current without changing the voltage.
10. How will you connect voltmeter & ammeter in electric circuit?
11. The area of cross – section of wire P is double that of Q (of same material & length) Which will have more resistance and resistivity?
12. Name one gas filled in bulbs.
13. Under similar physical conditions for resistance, what is the relation between voltage (P.D.)& current.
14. Under similar physical conditions if the P.D. across the wire is double. What will happen to its current?
15. Give an example of material used for domestic electric wiring.
16. Define Electric power. Write its S.I. unit.
17. Define 1 watt.
18. What is commercial unit of energy?
19. Name two appliances where heating is undesirable?
20. Define 1 Joule.
21. Give one property of fuse – wire.
22. Why is lead-tin alloy used for making fuse wire?
23. Write relationship between commercial unit & S.I. unit of energy.
24. What is Ohm's law?
25. What is the function of rheostat?
26. Give two examples where energy of the source is purely used in resistive circuit.
27. Why do we use tungsten while constructing a bulb?
28. Why do we encase the fuse wire in a cartridge of porcelain or similar material with metal end?
29. Relate Kilowatt hour with mega joule.
30. Why is an ammeter likely to be burnt out if you connect in parallel?
31. Identify the insulators among the following:–
Rubber, Graphite, Glass, Water
32. Consider the unit volt, ohm and ampere. One of them is the same as the product of other two. Identify it.
33. Which will have higher resistivity – a conductor or an insulator.
34. Which is a better conductor on the basis of resistivity :–
Silver : $1.60\times10^{-8}\Omega m$
Tungsten : $5.20\times10^{-8}\Omega m$
35. An electric buld is rated at 200V – 100W. What is its resistance.