

Vandana Tutorial

Mapping your future...

Electric Current & and Its Effect

(Class X)

Answer the following questions:

(Section A, one mark each)

1. How are different electric appliances connected in a house?
2. Direction of electrons in a conductor from
 - (a) Negative terminal to positive terminal
 - (b) Positive terminal to negative terminal
 - (c) In any direction
 - (d) In both the directions
3. What is the law of combination of resistances in parallel?
4. Define one ohm and 1 volt.
5. What happens if the pd across a resistance is doubled?
6. Name two special characteristics of heater coil.
7. On what factors does resistivity of material depend?
8. the length of a wire is half, but its cross section remains the same, then its resistance will become
 - (a) 1/ 4 times
 - (b) 2 times
 - (c) ½ times
 - (d) 8 times
9. Why resistance is less in parallel combination?
10. What is the cause of resistance?

(Section B, two marks each)

11. 5 Bulb of 140 W each and two fans of 85 W each is connected to a source of 220 V, the current drawn by the bulb will be?
12. A refrigerator and 5 fans rated 400W and 100 W operates 8hour per day. The total number of commercial units for 30days will be.
13. What do you mean by the potential difference? Write and define its unit.
14. Calculate the potential difference, if there are 5000 charge carrier are flowing for 10 min through a resistance of 100 ohm.
15. Calculate the ratio of series to parallel combination if there are two resistances.

(Section C, three marks each)

16. Two lamps, one rated 100 W at 220 volts and the other 60W at 220 volts are connected in parallel to a 220 V supply. What current is drawn from the supply line?
17. Find the total resistance with the help diagram of the circuit having three resistances which are connected in parallel.
18. Calculate the energy consumed in 20 days, if two bulbs of 30 w work for 6 hrs , three fans of 80 w work for 10 hrs daily and one tube of 60 w works for 3 hrs daily.(3)
19. to produce 1000 joule of heat in 10 seconds, how much voltage should be applied to 50 resistances?

By: sanjeev_29nov@rediffmail.com

9897632688