**CBSE class 10 - Electricity important questions Set C – cbsephysics.com**

1. A circular wire is made of a conductor having a resistivity of 2 x 10³ ohm/meter, and the diameter of this circular conductor is 2 meters. Then what will be the resistance between the ends of the wire (in ohms)?

2. If the filament of D bulb breaks, then does bulb C give – more light, less light, the same light or no light?
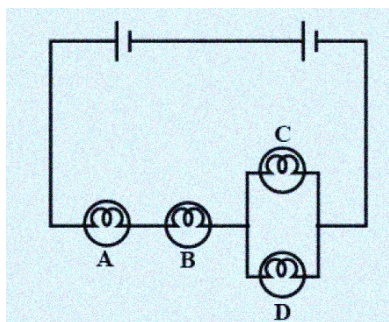

3. The equivalent resistance of 8 equal resistances in series is 40 ohms. What would be the equivalent resistance if they are connected in parallel?

4. Electric bulbs rated 220 V, 10 watts. How many lamps can be connected in parallel with each other across the two wires of the 220 V line if the maximum allowable current is 5 A through the fuse?

5. When current passes through a conductor, the heat produced in it depends on -

a. The material of the conductor

b. The current flows through the conductor.

c. The time for which the current flows.

Identify all the correct statements from above.

6. Two heater coils separately take10 minutes and 20 minutes to boil a certain amount of water. If both the coils are connected in series, How much time will it take to boil the same amount of water?

7. Three equal resistors connected in series across a source of emf 100V together dissipate 10 watts. If the same resistors are connected in parallel across the same source, What will be the power dissipation?

8. Why is rubber or plastic covers used to cover electric wires?

9. An electric heater of power of 3kW is used for 10 hours. How much energy will it consume? Express your answer in (i) kWh. (ii) joule.

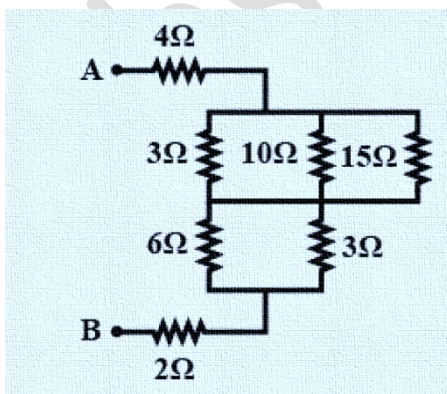10. Find the equivalent resistance between two-point A and B.
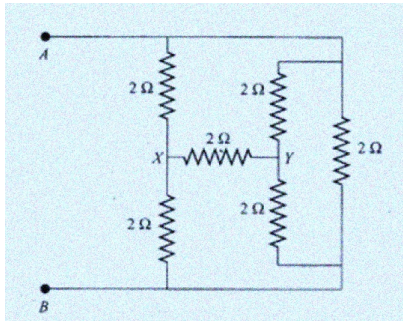
11. How much current is flowing through the ammeter?
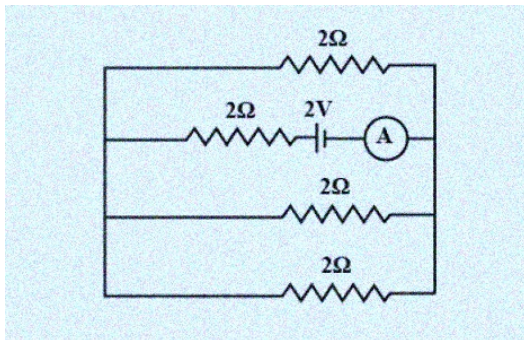
12. Two wires of the same dimension but different resistivities $\rho 1$ and $\rho 2$ are connected in parallel. If $\rho 1$ is smaller than $\rho 2$, Which wire has high resistance?

13. Find the odd term - joule, calorie, kilowatt and electron volt.

14. Find the equivalent resistance of the two-point A and B.

15. Find the equivalent resistance between two-points A and B.