AFGJI

PHYSICS ASSIGNMENT

CLASS XII

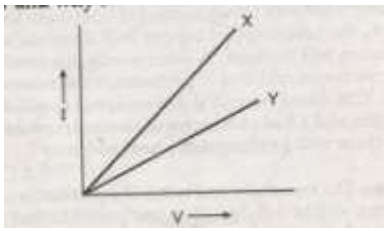
1. Define resistivity. State its unit.

2. A wire is not connected to a battery. Does it possess charge? Do electrons in it have velocity? This wire is now connected to a battery, do electrons have velocity? What is the direction of their velocity?What is the direction of current?

3. What are the factors that affect resistivity of a wire?

4. A wire of resistance 5Ω is drawn out so that its length is increased to twice its original length. Calculate its new resistance.

5. The voltage –current variation X and Y are shown in the given graph-

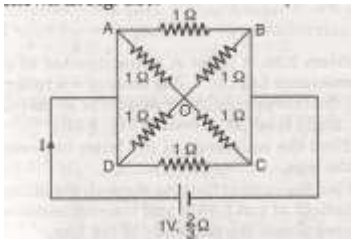


(a) If X and Y are for two wires of different material then find out which of them has higher resistivity.

(b) If X and Y are for same wire at two different temp. then which is at lower temp.?

(c) If X and Y are for two wires connected in series and then in parallel then which of them is for parallel combination?

6. Find the effective resistance of the given circuit. Also find the current drawn from the cell of e.m.f. 1V and internal resistance 2/3Ω.



7. Draw a graph to show the variation of resistance of a wire as a function of its diameter, keeping length of the wireand temp. constant.