

Name .....

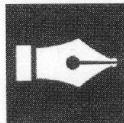
Class.....

Roll No.....

Time  
22 Min

**Max.  
Marks**

### Marks Obtained



# **TOPIC-1**

## **Electric Current**

- [R] Q. 1.** Name the physical quantity whose unit is volt/ampere. **[Board Term I, Set (15) 2011] (1)**

**Ans.** ....

- A Q. 2.** A charge of 150 coulomb flows through a wire in one minute. Find the electric current flowing through it. [Board Term I, Set-5X7289R, 2014] (1)

**Ans.** .....

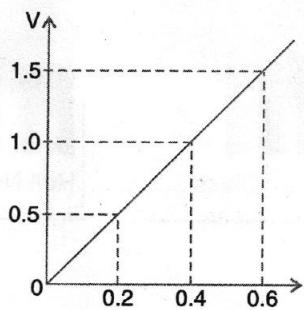
- Q. 3.** Mention the condition under which charges can move in a conductor. Name the device which is used to maintain this condition in an electric circuit. [Board Term I, Set (46), 2012] (2)

**Ans.** ....

- A Q. 4.** Calculate the resistance of a metal wire of length 2 m and area of cross section  $1.55 \times 10^{-6} \text{ m}^2$ , if the resistivity of the metal be  $2.8 \times 10^{-8} \text{ Wm}$ ? [Board Term I, Set-WJ7QPA9, 2013] (2)

**Ans.** .....

- Q. 5.** An electric circuit consisting of a 0.5 m long nichrome wire XY, an ammeter, a voltmeter, four cells of 1.5V each and a plug key was set up. Draw a diagram of this circuit in the 'ON' position. Following graph was plotted between the value of potential difference (V) and electric current (I). State the conclusion that you draw about the relation between V and I from this graph. [Board Term I, Set (49), 2011] (3)



Ans. ....

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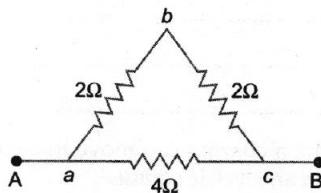
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**Q. 6.**



With the help of a circuit diagram prove that when a number of resistors are connected in parallel, the reciprocal of equivalent resistance of the combination is equal to the sum of the reciprocals of the individual resistances of the resistors.

Find the resistance between A and B in the following network. [Board Term I, Set-JYNE6XG, 2015] (5)

Ans. ....

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