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**Max Time : 1 hr** **Class = 10th Science Test**  **Max Marks : 25**

**ELECTRICITY – 1**

1. Define Current? Give its S.I. unit. [ 1 ]
2. Name a device that helps to maintain the potential difference across a conductor. [ 1 ]
3. What happens to the resistance of a wire if it is made thinner? [ 1 ]
4. Write the function of voltmeter in an electric circuit. [ 1 ]
5. Calculate the current in a wire if 300 C charge is passed through it in 5 minutes [ 1 ]
6. An incandescent lamp of resistance 100 Ω draws a current of 0.75 A. Find the line voltage [ 1 ]
7. A metal wire of resistivity 64 x 10 – 6 ohm cm and length 198 cm has a resistance of 7 Ω . Calculate its radius. [ 2 ]
8. A cylinder of a material is 10 cm long and has a cross-section of 2 cm2. If its resistance along the length be 20 Ω , what will be its resistivity in numbers and units ? [ 2 ]
9. A piece of wire of resistance 20 Ω is drawn so that its length is increased to twice its original length. Calculate resistance of the wire in the new situation [ 2 ]
10. A current of 5 A is flowing through a resistor of 15 . Calculate the potential difference between the ends of the resistor. [ 2 ]
11. On what factors does the resistor of a conductor depends? [ 3 ]
12. Resistance of a metal wire of length 1 m is 26 Ω at 20˚C. If the diameter of the wire is 0.3 mm, what will be the resistivity of the metal at that temperature ? [ 3 ]