

Name:		Roll No.		Subject	Physics
Test Type	MSQs, Short & Long Questions	Class	12 th	Date	
Chapter	13 Start to before Electrical Power	Unit	13	Time	

Q. No. 1 Tick the best option

22

- During electrolysis process, density of CuSO_4 solution:
(a) Increased (b) Decreased (c) Remains constant (d) None of these
- The magnitude of the drift velocity is of the order of:
(a) 10^{-3} m/s (b) 10^{-4} m/s (c) 10^{-6} m/s (d) 10^3 m/s
- The potential difference between the head and tail of an eel is:
and tail can be up to:
(a) 220 V (b) 440 V (c) 600 V (d) 660 V
- Heat generated by a 40 W bulb in one hour is:
(a) 140 J (b) 1440 J (c) 14400 J (d) 144000 J
- Cells converts into electrical energy:
(a) Sunlight energy (b) Chemical energy (c) Mechanical energy (d) Heat energy
- If the resistance of 500 Ω have fourth band of silver colour then its upper maximum resistance will be:
(a) 400 Ω (b) 450 Ω (c) 600 Ω (d) 550 Ω
- Which one of the following is S-I unit of temperature co-efficient of resistance or resistivity of a material?
(a) ohm-m (b) K (c) K^{-1} (d) ohm-K
- Which of the following is commercial unit of electricity?
(a) Watt (b) Kilowatt (c) Kilowatt hour (d) Horse power
- The color code of 100 Ω resistance with 5% tolerance is:
(a) Black, Black, Brown, Silver (b) Brown, Black, Brown, Silver
(c) Brown, Black, Black, Gold (d) Brown, Black, Brown, Gold
- Three resistances each of 4 Ω are connected to form a triangle, the resistance between any two terminals is:
(a) 12 Ω (b) 8 Ω (c) 0.75 Ω (d) 2.7 Ω
- Thermistors with high negative temperature coefficient are very accurate for measuring low temperature:
(a) 10 K (b) 20 K (c) 30 K (d) 40 K
- If a wire is stretched to double its original length, resistance becomes:
(a) 2-times (b) 4-times (c) $\frac{1}{4}$ -times (d) $\frac{1}{2}$ -times
- Resistance of a meter cube of the substance is called
(a) Conductivity (b) Permittivity (c) Resistivity (d) Susceptibility
- Resistivity of the Copper is:
(a) $1.54 \times 10^{-8} \Omega\text{m}$ (b) $2.63 \times 10^{-8} \Omega\text{m}$ (c) $3.5 \times 10^{-5} \Omega\text{m}$ (d) 0.5 Ωm
- If one end of the fixed terminals and sliding contact of a rheostat are connected in a circuit, it is to be used as:
(a) Potential divider (b) Variable resistor (c) Power supply (d) None of these
- A zero-ohm resistor indicated by:
(a) Single blue (b) Single Brown (c) Single black (d) Single Green
- A battery moves a charge of 40 C around a circuit at constant rate in 16 sec. The current will be:
(a) 2 A (b) 2.5 A (c) 80 A (d) 800 A
- The SI unit of conductance is:
(a) Ω^{-1} (b) Siemen (c) Henry (d) Both A & B
- The resistivity of a material is ρ . If the area of cross-section is doubled and length is halved then the resistivity of the material is:
(a) 4ρ (b) 2ρ (c) $\rho/4$ (d) ρ
- In order to have a constant current through a wire, the potential difference across its ends should be:
(a) Increasing (b) Decreasing (c) Maintained constant (d) Zero
- The process of depositing a thin layer of some expensive metal on an article of some cheap metal is called:
(a) Electrolysis (b) Electromagnetism (c) Electroplating (d) Doping
- Slope of IV-graph is numerically equal to:
(a) Capacitance (b) $\frac{1}{\text{resistance}}$ (c) Resistance (d) Reactance

Name:		Roll No.		Subject	Physics
Test Type	MSQs, Short & Long Questions	Class	12 th	Date	
Chapter	13 Start to before Electrical Power	Unit	13	Time	

Q. No. 2 Write the short answer of these following questions

5 x 2 = 10

- 1) Differentiate between conventional and electronic current.
- 2) Define resistivity, its mathematical form.
- 3) What is temperature co-efficient of resistivity and its formula?
- 4) How Rheostat can be used as a potential divider?
- 5) What is Thermistor, its types and write two uses.

Q. No. 3 Long question

05

- 1) State and Explain Ohm's law. Differentiate between Ohmic and Non-ohmic substances with the help of graph.

