ECAT Physics Chapter 12 Electrostatics Online Test

Sr	Questions	Answers Choice
1	Thermocouple is an arrangement of two different metals	A. To convert heat energy in to electrical energy B. To produce more heat C. To convert heat energy into chemical energy D. To convert electric energy in to heat energy
2	Current provided by a battery is maximum when	A. Internal resistance equal to external resistance B. Internal resistance is greater than external resistance C. Internal resistance is less then external resistance D. None of these
3	The thermistors are usually made of	A. Metals with low temperature coefficient of resistivity B. Metals with high temperature coefficient of resistivity C. Metal oxides with high temperature coefficient of resistivity D. Semi conducting materials having low temperature coefficient of resistivity
4	In Pakistan electricity is supplied for domestic use at 220 V, it is supplied at 110 V in USA. If the resistance of a 60 W bulb for use in Pakistan is R, the resistance of a 60 W bulb for use in USA will be	A. 2 R B. R/4 C. R/2 D. R
5	When three identical bulbs of 60 watt, 200 volt rating are connected in series to a 200 volt supply, the power drawn by them will be	A. 180 watt B. 10 watt C. 20 watt D. 60 watt
6	Which of the following does not obey ohm's law?	A. Copper B. Al C. Diode D. None
7	Battery is charged in motor cars, which is based on	A. Chemical effect B. Magnetic effect C. Electric effect D. None
8	The minimum resistance that can be obtained by connecting 5 resistance of $1/4\,\Omega$ each is	A. $4/5\,\Omega$ B. $5/4\,\Omega$ C. $20\,\Omega$ D. $0.05\,\Omega$
9	The resistance of an incandescent lamp is	A. Smaller when switched on B. Greater when switched off C. The same whether it is switch off or switch on D. Greater when switched on

10	A current of 1.6 A is passed through a solution of $CuSO_4$. How many Cu^{2+} ions are liberated in one minute?	A. 3×10^{20} B. 3×10^{10} C. 6×10^{20} D. 6×10^{10}
11	A heater coil rated at (1000 W - 200 V) is connected to 110 volt line. What will be the power consumed?	A. 200 W B. 302.5 C. 250 W D. 350 W
12	The colour sequence in a carbon resistor in red, brown, orange and silver. The resistance of the resistor is	A. 21×10^{3} <u>+</u> 10% B. 23×10^{1} <u>+</u> 10% C. 21×10^{3} <u>+</u> 5% D. 12×10^{3} <u>+</u> 5%
13	For two resistance wires joined in parallel, the resultant resistance is 6/5 ohm. When one of the resistance wire breaks, the effective resistance becomes 2 ohm. The resistance of the broken wire is	A. 3/5 ohm B. 2 ohm C. 6/5 ohm D. 3 ohm
14	A uniform resistance wire of Length L and diameter d has a resistance R. Another wire of same material has length, 4L and diameter 2d, the resistance will be	A. 2 R B. R C. R/2 D. R/4
15	Calculate the amount of charge flowing in 2 minutes in a wire of resistance 10 Ω when a potential difference of 20 V is applied between its ends	A. 120 C B. 240 C C. 20 C D. 4 C