

ECAT Physics Chapter 12 Electrostatics Online Test

Sr	Questions	Answers Choice
1	A 10 F capacitor is charged to a potential difference of 50 V and is connected to another uncharged capacitor in parallel. Now the common potential difference becomes 20 volt. The capacitance of second capacitor is	<p>A. $10\ \mu\text{F}$</p> <p>B. $20\ \mu\text{F}$</p> <p>C. $30\ \mu\text{F}$</p> <p>D. $15\ \mu\text{F}$</p>
2	A certain charge liberates 0.8 g of oxygen. The same charge will liberate. how many g of silver?	<p>A. 108 g</p> <p>B. 10.8 g</p> <p>C. 0.8 g</p> <p>D. 108/0.8 g</p>
3	In a voltmeter the conduction takes place due to	<p>A. Electrons only</p> <p>B. Holes only</p> <p>C. Electrons and holes</p> <p>D. Electrons and ions</p>
4	A conducting wire is drawn to double its length. Final resistivity of the material will be	<p>A. Double of the original one</p> <p>B. Half of the original one</p> <p>C. One fourth of the original one</p> <p>D. Same as original one</p>
5	A piece of fuse wire melts when a current of 15 ampere flows through it. With this current. If it dissipates 22.5 W, the resistance of fuse wire will be	<p>A. Zero</p> <p>B. $10\ \Omega$</p> <p>C. $1\ \Omega$</p> <p>D. $0.10\ \Omega$</p>
6	If 2.2 kilowatt power is transmitted through a 10 ohm line at 22000 volt, the power loss in the form of heat will be	<p>A. 0.1 watt</p> <p>B. 1 watt</p> <p>C. 10 watt</p> <p>D. 100 watt</p>
7	The conductivity of a superconductor is	<p>A. Infinite</p> <p>B. Very large</p> <p>C. Very small</p> <p>D. Zero</p>
8	If 2.2 kilowatt power is transmitted through 10 ohm line at 22000 volt, the power loss in the form of heat will be	<p>A. 0.1 watt</p> <p>B. 1 watt</p> <p>C. 10 watt</p> <p>D. 100 watt</p>
		<p>A. Zero</p> <p>B. $0.5\ \Omega$</p>

9	A 50 volt battery is connected across 10 ohm resistor. The current is 4.5 A. The internal resistance of the battery is	<p>align: center; background-color: rgb(255, 255, 248);">Ω</p> <p>C. 1.1Ω</p> <p>D. 5.0Ω</p>
10	A (100 W , 200 W) bulb is connected to a 160 V power supply. The power consumption would be	<p>A. 64 W</p> <p>B. 80 W</p> <p>C. 100 W</p> <p>D. 125 W</p>
11	A wire of radius r has resistance R. If it is stretched to a wire of r/2 radius, then the resistance becomes	<p>A. 2R</p> <p>B. 4R</p> <p>C. 16R</p> <p>D. Zero</p>
12	Two electric bulbs of 200 W and 100 W have same voltage. If R_1 and R_2 be their resistance respectively then	<p>A. $R_1 = 2R_2$</p> <p>B. $R_2 = 2R_1$</p> <p>C. $R_2 = 4R_1$</p> <p>D. $R_1 = 4R_2$</p>
13	A ten ohm electric heater operates on a 110 V line. Calculate the rate at which it develops heat in watts	<p>A. 1310 W</p> <p>B. 670 W</p> <p>C. 810 W</p> <p>D. 1210 W</p>
14	Question Image	<p>A. 5μF</p> <p>B. 10μF</p> <p>C. 3μF</p> <p>D. 6μF</p>
15	Taking the earth to be a spherical conductor of diameter 12.8×10^3 km. Its capacity will be	<p>A. 711μF</p> <p>B. 611μF</p> <p>C. 811μF</p> <p>D. 511μF</p>