

## ECAT Physics Chapter 12 Electrostatics

Sr	Questions	Answers Choice
1	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
2	The SI unit of electric flux is	A. Weber B. Nm <sup>2</sup> C <sup>-1</sup> C. NmC <sup>-1</sup> D. Nm <sup>-2</sup> C
3	A (100 W , 200 W) bulb is connected to a 160 V power supply. The power consumption would be	A. 64 W B. 80 W C. 100 W D. 125 W
4	A wire of radius r has resistance R. If it is stretched to a wire of r/2 radius, then the resistance becomes	A. 2R B. 4R C. 16R D. Zero
5	The electric field due to an infinite long thin wire at a distance R varies as	A. 1/R B. 1/R <sup>2</sup> C. R D. R <sup>2</sup>
6	If a charged spherical conductor of radius 10 cm has potential V at a point distance 5 cm from its centre, then the potential at a point distance 15 cm from the centre will be	A. 1/3 V B. 2/3 V C. 3/2 V D. 3V
7	The resistance of 20 cm long wire is 10 $\Omega$ . When the length is changed to 40 cm. The new resistance is	A. 10 <span style='color: rgb(34, 34, 34); font-family: "Times New Roman"; font-size: 24px; textalign: center; background-color: rgb(255, 255, 248);'><b><math>\Omega</math></b> </span> B. 20 <span style='color: rgb(34, 34, 34); font-family: "Times New Roman"; font-size: 24px; textalign: center; background-color: rgb(255, 255, 248);'><b><math>\Omega</math></b> </span> C. 30 <span style='color: rgb(34, 34, 34); font-family: "Times New Roman"; font-size: 24px; textalign: center; background-color: rgb(255, 255, 248);'><b><math>\Omega</math></b> </span> D. 40 <span style='color: rgb(34, 34, 34); font-family: "Times New Roman"; font-size: 24px; textalign: center; background-color: rgb(255, 255, 248);'><b><math>\Omega</math></b> </span> D. 40 <span style='color: rgb(34, 34, 34); font-family: "Times New Roman"; font-size: 24px; textalign: center; background-color: rgb(255, 255, 248);'><b}<math>\Omega </b}<math></span>
8	Which of the following represents an electric current?	A. C <sup>-1</sup> B. CS <sup>-1</sup> C. J.S <sup>-1</sup> D. dynes <sup>-1</sup>
9	The resistance of the given conductor can be increased by	A. Increasing the area B. Changing resistivity C. Decreasing the length D. None of the above because change does not matter because in any case the volume remains the same
10	The unit of resistance is	A. volt B. ampere C. ohm D. coat
		A. ohm-m

A. Both in positive and negative charges B. Positive charges C. The edges of the capacitor p D. The electric field between the plates  In a Milikian's oil drop experiment the charge on an oil drop is calculated to be 6.35 x 10 <sup>-19</sup> B. 4 C. 4.2 D. 6	11	The SI unit of conductivity is	B. ohm <sup>-1</sup> m <sup>-1</sup> C. ohm-m <sup>-1</sup> D. ohm <sup>-1</sup> m
In a charged capacitor the energy is stored in  In a Charges B. Positive charges C. The edges of the capacitor p D. The electric field between the plates  In a Milikian's oil drop experiment the charge on an oil drop is calculated to be 6.35 x 10 <sup>-19</sup> B. 4 C. 4.2 D. 6	12	The capacity of a parallel plat capacitor depends on the	A. Type to metal used     B. Thickness of plates     C. Potential applied across the plates     D. Separation between the plates
In a Milikian's oil drop experiment the charge on an oil drop is calculated to be 6.35 x 10 <sup>-19</sup> B. 4 C. 4.2 D. 6	13	In a charged capacitor the energy is stored in	B. Positive charges C. The edges of the capacitor plates D. The electric field between the
	14		B. 4 C. 4.2
A. watt B. coulomb C. volt D. ampere	15	The SI unit of current is	C. volt
A medium of dielectric constant 'K' is introduced between the plates of parallel plate condenser. As a result its capcitance  A. Increase k time B. Decreases k times C. Decreases 1/K times D. Remains unchanged	16		B. Decreases k times C. Decreases 1/K times
A. H = I <sup>2</sup> Rt B. H = I <sup>2</sup> R C. H = IR <sup>2</sup> t D. H = IR <sup>2</sup> t D. H = IR <sup>2</sup>	17	Heating effect caused by an electric circuit is written	B. H = I <sup>2</sup> R C. H = IR <sup>2</sup> t
A. Increase  B. Decrease C. Remain same D. First increase then decrease	18	If we increase the distance between two plates of the capacitor, the capacitance will	B. Decrease
A. ohm B. ohm-m <sup>2</sup> C. ohm-meter D. ohm-m <sup>-1</sup>	19	The unit of resistivity is	B. ohm-m <sup>2</sup> C. ohm-meter
A. electrons B. ions C. protons D. ions and electrons	20	The charge carriers in gases are	B. ions C. protons