ECAT Physics Chapter 12 Electrostatics Online Test

Sr	Questions	Answers Choice
1	Electric potential of earth is taken to be zero because the earth is good	A. Semiconductor B. Conductor C. Insulator D. Dielectric
2	An electric dipole is at the centre of a hollow sphere of radius r. The total normal electric flux through the sphere is (here Q is the charge and d is the distance between the two charges of the dipole)	A. Q/4πr² B. 2Q/4πr² C. Q.d D. Zero
3	One moving a charge of 20 coulombs by 2 cm, 2 J of work is done, then the potential difference between the points is	A. 0.1 V B. 8 V C. 2 V D. 0.5 V
4	Free electrons are	A. tightly bound B. fixed C. loosely bound D. tightly fixed
5	The minimum resistance that can be obtained by connecting 5 resistance of 1/4Ωeach is	A. 4/5Ω B. 5/4Ω C. 20Ω D. 0.05 Ω
6	A car battery has e.m.f 12 volt and internal resistance 5 x 10^{-2}ohm. If it draws 60 ampere current, the terminal voltage of the battery will be	A. 5 volt B. 3 volt C. 15 volt D. 9 volt
7	Cause of heat production in a current carrying conductor is	A. Collisions of free electrons with one another B. High drift speed of free electrons C. Collisions of free electrons with atoms or ions of conductor D. High resistance value
8	The electric field will be uniform	A. Near a positive point charge B. Near a negative point charge C. Between two oppositely charged parallel metal plates D. None of above
9	Electron volt is the unit of	A. Potential difference B. Energy

		C. Resistance D. Capacitance
10	The electric field due to an infinite long thin wire at a distance R varies as	A. 1/R B. 1/R² C. R D. R²
11	The resistivity of a substance depends upon the	A. length B. mass C. area D. temperature
12	Potentiometer is more sensitive than voltmeter, because	A. Voltmeter has a very high resistance B. Voltmeter has a very low resistance C. Potentiometer does not draw any current from a source of unknown potential difference D. Potentiometer is sensitive
13	Electron volt is the unit of.	A. Potential difference B. Energy C. Resistance D. Capacitance
14	An electric charge at rest is	A. Only an electric field B. Only a magnetic field C. Both electric and magnetic fields D. None of the above
15	10^6electrons are moving through a wire per second, the current developed is	A. 1.6 x 10⁻¹⁹ B. 1 A C. 1.6 x 10⁻¹⁵A D. 10⁶A
16	The unit of conductance is	A. ohm B. meter C. mho D. ohm-meter
17	The capacitance of a parallel plate capacitor depends upon	A. Area of the plates B. Separation between the plates C. Medium between the plates D. All of the above
18	Ohm established a relation between	A. voltage and resistance B. voltage and charge C. voltage and current D. voltage resistance and charge
19	Which of the following represents an electric current?	A. C⁻¹ B. CS⁻¹ C. J.S⁻¹ D. dynes⁻¹
20	What is the current is a 2 x 10^6ohm resistor having a potential difference of 2 x 10^3volts?	A. 10⁻¹A B. 10⁻²A C. 10⁻⁴A D. 1 mA