ECAT Physics Chapter 12 Electrostatics

Sr	Questions	Answers Choice
1	A charge of 0.1 c accelerated through a potential difference of 1000V acquires kinetic energy	A. 200 J B. 100 J C. 1000 J D. 400 J
2	A wire is bent into a ring of radius R is given a charge q. The magnitude of the electrical field at the centre of the ring is	A. Two B. 1/2 C. Zero D. 3/2
3	At any point on the right bisector of the line joining two equal and opposite charges	A. At electric field is zero B. The electric potential is zero C. The electric potential decreases with increasing distance from the centre D. The electric field is perpendicular to the line joining the charges
4	The resistance of a conductor does not depend on its	A. mass B. resistivity C. length D. cross-sectional area
5	The material in the form of wire or rod or plate which leads the current into or cut of the electrolyte is known as	A. voltmeters B. resistance C. electrode D. current
6	Electron volt is the unit of	A. Potential difference B. Energy C. Resistance D. Capacitance
7	In RC series circuit the time during which the capacitor acquires 0.63 times the equilibrium charge is called	A. Time constant B. Decay constant C. None of these D. All of above
8	In a charged capacitor the energy is stored in	A. Both in positive and negative charges B. Positive charges C. The edges of the capacitor plates D. The electric field between the plates
9	The graphical representation of ohm's law is	A. hyperbola B. straight line C. ellipse D. parabola
10	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
11	Solar cell converts sunlight directly into	A. potential energy B. thermal energy C. mechanical energy D. electrical energy
12	The charge carriers in electrolyte are positive and negative	A. protons B. electrons C. ions D. none of these
13	The electrode connected with the positive terminal of the current source is called	A. cathode B. anode C. electrolyte D. position
14	Which one of the following has larger value of relative permitivity E_r at room temperature?	A. Vaccum B. Air

		C. Glass D. Water
15	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
16	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
17	The current through a metallic conductor is due to the motion of	A. protons B. neutrons C. electrons D. free electrons
18	A capacitor of capacity 1μF is charged to 1 KV. The energy stored in J	A. 5 B. 0.5 C. 0.005 D. 50
19	The ohm's is defined as	A. 1 ampere / 1 volts B. 1 coulomb / 1 volt C. 1 volt / 1 ampere D. 1 volt / 1 coulomb
20	The charge per unit time through any cross-section of a conductor is called	A. capacitance B. electric power C. current D. potential difference