ECAT Pre General Science Physics Chapter 12 Electrostatics

Sr	Questions	Answers Choice
1	Resistance of a conductor is increased, the currant will	A. Decrease B. Increase C. Remain the same D. None of these
2	Which of the following does not obey ohm's law?	A. Copper B. Al C. Diode D. None
3	The SI unit of permitivity is	A. Nm^2C^2 B. $N^{-1}m^{-2}C^2$ C. NmC^2 D. Nm^2C^{-1}
4	Two conductors having the same type of charges are connected by a conducting wire. There would not be any amount of charges on them if	A. They have the same potential B. They have the same amount of charge C. They have the same capacity D. They have the same shape
5	The electric intensity outside the two oppositely charged parallel metal plates is	A. Maximum B. Minimum C. Zero D. Infinite
6	Which of the following represents an electric current?	A. C^{-1} B. CS^{-1} C. $J.S^{-1}$ D. $dynes^{-1}$
7	The electric lines of force are	A. Imaginary B. Physically existing everywhere C. Physically existing near the charge D. All of the above
8	The electric potential at the surface of an atomic nucleus (Z = 50) of radius 9.0×10^{-15} is	A. 9×10^5 V B. 9 V C. 8×10^6 V D. 80 V
9	If electric and gravitational force on an electron in a uniform electric field will be	A. E=mg/q B. E=q/mg C. E=,g/q D. E=qg/m
10	Consider a spherical shell of metal at he centre of which a positive point charge is kept	A. The electric filed is zero outside the shell B. The electric field is zero everywhere C. The electric field is zero in the region inside the shell D. The electric field is non-zero in both regions outside and inside the shell
11	In a voltmeter the conduction takes place due to	A. Electrons only B. Holes only C. Electrons and holes D. Electrons and ions
12	One coulomb of charge is created by	A. 10 electrons B. 1.6×10^{-19} electrons C. 6.25×10^{18} electrons D. 6.25×10^{21} electrons
13	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
	A point charge A of charge +4uC and another B of charge -1uC are placed in air at a	A. 2 B. 1

14	distance 1 m apart. Then the distance of the point on the line joining the charge B, where the resultant electric field is zero, is (in m)	B. 1 C. 0.5 D. 1.5
15	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
16	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
17	The force between two chares 0.06 m apart is 5 N. If each charge is moved towards the other by 0.01 m, then the force between them will become	A. 7.20 N B. 11.25 N C. 22.50 N D. 45.00
18	A 100 W, 200 V bulb is connected to a 160 volts supply. The actual power consumption would be	A. 64 W B. 80 W C. 100 W D. 125 W
19	The electric intensity at infinite distance from the point charge will be	A. Infinite B. Positive C. Zero D. Negative
20	Some charge is being given to a conductor. Then its potential	A. Is maximum at surface B. Is maximum at centre C. Is remain same throughout the conductor D. Is maximum somewhere between surface and centre