Physics ECAT Pre Engineering Chapter 12 Electrostatics Online Test

Sr	Questions	Answers Choice
1	One electron volt is equal to	A. 1.6×10^{19} eV B. 6.25×10^{18} eV C. 1.6×10^{18} eV D. 6.25×10^{19} eV
2	When an electron is accelerated through a P.D. of an one volt, it will acquire energy equal to	A. One joule B. One erg C. One electron volt D. None of these
3	The earth's potential is taken as	A. Negative B. Positive C. Zero D. Infinite
4	The electric lines of force are	A. Imaginary B. Physically existing everywhere C. Physically existing near the charge D. All of the above
5	Which one of the following is the unit of electric field intensity	A. JC^{-1} B. Vm^{-1} C. Cm^{-1} D. CJ^{-1}
6	A closed surface contains two equal and opposite charges. The net electric flux from the surface will be	A. Negative B. Positive C. Infinite D. Zero
7	The electric flux from a closed surface	A. Is independent of the shape of the surface B. Depends on the charge enclosed by the surface C. Both a and b D. None of the above
8	The electric flux is linked with a surface will be maximum when	A. The surface is held parallel to the electric field B. The surface is held perpendicular to the electric field C. The surface makes an angle of 45° with the electric field D. All of the above
9	The SI unit of electric flux is	A. Weber B. $Nm^2 C^{-1}$ C. NmC^{-1} D. $Nm^{-2}C$
10	Electric flux is defined by the relation	A. E.A. B. E x A C. E/A D. none of these
11	The dot product of electric field intensity E and vector area A is called	A. Electric potential B. Electric flux C. Electric field D. Magnetic field
12	The SI unit of electric field intensity is	A. CN^{-1} B. NC^{-1} or Vm^{-1} C. JC^{-1} D. AV^{-1}
13	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
14	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

15	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
16	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
17	Which one of the following has larger value of relative permitivity E_r at room temperature?	A. Vaccum B. Air C. Glass D. Water
18	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
19	Coulomb force, when any material medium is placed between two charges	A. Increases B. Decreases C. Remain unchanged D. None of these
20	The minimum charge on any object can not be less than	A. 1.6×10^{-19} C B. 3.2×10^{-19} C C. 1.0 C D. 4.8×10^{-19} C
21	The ratio of the gravitational force F_g to the electrostatic force F_e between two electrons at the same distance apart is approximately	A. 9.8 B. 24×10^{19} C. 24×10^{42} D. 24×10^{-44}
22	The statement "the electric force of repulsion or attraction between two point charges is directly proportional to the product of the charges and inversely proportional to square of the distance between them" refer to	A. Coulomb's law B. Gauss's law C. Biot-Sarwat law D. Ampere's law
23	The electric field intensity at a point due to a point charge	A. Falls off inversely as the distance B. Falls off inversely as the square of distance C. Remains unchanged with distance D. Increase directly as square of distance
24	Coulomb's force between two point charges depends upon	A. Magnitude of charges B. Distance between them C. Medium in which they are located D. All of the above
25	The concept of field theory was put forward by	A. Franklin B. Kepler C. Oersted D. Michael Faraday
26	The value of electrical constant of proportionality k is	A. 9×10^9 Nm^{2}C^{-2} B. 9×10^{-9} Nm^{2}C^{-2} C. 9×10^{10} Nm^{2}C^2 D. 9.85×10^{-12} N^{-1}C^{-2}
27	The SI unit of permitivity is	A. Nm^{2}C^2 B. N^{-1}m^{-2}C^2 C. NmC^2 D. Nm^{2}C^{-1}
28	If the two charges in Coulomb's law have double distance between them, then electric force	A. Becomes two-fold B. Becomes four-fold C. Remains the same D. None of these