

ECAT Physics Chapter 12 Electrostatics Online Test

Sr	Questions	Answers Choice
1	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
2	Which one of the following has larger value of relative permittivity ϵ_r at room temperature?	A. Vacuum B. Air C. Glass D. Water
3	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. $E=qg/m$
4	Coulomb force, when any material medium is placed between two charges	A. Increases B. Decreases C. Remain unchanged D. None of these
5	The minimum charge on any object can not be less than	A. $1.6 \times 10^{-19} \text{ C}$ B. $3.2 \times 10^{-19} \text{ C}$ C. 1.0 C D. $4.8 \times 10^{-19} \text{ C}$
6	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}
7	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
8	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
9	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
10	The concept of field theory was put forward by	A. Franklin B. Kepler C. Oersted D. Michael Faraday
11	The value of electrical constant of proportionality k is	A. $9 \times 10^9 \text{ Nm}^2 \text{ C}^{-2}$ B. $9 \times 10^{-9} \text{ Nm}^2 \text{ C}^{-2}$ C. $9 \times 10^{10} \text{ Nm}^2 \text{ C}^{-2}$ D. $9.85 \times 10^{-12} \text{ Nm}^2 \text{ C}^{-2}$
12	The SI unit of permittivity is	A. $\text{Nm}^2 \text{ C}^{-2}$ B. $\text{N}^{-1} \text{ m}^2 \text{ C}^{-2}$ C. $\text{Nm}^2 \text{ C}^{-2}$ D. $\text{Nm}^2 \text{ C}^{-1}$
13	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