

Electric field intensity at a point is equal to the electrostatic force experienced by a unit positive point charge both in magnitude and direction.

the electric field intensity at that point due to source charges is given by

$$\vec{E} = \frac{\vec{F}}{q_0}$$

Its dimensional formula is $[MLT^{-3}A^{-1}]$

Electric force on a charge q placed in a region of electric field at a point where the electric field intensity is \vec{E} is given by

$$\vec{F} = q\vec{E}.$$

It obeys the superposition principle, that is, the field intensity at a point due to a system of charges is vector sum of the field intensities due to individual point charges. I.e.

$$\vec{E} = \vec{E}_1 + \vec{E}_2 + \vec{E}_3 + \dots$$