

Chapter 01

ELECTRIC CHARGES AND FIELDS

Example- 11:

A point charge of $2\mu C$ is at the centre of a cubic gaussian surface 9 cm edge. What is the net electric flux through the surface?

Solution:

Given,

$$q = 2 \times 10^{-6} C$$

And

$$\epsilon_0 = 8.85 \times 10^{-12}$$

$$\phi = \frac{q}{\epsilon_0} = \frac{2 \times 10^{-6}}{8.85 \times 10^{-12}}$$

$$\phi = 2.25 \times 10^5 \text{ Nm}^2 / C$$