

Chapter 01

ELECTRIC CHARGES AND FIELDS

Example- 1:

A polythene piece rubbed with wool is found to have a negative charge of $3 \times 10^{-7} \text{ C}$, find the number of electrons transferred from wool?

Solution:

Given,

$$q = -3 \times 10^{-7} \text{ C}$$

$$e = -1.6 \times 10^{-19} \text{ C}$$

Number of electrons transferred,

$$n = \frac{q}{e} = \frac{-3 \times 10^{-7}}{-1.6 \times 10^{-19}}$$

$$\therefore \boxed{n = 1.875 \times 10^{12}}$$