

**Answer on Question #45434, Physics, Electric Circuits**

A solid metal contain  $16 \cdot 10^{21}$  atom . If 5% of electron comes out of total atom, then what will be the charge of solid.

Solution

$16 \cdot 10^{21} \cdot 0.05 = 8 \cdot 10^{20}$ . An electron has charge of  $1.6 \cdot 10^{-19}$ . This means, charge of 5 % will be

$$0.05 \cdot 16 \cdot 10^{21} \cdot 1.6 \cdot 10^{-19} = 128 C$$

So, charge of solid will be approximately 128 Coulombs.