

The impurity atoms with which pure silicon should be doped to make a p -type semiconductor are those of *(1988 - 2 Marks)*

(a) phosphorus

(b) boron

(c) antimony

(d) aluminium

Ans: (b, d)

Solⁿ: Boron and Aluminium have 3 valence electrons
So, they have 1 electron less than 4 and
hence, they have holes which ~~become~~ makes
the p-type semiconductor rich in holes.
Whereas Phosphorus and antimony has 5 valence e^- .