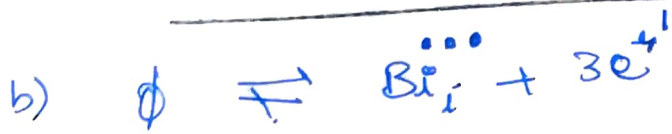


(5)

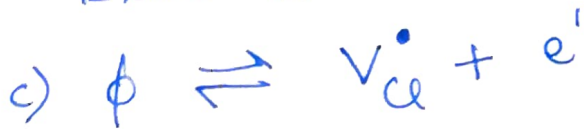


Bi^{3+} and In^{3+} are in same oxidation state so no charge (excess or deficiency) has been introduced

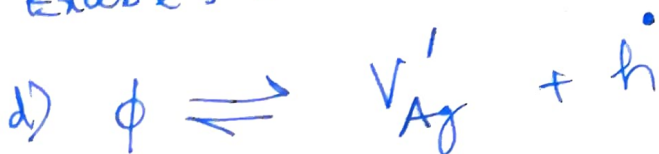
\Rightarrow No conductivity introduced



Excess electrons introduced \Rightarrow n-type conductivity



Excess e^- s introduced \Rightarrow n-type conductivity



Excess holes introduced \Rightarrow p-type conductivity



Excess holes introduced \Rightarrow p-type conductivity