The CFSE for octahedral $[CoCl_6]^{4-}$ is 18,000 cm^{-1}. The CFSE for tetrahedral $[CoCl_4]^{2-}$ will be

   (i)   18,000 cm^{-1}

   (ii)   16,000 cm^{-1}

   (iii)   8,000 cm^{-1}

   (iv)   20,000 cm^{-1}

Ans : iii

4/9CSFE(octahedral)=CFSE(tetrahedral)