Calculate the no. of unpaired electrons in $\mathrm{O}_{2}{ }^{-}$and $\mathrm{O}_{2}{ }^{2-}$ ions by drawing molecular orbital diagram.
$\mathrm{O}_{2}{ }^{-}$unpaired electrons $=1$

$\mathrm{O}_{2}{ }^{2-}$ unpaired electrons $=0$


