Among the following, the species having the smallest 6. bond length is [Online May 7, 2012] (a) NO^{-} (b) NO^{+} (c) O_{2}

(d) NO

Ans. (b)

(b) $NO^{-}(16) - B.O. - 2$ $O_{2}(16) - B.O. - 2$ $NO^{+}(14) - B.O. - 3$ NO(15) - B.O. - 2.56.

Higher the bond order lower is the bond length. Hence NO+ will have smallest bond.