



11. The ionic radii (in Å) of N^{3-} , O^{2-} and F^- are respectively:

- (1) 1.36, 1.40 and 1.71 (2) 1.36, 1.71 and 1.40
(3) 1.71, 1.40 and 1.36 (4) 1.71, 1.36 and 1.40

Answer: No of electrons in $\text{N}^{3-} = 7+3=10$, $\text{O}^{2-} = 8+2=10$ and $\text{F}^- = 9+1=10$ so they are Isoelectronic species.

As the negative charge increases, we know ionic radius also increases hence Ionic radius
 $\text{N}^{3-} > \text{O}^{2-} > \text{F}^-$

Correct option is (3) 1.71, 1.40 and 1.36