106.(D) $A \Rightarrow H(1s^1)$

$B \Rightarrow He(1s^2)$

$C \Rightarrow Li(1s^2 2s^1)$

$A_1 = IE_1(A)$	$B_2 = IE_2(B)$
$B_1 = IE_1(B)$	$C_2 = IE_2(C)$
$C_1 = IE_1(C)$	$C_3 = IE_3(C)$

$B_1 > A_1 > C_1$ $C_3 > B_2 > A_1$ $C_3 > C_2 > B_2$

$He > H > Li$ $Li^{2+} > He^+ > H$ $Li^{2+} > Li^+ > He^+$

$1s^2$ $1s^1$ $2s^1$ $1s^1$ $1s^1$ $1s^1$ $1s^2$ $1s^2$ $1s^1$

107.(D) **(a)** $\underset{4p^4}{Se} \xrightarrow{I.E._1} \underset{4p^3}{Se^+} \xrightarrow{I.E._2} \underset{4p^2}{Se^+}$ $\underset{4p^3}{As} \xrightarrow{I.E._1} \underset{4p^2}{As^+} \xrightarrow{I.E._2} \underset{4p^1}{As^{2+}}$

(b) $\underset{2p^2}{C} \longrightarrow \underset{2p^1}{C^+} \longrightarrow \underset{2p^2}{C^{2+}}$ $\underset{2p^3}{N} \longrightarrow \underset{2p^2}{N^+} \longrightarrow \underset{2p^1}{N^{2+}}$

(c) $\underset{2p^5}{F} \xrightarrow{I.E._1} \underset{2p^4}{F^+} \xrightarrow{I.E._2} \underset{2p^3}{F^{2+}} \xrightarrow{I.E._3} \underset{2p^2}{F^{3+}}$ $\underset{2p^4}{O} \xrightarrow{I.E._1} \underset{2p^3}{O^+} \xrightarrow{I.E._2} \underset{2p^2}{O^{2+}} \xrightarrow{I.E._3} \underset{2p^1}{O^{3+}}$

(d) In respective period, noble gases have highest I.E.

108.(C) R is p-block element, because difference between IE_2 and IE_3 is not very high as compared to between IE_1 and IE_2; hence stable oxidation state of R will be higher than $+2$.

109.(A) $A \longrightarrow A^+$ I.E.   I.E. $= |E.A|$

$A^+ \longrightarrow A$ E.A as they are opposite to each other

110.(A) Along the period, EGE increases so, F > O ; Cl > S

Also E.N. of Cl < F & S < O because of small size of F & O, they become unstable after gain of e^- due to interelectronic repulsion which doesn't happen in case of Cl, S due to their comparatively bigger size.

111.(D) $O^- \xrightarrow{e^-} O^{-2}$ EGE = +ve

$S^- \xrightarrow{e^-} S^{-2}$ EGE = +ve

EGE is positive when an electron is added to anion (as repulsion between negative charges) and EGE is more (+ve) in case of O^- because of it small size, so charge density increases & hence more repulsion.

112.(B) $O^- \xrightarrow{e^-} O^{-2}$ EGE = +ve

$S^- \xrightarrow{e^-} S^{-2}$ EGE = +ve

EGE is positive when an electron is added to anion (as repulsion between negative charges) and EGE is more (+ve) in case of O^- because of it small size, so charge density increases & hence more repulsion.

113.(C) For Halogens E.G.E order Cl > F > Br > I

114.(C) EGE is positive when an electron is added to anion (as repulsion between negative charges).

115.(B) Due to smaller size of O, gain in e^- causes $e^- - e^-$ repulsion hence energy is required.