Most Repeated Questions in JEE Main Chemistry from Ionisation enthalpy and Electron gain enthalpy

Q: . First ionisation enthalpy values of first four group 15 elements are given below. Choose the correct value for the element that is a main component of apatite family:

Q: An element 'E' has the ionisation enthalpy value of 374 kJ mol^{-1} . 'E' reacts with elements A, B, C and D with electron gain enthalpy values of -328, -349,-325 and -295 kJ mol^{-1} , respectively. The correct order of the products EA, EB, EC and ED in terms of ionic character is:

Q: Statement (I): The oxidation state of an element in a particular compound is the charge acquired by its atom on the basis of electron gain enthalpy consideration from other atoms in the molecule.
Statement (II) pπ - pπ bond formation is more prevalent in second period elements over other periods.

(A) Statement I is correct but Statement II is incorrect
(B) 8 Both Statement I and Statement II are correct
(C) Statement I is incorrect but Statement II is correct
(D) Both Statement I and Statement II are incorrect

Q: Inert gases have positive electron gain enthalpy. Its correct order is

(A) Xe < Kr < Ne < He
(B) He < Ne < Kr < Xe
(C) He < Xe < Kr < Ne
(D) He < Kr < Xe < Ne

Q: Assertion A: The first ionization enthalpy of 3d series elements is more than that of group 2 metals
Reason R: In 3d series of elements successive filling of d-orbitals takes place.

(A) Both A and R are true and R is the correct explanation of A
(B) Both A and R are true but R is not the correct explanation of A
(C) A is false but R is true
(D) A is true but R is false

Q: For electron gain enthalpies of the elements denoted as $\Delta_{eg}H$, the incorrect option is:
(A) $\Delta_{eg}H(Cl) < \Delta_{eg}H(F)$
(B) $\Delta_{eg}H(Se) < \Delta_{eg}H(S)$
(C) $\Delta_{eg}H(I) < \Delta_{eg}H(At)$
(D) $\Delta_{eg}H(Te) < \Delta_{eg}H(Po)$