Daily Tutorial Sheet-5	Level – 1

61.(B) Last electron goes in d orbital.

62.(A) According to Mulliken scale $\Rightarrow$ $EA = 2EN - IE = 2E_1 - E_2$

63. (C) $[Xe]^{54}\, 6s^2 5d^1$ (last e^- enters to d-orbitals)

64.(C) Metallic character decreases across the period and increases down the group.

65.(D) Fe, Co, Ni are transition metal atoms and variation in properties of such elements (d-block elements) is quite less (as they have nearly same size.)

66.(A) $Z_{eff} \uparrow$ as $\frac{p}{e} \uparrow$

$\left.\begin{array}{l} p = \text{no. of proton} \\ e = \text{no. of electron} \end{array}\right]$

67. (C) Z_{eff} Au > Cu > Ag So, I.E. Au > Cu > Ag

Will be more discussed in 12th (d block elements)

68.(B) Along the period, size decreases but E.N, I.E. Non-metallic character increases.

69.(A) Along the period, E.N increases but down the group E.N decreases .

70.(D) Cl has maximum e^- affinity.

71.(D) A change from $Zn \rightarrow Zn^{2+}$ causes decreases in no. of shells only.

72.(B) II is a noble gas

73.(B) II is a noble gas

74.(D) Because out of the given choices III will have the highest tendency to loose its electrons and V will have highest tendency to accept electrons.

75.(B) In the present set-up, on the basis of Aufbau principle and four blocks of elements, the last period, i.e., 7th period can accommodate 32 elements ($7s^2, 5f^{14}, 6d^{10}, 7p^6$). Thus, total elements that can be accommodated are 118 (86 upto 6th period plus 32 in the 7th period).