Date Planned : __ / __ / __	Daily Tutorial Sheet -1	Expected Duration : 90 Min
Actual Date of Attempt : __ / __ / __	JEE Advanced (Archive)	Exact Duration :_____

1. The energy released when an electron is added to a neutral gaseous atom is called _____. **(1982)**

2. The hydration energy of Mg^{2+} is larger than that of: **(1984)**

(A) Al^{3+} **(B)** Na^{+} **(C)** Be^{2+} **(D)** Mg^{3+}

3. Arrange the following in order of their: **(1985)**

(i) Decreasing ionic size Mg^{2+}, O^{2-}, Na^{+}, F^{-}

(ii) Increasing first ionisation energy Mg, Al, Si, Na

(iii) increasing bond length F_2, N_2, Cl_2, O_2

4. On Mulliken scale, the average of ionisation potential and electron affinity is known as _____. **(1985)**

5. The softness of group IA metals increases down the group with increasing atomic number. **(1986)**

6. Compare qualitatively the first and second ionisation potentials of copper and zinc. Explain the observation. **(1986)**

7. Arrange the following in the order of their increasing size : Cl^{-}, S^{2-}, Ca^{2+}, Ar **(1986)**

8. In group IA of alkali metals, the ionisation potential decreases down the group. Therefore, lithium is a poor reducing agent. **(1987)**

9. The electronegativity of the following elements increases in the order: **(1987)**

(A) C, N, Si, P **(B)** N, Si, C, P **(C)** Si, P, C, N **(D)** P, Si, N, C

10. Atomic radii of fluorine and neon in Angstrom units are respectively given by: **(1987)**

(A) 0.72, 1.60 **(B)** 1.60, 1.60 **(C)** 0.72, 0.72 **(D)** None of these

11. The first ionization potential in electron volts of nitrogen and oxygen atoms are respectively given by:

(A) 14.6, 13. 6 **(B)** 13.6, 14.6 **(C)** 13.6, 13.6 **(D)** 14.6, 14.6 **(1987)**

12. The first ionization potential of Na, Mg, Al and Si are in the order **(1988)**

(A) Na < Mg > Al < Si **(B)** Na > Mg > Al > Si

(C) Na < Mg < Al > Si **(D)** Na > Mg > Al < Si

***13.** The statements that are true for the long form of the periodic table are : **(1988)**

(A) It reflects the sequence of filling the electron in the order of sub-energy level s, p, d and f

(B) It helps to predict the stable valency states of the elements

(C) It reflects trends in physical and chemical properties of the elements

(D) It helps to predict the relative ionic strength of the bond between any two elements

***14.** The first ionization potential of nitrogen and oxygen atoms are related as follows. **(1989)**

(A) The ionisation potential of oxygen is less than the ionisation potential of nitrogen

(B) The ionisation potential of nitrogen is greater than the ionisation potential of oxygen

(C) The two ionisation potential values are comparable

(D) The difference between the two ionisation potential is too large

15. Which one of the following is the smaller in size? **(1989)**

(A) N^{3-} **(B)** O^{2-} **(C)** F^{-} **(D)** Na^{+}