ACE Academy — Inspiring the Winner in You

Std. : 10th ICSE **Date : 26/03/2017**

Sub : Chemistry **Marks : 30 Time : 1 hr.**

I. 1 mark each questions : [03]

(A) Fill in the blanks :

1. Among alkali metals, the metals with the highest value of ionization potential is ……..
2. Moving across a …… of periodic table, the elements show increasing …… character.
3. Ionisation energy …… along period and ……. Down a group.

(B) Name the following : [03]

1. Smallest atom in second period.
2. The most electronegative element.
3. The group of elements having zero valency.

II. 3 marks each questions : [12]

1. An element has an atomic number 16, state
   (a) to which period & group it belongs.
   (b) the number of valence electrons.
   (c) whether it is a metal or non-metal.
2. What is meant by a 'group' in periodic table ?
   (a) Within a group, where would you find the element with
      (i) greatest metallic character
      (ii) largest atomic size
   (b) How many elements are there in period 2 ?
3. Give reasons :
   (a) Halogens have very high values of electron affinity.
   (b) Fluorine has lower electron affinity than chlorine.
   (c) Noble gases have practically zero electron affinity.
4. Define atomic radius. How does it vary in a group and in a period ? Justify.

III. 4 marks questions : **[12]**

1. Given below is a list of symbols of elements from the periodic table :

   S, Al, C, Ar, Mg, F, O and B

   choose correct symbol for

   (a) most metallic element

   (b) noble gas

   (c) elements of group 16

   (d) elements of period 3

2. The atoms A & B have electronic configuration A – (2, 8, 18, 2) and B – (2, 6).

   (a) To which periods and groups A & B belong

   (b) Give valency of A & B

   (c) What is formula of compound of A and B ? Is the compound ionic or covalent in nature.

3. Given below is a list of elements of a period Li, Be, B, C, O, F and Ne.

   (a) Name the missing element & its place.

   (b) Which element shows catenation ?

   (c) Place fluorine, beryllium & nitrogen in increasing electronegativity.

   (d) Name elements belonging to halogen & noble series ?

Best of Luck