CLASS XI CHEMISTRY CCT QUESTION

Modern periodic table arranges the elements in the increasing order of atomic number. It has 18 groups and 7 periods. Atomic numbers are consecutive in a period and increases in group in a pattern. Elements are divided into four blocks, s-block,p-block, d-block and f-block based on their electronic configuration. 78% of elements are metals, about 20 elements are non-metals and few elements like B, Si, Ge, As are metalloids. Metallic character increases down the group but decreases along the period from left to right. The physical and chemical properties vary periodically with their atomic numbers.

Periodic trends are observed in atomic size, ionisation enthalpies, electron gain enthalpies, electronegativity and valence. Oxides of metals are basic, some are amphoteric. Non-metals form acidic oxides, some form neutral oxides. s-block elements are soft, highly reactive, do not show variable oxidation states. p-block elements are metals, non-metals as well as metalloids, show variable oxidation states, exist as solids, liquids and gases. d-block elements are metals, form coloured ions, show variable oxidation states, have high melting and boiling points. Lanthanoids and actinoids are f-block elements, form coloured ions. All actinoids are radioactive.

(i) Name the elements which belong to d-block but are not transition metals.

a)Pt b)Fe c)Sc d)Zn

(ii) What are representative elements?

a) S block elements b)p block elements c)d block elements d)s and p block elements

(iii) f block elements are called as

a)transition elements b)inner transition elements c) chalcogens d)radioactive elements

(iv) Which group elements are most electropositive?

a)Group 3 b) group1 c) group 7 d)group 5

Answer key:

i)d ii) d iii) b iv) b