STD 10– FIRST BELL – CHEMISTRY – CLASS-08

Chapter – 1

PERIODIC TABLE AND ELECTRONIC CONFIGURATION

Characteristics of p block elements:

- The elements consist of metals, nonmetals and metalloids.
- These elements exist in different states ie solid, liquid, gas.
- High ionisation energy.
- High electronegativity
- High nonmetallic nature.

Activity 1:

Element	Outermost electronic configuration	Complete subshell electronic configuration	Atomic number	Period	Group	Block
X	$3s^2$	$1s^2\ 2s^2\ 2p^6\ 3s^2$	12	3	2	S
Y	$3s^2 3p^5$	$1s^2\ 2s^2\ 2p^6\ 3s^2\ 3p^5$	17	3	17	P

a. Which element has a valency 1?
   Y
b. Which element shows metallic character?
   X
c. Which element has the highest ionisation energy?
   Y

d. Write the chemical formula of the compound formed by the combination of X and Y labels the oxidation state.
   XY_2.

Home work:

1. The element X in group 17 has 3 shells, if so.
   a. Write the subshell electronic configuration of the element.
   b. Write the period number.
   c. What will be the chemical formula of the compound formed, if the element X reacts with Y of the third period which contains one electron in the p subshell?

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