



QUEEN'S VALLEY SCHOOL QUEEN'S VALLEY JUNIOR SCHOOL

ASSIGNMENT

For Class : X

Sections : All Sections

Subject: CHEMISTRY

- Q1. Which of the following elements belong to the same group of the periodic table?
Na, Li, Mg, P, K
- Q2. Why are the elements of group 18 called zerovalent?
- Q3. With reference to the second group of the periodic table, name the element with the smallest size and the element with the largest size.
- Q4. An element X has an atomic number 14.
(i) What will be its valency?
(ii) What type of bonds will it form?
- Q5. A metal M forms an oxide having the formula M_2O_3 . It belongs to 3rd period in the modern periodic table. Write the atomic number and valency of the metal.
- Q6. Atomic number is considered to be more appropriate parameter than atomic mass for classification of elements in periodic table. Why? How does atomic size of element vary on moving from (i) Left to right in p period. (ii) From top to bottom in a group. Give reasons for your answers.
- Q7. What were the two major shortcomings of Mendeleev's periodic table? How have these been removed in the modern periodic table?
- Q8. Two elements X & Y have atomic numbers 12 and 16 respectively. Write the electronic configuration of these elements. To which period of the modern periodic table do these two elements belong? What type of bond will be formed between them and why?
- Q9. An element X (2,8,2) combines separately with nitrate, sulphate and phosphate radicals. Write the formulae of the three compounds so formed. To which group of the periodic table does the element X belong? Will it form covalent or ionic compound. Give reason.
- Q10. The following table shows the position of six elements A,B,C,D,E,F in the periodic table.

Groups /Periods	1	2	3 to 12	13	14	15	16	17	18
2.	A					B			C
3.		D			E				F

Using the above table, answer the following questions.

- Which elements will form only covalent compounds?
- Which element is a metal with valency 2?
- Which element is a non-metal with valency 3?
- Out of D & E, which one has a bigger atomic radius and why?