

**Chapter: 4**

**Q.1 A) Choose the correct alternative and rewrite the sentence (1)**

Which of the statement or statements are true with respect to atomic size.

- The atomic size depends on the number of electron orbits in the atom.
- The greater the number of orbits the larger the size.
- Atomic size of Potassium atom is bigger than atomic size of Sodium atom.
- All of the above.

**B) Answer the following questions. (2)**

**1) Find co-related terms**

Salt : NaCl :: Water : .....

**2) Find the odd man out:**

2) Lead, Iron, Calcium, Copper

**Q.2 A) Give scientific reasons (Any one) (2)**

- The element sodium is monovalent.
- An atom of Magnesium (Mg) is smaller than an atom of Sodium (Na).

**B) Answer the following questions. (Any two) (4)**

1) Define Unified Atomic Mass.

**2) Chemical Equation.**

Write the steps in deducing the chemical formulae of the following compounds.  
calcium oxide

3) Find the number of molecules in 90 gm water.

**Q.3 Answer the following questions. (Any two) (6)**

- What is unified mass. Write another name of unified mass, Its symbol and value in kilogram.
- Deduce the number of molecules of the following compounds in the given quantities.
  - 90 g water.
  - 8.8 g of carbon dioxide.
  - 7.1 g chlorine:

3)

Sr. No.	Element	Atomic number	Electronic configuration	Valency
i.	Helium	2	2	.....
ii.	Nitrogen	7	.....	3
iii.	Flourine	.....	2, 7	.....

iv.	Magnesium	12	.....	.....
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**Q.4 Answer the following questions. (Any one)**

**(5)**

- 1) M is a bivalent metal. Write down the steps to find the chemical formulae of its compound formed with the radical Sulphate and Phosphate.
- 2) How is the mass of an atom determined ?

