

Chapter: 5

Q.1 A) Choose the correct alternative and rewrite the sentence (2)

1) The electron shell is nearest to the nucleus.

- a) K b) L
c) M d) N

2) An electron carries a charge.

- a) positive b) negative
c) neutral d) none of the above

Q.2 B) Solve the following questions. (3)

1) **State True or False (1)**

1) The indivisible particles that constitute matter were named by Kanad Muni as 'Paramanu'.

2) **Find the odd one out (1)**

1) Sodium, Hydrogen, Chlorine, Magnesium

3) **Name the following (1)**

An element having valency 'zero'.

Q.2 Solve the following questions. (Any two) (4)

1) **Write Short Notes**

Isotopes

2) Write down the number of electrons present in each of them.

Element	H	C	Na	Cl	N
Z	1	6	11	17	7
Number of electrons in the outermost shell

3) **Give scientific reasons**

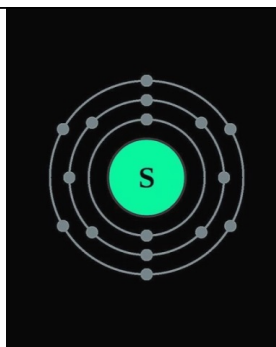
If sodium metal is put in water, it burns to give yellow flame.

Q.3 Answer the following in detail (Any TWO) (6)

1) Describe the outcomes of the Rutherford's scattering experiment.

2) Explain Thomson's plum pudding model with the help of a neat labelled diagram.

3) Observe the diagram and answer the following.



- a. Write the electronic configuration of the element?
- b. State the valency of the element.
- c. State the atomic number of the element.
- d. Write the electron distribution for the element?

Q.4 Solve the following questions. (Any one)

(5)

- 1) What is meant by valency of an element? What is the relationship between the number of valence electrons and valency?
- 2) Explain Rutherford's scattering experiment with a labelled diagram.