

Std. 8 General Science

Marks : 20

Ch.5 The Structure of an atom

Duration : ½ hr.

Q1 Fill in the blanks [3 M]

1. An atom is electrically -----.
a) positive b) negative c) neutral
2. When writing the symbol of _____, its-----and -----are written
a) Atomic number and atomic mass number b) protons and neutrons
c) atomic number and electrons
3. The atomic number Z is equal to number of ----- or -----
a) Electron and neutron b) neutron or proton c) protons or electrons

Q2 State whether True or False [3 M]

1. Most of the mass of the atom is concentrated in the nucleus .
2. Generally, all isotopes of an element have the same chemical properties.
3. The deuterium and tritium have 2 and 3 protons in their nuclei respectively.

Q3 Match the following.[2 M]

A	B
1. Atom	a. Protons + Neutrons
2. Proton	b. Different number of neutrons
3. Atomic mass number	c. Electrically neutral
4. Isotopes	d. Positively charged

Q4 Distinguish between the following [2 M]

1. Atomic number and atomic mass number
2. Proton and Electron

Q5 Give scientific reasons . (Any Two) [4 M]

1. Why does ionization take place .
2. All the mass of an atom is concentrated in the nucleus.
3. In Rutherford's experiment , some alpha rays collide with the gold sheet and are turned back.

Q6 Answer any THREE of the following. [6 M]

1. Write short note on Isotopes .
2. What is meant by valency ?
3. What are the conclusions drawn from the alpha rays experiment performed by Rutherford ?
4. Explain Thomson's atomic model.
