

## 2. STRUCTURE OF ATOMS (ix)

1. What was the first indication that atoms are indivisible?
2. What are canal rays? How it helped in discovery of proton?
3. Name the scientist who first proposes the structure of atoms give that structure.
4. List the limitations of first model of atoms structure.
5. What are particle scattering experiment. What was the conclusion of this experiment?
6. Explain main drawbacks of Rutherford's model of the atom.
7. Draw a sketch of Bohr's model of an atom with its shell. Distribute electrons of Na, Cl.
8. Who discovered Neutrons? What is its significance?
9. What do you understand by valency?
10. Write atomic number and atomic mass scientifically of C, Ca, Fe, Cu.
11. What do you understand by Isotopes? Write the isotopes of hydrogen.
12. Cl occurs in nature in two isotopic forms with mass 35u and 37u in ratio 3:1. What is its mass taken in general?
13. What are isobars? Give examples.
14. The average atomic mass of a sample of an element x is 16.2u. What are the percentage of isotopes  $16/8x$  and  $18/8x$  in the sample.
15. If  $Z = 3$ , what would be the valency of the element? Also name the element.