

## Class 9 CBSE Test Paper Chapter 3: Structure of atoms - 2

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1. Plum pudding Model of atom was discovered by \_\_\_\_\_
  2. Combining capacity of an atom is called \_\_\_\_\_
  3. Alpha - particle scattering experiment of Rutherford led to discovery of \_\_\_\_\_
  4. Number of neutrons in  ${}_{35}^{81}\text{Br}$  is \_\_\_\_\_
  5. \_\_\_\_\_ are atoms having the same mass number but different atomic number.
  6. The charge on the electron is found to be \_\_\_\_\_ coulombs.
  7. What do you understand by valency of an element? What is valency of boron?
  8. List the features of Rutherford's nuclear model of atom.
  9. What are the postulates of Bohr Model of an atom?
  10. Define Valency. What is the valency of chlorine, sulphur and magnesium?
  11.  $\text{Cl}^-$  has completely filled K&L shells. Explain.
  12.  $\text{Na}^+$  is possible but  $\text{Cl}^+$  is not possible. What is the reason?
  13. What are isotones? Give two examples .
- Hint: These are the atoms of different elements with same number of neutrons Example : ( ${}_{6}^{13}\text{C}$ ,  ${}_{7}^{14}\text{N}$ )
14. What were the observations of Rutherford's Alpha particles scattering experiment?
  15. What are the drawbacks of Rutherford's model of atom?
  16. From what observations do you derive the following inferences?
    - (i) The most of the space inside the atom is empty.
    - (ii) The volume of the nucleus is very small.
    - (iii) Anode rays consist of positively charged particles.