

3. STRUCTURE OF ATOMS (ix)

1. Which subatomic particle is not present in an ordinary H atom
2. Name the scientist who discovered electron.
3. Name the gas which produces anode rays consisting of proton in the discharge tube experiment.
4. How was it shown that an atom has a lot of empty space in it?
5. An element has an At. No-12. How many electrons will be present in K, L, M energy shells of its atoms?
6. Which two of the following atomic species are isotopes of each other and which two are isobars? $^{231}_{90}\text{Z}$, $^{230}_{91}\text{Z}$, $^{230}_{88}\text{Z}$, $^{233}_{92}\text{Z}$
7. Write the electronic configuration of any one pair of (1)Isotopes and(2)Isobars.
8. What is valency? How will you find the valency of Ca, S, and Mg?
9. If bromine atom is available in the form of say two isotopes $^{79}_{35}\text{Br}$ (49.7%), $^{81}_{35}\text{Br}$ (50.3%) calculate the average atomic mass.
10. The average atomic mass of a sample of an element x is 16.24 what are the percentages of Isotopes $^{16}_8\text{x}$ and $^{18}_8\text{x}$ of the sample.
11. List the main application of Isotopes.
12. Describe Bohr's model of the atom.
13. What are the limitations of Rutherford's model of the atom?
14. Number of valence electrons in Cl and Na.
15. What is the significance of Neutron and who discovered it.