Structure of Atom

Chapter 2

ONE MARK QUESTIONS AND ANSWERS:

1. Mention the constituents of atom.
   Ans: Electron, Proton & Neutron.

2. Who discovered electron.
   Ans: J.J. Thomson

3. What is the mass of electron?
   Ans: $9.109 \times 10^{-31} \text{kg} \ (0.0005487 \text{amu})$.

4. Mention the charge of electron in coloumb.
   Ans: $1.616 \times 10^{-19} \text{C}$.

5. What is the charge of proton?
   Ans: Positive charge.

6. What is the mass of proton?
   Ans: $1.672 \times 10^{-27} \text{kg} \ (1.00728 \text{amu})$

7. Who discovered proton?
   Ans: E. Goldstein

8. Who invented charge on electron?
   Ans: Robert Millikan.

9. Name the experiment by which charge on electron determined.
   Ans: Robert Millikan oil drop experiment.

10. Who discovered neutron?
    Ans: James Chadwick.

11. What is atomic number?
    Ans: Atomic number ‘Z’ is the number of protons present in the nucleus of an atom of an element or the number of electrons present in an atom of an element.

12. What is mass number?
    Ans: Atomic mass ‘A’. The total number of protons and neutrons present in the nucleus an atom of an element.

13. Write the relationship between mass number and atomic number.
    Ans: Number of neutrons = Mass number $(A) - \text{Atomic number (Z)} = A - Z$