

Two mark Questions

What is an atom

Smallest particle of an element that can take part in chemical reaction

What is a nucleus

The central core of tiny part of an atom is nucleus which is of radius nearly equal to 10^{-15} m . It includes neutron and proton.

What is sphere

Outer sphere is the surrounding region in an atom other than nucleus in which electron spins and rounds that is called outer sphere

How outer sphere functions in nucleus

Space outside and surrounds nucleus is outer sphere and has different orbits. It has different orbits or volume of elements, their shapes and sizes and electron are in orbits. Number of protons are equal to the number electrons in outer sphere of the nucleus.

State Dalton atomic theory

1. All atoms of the same elements are alike and all have the same mass but it differ from the atoms of other elements.
2. Its chemical combination is the union of small fixed number of atoms of one element with a small fixed number of other element.

What is Isotopes

Generally all atom have same and equal number of proton and electron and its nucleus has equal number of proton and neutrons .This is the mass number. It differs in one form to another form of the same atom though they have the same atomic number. Such elements called Isotopes of the element.

Name some Isotopes used in fusion reaction

Protium, Deuterium, Tritium, Helium -3, Helium -4

Write down the energy equation

$$E = m c^2 \text{ where } m \text{ is mass and } c \text{ is speed of light wave.}$$

What is binding energy

The energy released at the moment of combining of two nucleons to form Nucleus.

Define radioactivity

Heavy element spontaneously emit the radiation of alpha, beta and gamma rays are called Radioactivity. These emission takes place during bombardment of neutrons to disintegrate or decay the nucleus.

List down the types of radio active decay

Radioactive decay emits the radiation of alpha, beta and gamma rays.