



ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION



Sub: Physical Science

Class: 8

Date: 20.04.20

Duration: 40 min

Worksheet solutions-12

Full Marks: 15

ATOMIC STRUCTURE/DISCOVERY OF THE NUCLEUS

Choose the Correct options:

- Who gave the concept of nucleus?
Ans (a) **Rutherford** (b) Goldstein (c) Bohr (d) Thomson
- When was the idea of nucleus formulated?
Ans (a) 1905 (b) **1911** (c) 1913 (d) 1932
- What was the basis of the idea of the nucleus?
Ans (a) Discharge tube (b) **Alpha particle scattering experiment** (c) Quantum theory (d) Solar system
- From which elements are alpha particles obtained?
Ans (a) Helium (b) Polonium (c) Radium (d) **Both (b) and (c)**
- What material was bombarded with the alpha particle?
Ans (a) **gold** (b) silver (c) copper (d) tin
- What happened to most of the alpha particles?
Ans (a) **passed un-deviated** (b) bounced back (c) deflected (d) absorbed
- Which particles retraced their paths?
Ans (a) **central** (b) peripheral (c) slow (d) fast
- What was the name of the atomic model given by Rutherford?
Ans (a) **nuclear model** (b) Solar system model (c) Plum pudding model (d) quantum model
- Who provided an atomic model in 1913?
Ans (a) Rutherford (b) Thomson (c) Planck (d) **Bohr**
- What is at the centre of the solar system model of atom?
Ans (a) neutron (b) proton (c) Electron (d) **Both (a) and (b)**
- Alpha particles retraced their path due to
Ans (a) Attraction (b) **Repulsion** (c) Collision (d) None of these
- Mass of the atom is concentrated in
Ans (a) orbit (b) **Nucleus** (c) None of these (d) Atom is mass-less
- Name an atom whose nucleus contains no neutron.
Ans (a) **Hydrogen** (b) Helium (c) Lithium (d) Beryllium
- Electrons revolve around
Ans (a) **nucleus** (b) proton (c) neutron (d) quark
- The nucleus is positively charged due to the presence of
Ans (a) electrons (b) **protons** (c) neutrons (d) neutrinos