



CHEMISTRY-TEST (Structure of Atom)

Instructions:

9th Science

- All the questions are compulsory.
- Attempt all the questions in order.

Time : 1 Hr

M. marks : 25

-----Section-A-----

i) E. Rutherford (father of nuclear physics) got Noble Prize in chemistry in 1908 for the discovery of

- a) Nucleus b) Electron c) Proton d) None

ii) According to Bohr's Model of Atom L shell has maximum _____ number of electrons.

- a) 2 b) 8 c) 12 d) None

iii) Atoms of different elements which have same number of neutrons are called

- a) Isotopes b) Isobars c) Isotones d) None

iv) Isotopes are used

- a) as a fuel b) in the treatment c) Determining age d) All

v) The nucleus of Hydrogen is known as

- a) Proton b) Positron c) Nucleon d) Neutrino

Q. 2. DEFINE THE FOLLOWING.

_____ (1) each

i) Anode Rays

ii) Isotope

iii) Isobars

iv) Valence

v) Mass Number

-----Section-B-----

Q. 3. ANSWER THE FOLLOWING.

_____ (2) each

i) Na^+ has completely filled K and L shells. Explain.

ii) Calculate no. of Protons and Neutrons in A-14 and B-18 where A and B are not symbols.

Q. 4 GIVE SOLUTIONS FOR THE FOLLOWING.

_____ (3) each

i) Write three subatomic particles of an atom along with their charge, mass and discoverer.

ii) The average atomic mass of a sample of an element X is 16.2 u. what are the percentages of isotopes X-16 and X-18 in the given sample?

-----**Section-C**-----

Q. 5. Discuss Rutherford's Scattering Experiment. Compare all the Models of atom given in this unit. _____ (5)

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