

CHEMISTRY-11	Chapter#05-First Half (5.1-5.5) Test-4		
	Name:	Class:	ID:
Date: / /	Marks Total: 30	Marks Obtained:	
Time Allowed: 50 Min.			

Maximum Marks: 10

(OBJECTIVE TYPE)

Time Allowed: 10 Min.

NOTE: Tick The Correct Option:

- Rutherford's model of the atom failed because:**
 - The atom did not have a nucleus and electrons.
 - It did not account for the attraction between protons and neutrons.
 - It did not account for the stability of the atom.
 - There is usually no space between the nucleus and the electrons.
- Bohr model of atom is contradicted by:**
 - Plank's quantum theory
 - Dual nature of matter
 - Heisenberg's uncertainty principal
 - All of the above
- ${}^{66}_{29}\text{Cu} \rightarrow {}^{66}_{30}\text{Zn} + x$ where x is:
 - Proton
 - Positron
 - Electron
 - Neutron
- Positive rays are produced:**
 - By the ionization of gas
 - From the cathode
 - From the anode
 - None
- When slow neutrons hit the copper nucleus, it is converted into:**
 - Au
 - Ag
 - Fe
 - Zn
- Rutherford observed that most of the α -particles _____ from the gold foil.**
 - Passed un-deflected
 - Deflected at large angles
 - Reflected
 - All of the above
- The unit of wavelength is:**
 - m
 - m^{-1}
 - ms^{-1}
 - cm^{-1}
- When electron is promoted to higher orbit, its velocity:**
 - Increases
 - Decreases
 - Remains same
 - None
- In hydrogen atom, the third orbit is _____ times away from the nucleus than the first orbit.**
 - 3
 - 6
 - 9
 - 8
- H_{α} -line of Hydrogen spectrum consists of _____ component lines.**
 - Two
 - Three
 - Five
 - Seven

Maximum Marks: 20

(SUBJECTIVE TYPE)

Time Allowed: 40 Min.

SECTION-I

Q.2: Give brief answers to the following questions: (12)

- Why is it necessary to decrease the pressure in the discharge tube to get the cathode rays?
- Why is e/m value of cathode rays just equal to that of electrons?
- How are slow neutrons more effective than fast neutrons?

- iv. How do you come to know that the velocities of electrons in higher orbits are less than those in lower orbits?
- v. Why is the energy of an electron, revolving in an orbit, always negative?
- vi. What is the origin of line spectrum of hydrogen?

SECTION-II

NOTE: Attempt All Questions:

(08)

Q.3: Describe Millikan's oil droplet method for the determination of charge of electron.

Q.4: What is spectrum? Explain atomic emission and atomic absorption spectrum.