CHEMISTRY-11	Chapter#05-First Half (5.1-5.5) Test-2		
	Name:	Class:	ID:
Date: / /	**Marks Total: 25**	**Marks Obtained:**	
Time Allowed: 40 Min.			

Maximum Marks: 09 **(OBJECTIVE TYPE)** Time Allowed: 10 Min.

NOTE: Tick The Correct Option:

1) The velocity of photon is:

(a) Independent of wave length (b) Depends on its wave length

(c) Depends on it source (d) Equal to square of its amplitude

2) In the ground state of an atom, the electron is present:

(a) In the nucleus (b) In the second shell

(c) Nearest to the nucleus (d) Farthest from the nucleus

3) Cathode rays strike alumina and produce a _____ color.

(a) Red (b) Blue (c) Yellow (d) Green

4) Mass of electron is:

(a) 9.1095×10^{31} kg (b) 9.1095×10^{-31} kg

(c) 9.1095×10^{-27} kg (d) 9.1095×10^{-31} g

5) Cathode rays were named electrons by:

(a) Crooks (b) J. J. Thomson (c) Millikan (d) Stoney

6) According to Plank's quantum theory, energy travels in a _____ manner.

(a) Continuous (b) Discontinuous (c) Wave-like (d) None

7) Which one is the correct relation between the radius of H-atom and the number of orbit?

(a) $r \propto \frac{1}{n^2}$ (b) $r \propto n^2$ (c) $r \propto \frac{1}{n}$ (d) $r \propto n$

8) The ionization energy of hydrogen atom is:

(a) -1313.31 kJ mol^{-1} (b) 1313.31 kJ mol^{-1} (c) 984.99 kJ mol^{-1} (d) -328.32 kJ mol^{-1}

9) The value of Rydberg constant is:

(a) 1.7904×10^7 m^{-1} (b) 1.0967×10^7 m^{-1} (c) 1.9768×10^7 m^{-1} (d) 1.6×10^7 m^{-1}

Maximum Marks: 16 **(SUBJECTIVE TYPE)** Time Allowed: 30 Min.

SECTION-I

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

i. How can it be proved that cathode rays travel in straight line?

ii. The e/m value of positive rays obtained from hydrogen gas is 1836 times less than that of cathode rays. Explain.

iii. What is the difference between a fast neutron and a slow neutron?

iv. Justify that the distance gaps between orbits go on increasing from lower to higher orbits.

v. H atom and He^+ are monoelectronic systems but the size of He^+ is much smaller than that of H-atom. Why?

vi. Differentiate between continuous spectrum and line spectrum.

SECTION-II

NOTE: Attempt All Questions: (04)

Q.3: Give four defects of Bohr's atomic model.