STRUCTURE OF THE ATOM

1. The charge/ mass ratio of electron:

a. Depends on the nature of the electrodes

b. Depends upon nature of the gas c. Remains constant

d. Depends on both nature of the gas and nature of the electrode

2. A student weighs 30kg. Suppose his body is entirely made of electrons. How any electrons are there in his body? Mass of an electron= $9.1X10^{-31}$kg

a. $3.29\ X10^{31}$

b. $3.29\ X10^{30}$

c. $3.29\ X10^{23}$

d. $3.29\ X10^{32}$

3. Which of the following is correct?

Column 1	Column2
A. Electrons	i. Positive charge
B. Protons	ii. No charge
C. Neutrons	iii. Negative charge

a. A-iii, B-ii, C-i

b. A-iii, B-i, C-ii

c. A-ii, B-iii, C-i

d. A-ii, B-i, C-iii

4. If K, L, M, N shells of an atom are full, the total number of electrons in the atom are:

a. 60 b. 26 c. 42 d. 36

5. Which of the following are positively charged ions:

Atoms	Protons	Electrons	Neutrons
A	17	17	18
B	12	10	12
C	16	17	20
D	1	0	0
E	18	18	22
F	10	10	10

a. A and B

b. C and D

c. B and D

d. D and F

6. The electronic configuration of Cl(17) is:

a. 2,8,7

b. 2,2, 8,5

c. 2,8,2,5

d. 2,2,5,8

7. Composition of the nuclei of two atomic species are given:

	X	Y
P	7	8
N	9	8

The mass number of x and Y and their relation is

a. 16,16; isotopes

b. 17,15; isotopes

c. 17,15: isotopes

d. 16,16; 1sobars

8. Na^+ has 12 neutrons and 10 electrons. Which of the following statements is correct?

a. Na^+ has atomic number 10 and mass number 22.

b. Na^+ has atomic number 11 and mass number 23.

c. Na^+ has atomic number 10 and mass number 23.

d. Na^+ has atomic number 11 and mass number 22.

9. Which of the following statement is correct about proton?

a. It is the nucleus of deuterium

b. It is an ionized hydrogen molecule

c. It is an ionized Hydrogen atom

d. It is an α particle with unit positive charge

10. The highest value of e/m ratio for anode rays is observed when the discharge tube is filled with:

a. N_2 b. H_2 c. He d. Ar

11. When a gold foil is bombarded by a beam of α particle, only a few of them get deflected whereas most go straight undeflected. This is because

a. The force of attraction exerted on α particles by the electrons is insufficient

b. The volume of nucleus is much smaller than that of the atom

c. The force of repulsion acting on the fast moving α particles is very small

d. The neutrons have no effect on α particles

12. Which of the following statements does not belong to Bohr's model?

a. Energy of the electrons in the orbit is quantized

b. The electrons in the orbit nearest to the nucleus is the lowest energy

c. Electrons revolve around the nucleus in different orbits having fixed energies

d. The electrons radiate energy during revolution due to force of attraction between nucleus and electrons

13. How many electrons, protons and neutrons are present in X^+, if atomic number of X is 19 and its mass number is 39

a. E=19, P=19, N= 20

b. E=18, P=19, N= 20

c. E=18, P=19, N= 19

d. E=19, P=20, N= 20

14. Which of the following does not have 8 valence electrons:

a. He b. Ne c. Ar d. Cl^-

15. Which of the following does not have one electron in its valance shell

a. Na b. Li c. H d. Ca

LIVEWORKSHEETS