Name:
Section:
Roll No:
Max.Marks:20
I. Answer the following questions. Each carries four marks.

1) Complete the following table. It contains the formulae of compounds formed by different anions and cations given.

| Cations $\backslash$ Anions | $\mathrm{Cl}^{-}$ | $\mathrm{O}^{-2}$ | $\mathrm{~N}^{-3}$ | $\mathrm{SO}_{4}{ }^{-2}$ |
| :--- | :--- | :--- | :--- | :--- |
| $\mathrm{Na}^{+}$ | NaCl |  |  | $\mathrm{Na}_{2} \mathrm{SO}_{4}$ |
| $\mathrm{Mg}^{+2}$ |  |  | $\mathrm{Mg}_{3} \mathrm{~N}_{2}$ |  |
| $\mathrm{Al}^{+3}$ | $\mathrm{AlCl}_{3}$ |  |  |  |

2) Distinguish between electron, proton and neutron.
II. Answer the following questions briefly. Each carries two marks.
3) Complete the following table. And rewrite the answer.

| Name | Symbol | $\mathbf{Z}$ <br> (Atomic number) | $\mathbf{A}$ <br> (Mass number) | $\mathbf{N}$ <br> (Number of neutrons) |
| :---: | :---: | :---: | :---: | :---: |
| Oxygen | ${ }_{8} \mathrm{O}^{16}$ |  | 16 |  |
|  |  | 9 |  | 10 |

4) Find the molecular mass of $\mathrm{CO}_{2}$ molecule.
(Atomic masses of carbon and oxygen are 12 and 16 respectively).
III. Answer the following in one or two sentences. Each carries one marks. $2 \times 1=2 \mathrm{M}$
5) What do you understand about $N_{2}$ and $N$ ?
6) Write any two applications of Isotopes.
IV. Choose the correct choice and write down in the given brackets. $6 \times 1=6 \mathrm{M}$
7) Valency of Argon
A. 0
B. 1
C. 2
D. 2
8) Latin name of Lead
A. Aurum
B. Ferrum
C. Plumbum
D. Kalium
9) Law of Conservation of mass was proposed by $\qquad$
D. Robert Boyle
10) This is not a sub atomic particle
C. John Berzilius
A. Electron
B. Proton
C. Neutron
D. Atom
11) Match the following.

## Set-I

(i) Rutherford
(ii) J.J.Thomson

## Set-II

(a) Planetory model
(b) Plum pudding model

Choose the correct answer:
A. (i)-a, (ii)-b
B. (i)-b, (ii)-a
C. (i)-a, (i)-b
D. (ii)-a, (ii)-b
12) Which among the orbits $K, L, M, N$ and $O$ has least energy ?
A. K
B. O
C. M
D. $N$


