CHEMISTRY
9th (Fresh Reappear)

Time Allowed: 3 Hrs   Marks: 65

Note:- Three are THREE sections in this paper i.e. Section A, B and C.

Attempt Section-A on the same paper and return it to the superintendent within the given time.

No marks will be awarded for Cutting, Erasing or Overwriting. Marks of Identification will lead to UFM case, Mobile Phone etc are not allowed in the examination hall.

Time Allowed: 15 minutes   Section – A   Marks: 12

Q1:- Write the correct option i.e. A, B, C or D in the empty box provided opposite to each part.

(i)   Which one is a homogeneous mixture.   [B]
(a) smoke   (b) air   (c) fog   (d) smog

(ii)   Which one is a chemical property of substance.   [ ]
(a) solubility   (b) density   (c) melting point   (d) corrosion

(iii)   Alpha particle ....   [D]
(a) Neutral   (b) Negatively charged
(c) Protons   (d) Double positively charged

(iv)   S – Block elements are ....   [B]
(a) Non metals   (b) Metals   (c) Metalloid   (d) Transition

(v)   The bond which never results in compound formation is ....   [D]
(a) Ionic bond   (b) Covalent bond
(c) Metallic bond   (d) Dative bond

(vi)   Glass is a solid which is ....   [B]
(a) Crystalline   (b) Amorphous   (c) Allotrope   (d) None

(vii)   Milk is an example of ....   [C]
(a) Solution   (b) Colloidal solution
(c) Suspension   (d) Heterogeneous mixture

(viii) The oxidation number of elements in the free state is ....   [C]
(a) –2   (b) -2   (c) Zero   (d) +4

(ix) $Ca(OH)_2$ is the formula of ....   [C]
(a) Lime stone   (b) Lime   (c) Lime water   (d) Bleaching powder

(x)   Potassium is an element of group.   [A]
(a) I   (b) IV   (c) II   (d) VII.

(xi)   Group II A elements are called ....   [A]
(a) Alkali metals   (b) Transition elements
(c) Alkaline earth metals   (d) Noble metals

(xii)   The maximum number of electrons in third energy level is. ....   [B]
(a) 10   (b) 18   (c) 32   (d) 64

Note:- Time Allowed for Section – B and Section – C is 2 Hours 45 minutes.

Section – B   Marks: 32

QII: Answer any Eight parts. Each carries FOUR Marks.

1.   What do you mean by mole and Avogadro's number?

2.   What are the main points of Rutherford's Atomic Model?

3.   Calculate the molecular mass of Glocose $C_6H_{12}O_6$. Atomic mass are (C=12, H=1 and O=16).

4.   What is meant by electronic configuration? Give electronic configuration of Ne and Cl.

5.   Define ionic bond. Explain with example.

6.   State and explain Boyle's Law.

7.   Give important properties of metals.

8.   Differentiate between solution and suspension.

9.   What are the typical properties of solids?

10. What do you understand by hydrogen bonding?

11. What is Molarity?

Section – C   Marks: 21

Note:- Attempt any Three questions. All questions carry equal marks.

QIII: (a)   What are Isotopes? Give isotopes of hydrogen.

(b)   How many molecules are there in 40.5 gram of HBr?

QIV: (a)   What is ionization energy? Discuss its variation in the periodic table.

(b)   Define covalent bond and write its types?

QV: (a)   Describe the typical properties of liquids?

(b)   What is the oxidation number of each element in CO_2?

QVI: (a)   Define chemistry? Describe any four important branches of chemistry?

(b)   Write a note on electroplating.