Allied School

Test Series –II

Test -1

Name :_____ **Class : 9th** **Subject :Chemistry**

Section- A (Marks -15)

Encircle the correct answer. Cutting/overwriting is not allowed. Each question carries equal marks.

i. **How many periods are there in the periodic table?**
(A) 6 (B) 7 (C) 8 (D) 18

ii. **The number of protons in an atom determines its:**
(A) Atomic mass (B) Isotope (C) Atomic number (D) Neutron count

iii. **Which of the following is an example of a homogeneous mixture?**
(A) Sand and water (B) Saltwater (C) Oil and water (D) Flour and sugar

iv. **The molar mass of NaCl is:**
(A) 23 g/mol (B) 35.5 g/mol (C) 58.5 g/mol (D) 45 g/mol

v. **Which element has the highest atomic mass in the first period?**
(A) Hydrogen (B) Helium (C) Lithium (D) Carbon

vi. **The electronic configuration of sodium (Na) is:**
(A) $1s^2\ 2s^2\ 2p^6$ (B) $1s^2\ 2s^2\ 2p^6\ 3s^1$ (C) $1s^2\ 2s^2\ 2p^6\ 3p^1$ (D) $1s^2\ 2s^2\ 2p^6\ 3d^1$

vii. **What is the simplest whole-number ratio of atoms in a compound called?**
(A) Molecular formula (B) Empirical formula (C) Structural formula (D) Ionic formula

viii. **The branch of chemistry that help in treating disease is called?**
(A) Physical (B) Organic (C) Inorganic (D) Environment

ix. **Anything that has mass and occupies space is called**
(A) Liquid (B) Gas (C) Solid (D) Matter

x. **Which of the following obey duplet rule?**
(A) H_2 (B) N_2 (C) F_2 (D) Cl_2

xi. **Identify the covalent bond.**
(A) KF (B) H2O (C) MgO (D) NaCl

xii. **What is the mass of 4 moles of hydrogen gas?**
(A) 8.064g (B) 4.032g (C) 1g (D) 1.008g

xiii. **What is the mass of carbon present in 44g of CO2?**
(A) 12g (B) 44g (C) 6g (D) 24g

xiv. **The oxidation state of Cr in $K_2Cr_2O_7$ is**
(A) +12 (B) +6 (C) -6 (D) +3

xv. **Oxidation is**
(A) gain of electrons (B) loss of electrons (C) gain of hydrogen (D) loss of oxygen

Section- B (Marks -20)

Note : Attempt 5 parts each parts carry equal Marks (5 x 4 = 20)

i. Which one has more shielding effect Ca or Mg and why?

ii. Calculate the mass in grams of each of the following samples.

(a)1.2 moles of K **(b)** 0.15 moles of steam

iii. Explain one example from daily life that involves an oxidation-reduction reaction.

iv. What are isotopes? Give one example.

v. Define analytical chemistry.

Section-C (Marks 15)

Note: Attempt 2 parts each part carry equal Marks (2 x 7.5 = 15)

QNo2: Explain coordinate covalent bond with examples.

QNo3: Write a detailed note on Halogens.