Ninth Gujranwala Board 2014

Chemistry (New Scheme) Paper I (Subjective)

Time: 2.45 Hours **Marks: 63**

(Group-II)

Note: Section I is compulsory. Attempt any THREE questions from Section II and any TWO parts from Section III.

SECTION-I

2. Write short answers to any FIVE questions: (2×5=10)

i. What is meant by triple covalent bond? Explain it with an example.
ii. Why chlorine can accept only 1 electron?
iii. Explain non-polar covalent bond with an example.
iv. Define standard atmospheric pressure.
v. Why are the rates of diffusion in liquids slower than that of gases?
vi. Differentiate between Boyle's law and Charles' law.
vii. Write trend of electronegativity in a group.
viii. Describe any two uses of sodium.

3. Write short answers to any SIX questions: (2×6=12)

i. Differentiate between industrial and analytical chemistry.
ii. What is the difference between atoms and ions?
iii. Define atomic mass unit. Why is it needed?
iv. How does electron differ from neutron?
v. State any two defects in Rutherford's atomic model.
vi. Write the electronic configuration of "S".
vii. What is meant by periodic function?
viii. State Mendeleev's periodic law.
ix. What is shielding effect?

4. Write short answers to any FIVE questions: (2×5=10)

i. Define saturated solution.
ii. Define solubility.
iii. What is the difference between solute and solvent.
iv. What is meant by $\left(\%\frac{m}{v}\right)$?
v. Calculate oxidation number of chlorine in $KClO_3$.
vi. What is the difference between valency and oxidation state?
vii. Define oxidation and reduction.
viii. Define weak electrolyte and give an example.

SECTION-II

(Each part 'a' has 3 marks and part 'b' has 4 marks)

5.(a) Define atomic number and mass number with examples.
(b) State any four steps for writing a chemical formula.
6.(a) Write three properties of neutron particles.
(b) Define electron affinity. Give its trend in group and period.
7.(a) Describe the factors which influence the diffusion of liquid.
(b) Describe the properties of covalent compounds.
8.(a) Explain the effect of temperature on solubility.
(b) Describe the chemical reaction of sodium with water, oxygen, chlorine and hydrogen.
9. (a) Define electroplating. How electroplating of tin is carried out?
(b) Describe in detail the electrolysis of water.

SECTION-III

10.(a) i. Write the material required to separate the given mixture of iron filings and sand by physical method. 2
ii. Write down procedure to determine the melting point of biphenyl. 3
(b) i. Write the names of two acids which we use in our daily food indirectly. 2
ii. Write brief procedure to demonstrate that some chemical reactions release energy in the form of heat. 3
(c) i. Write down the material required to prepare 0.1 M solution of oxalic acid. 2
ii. Write down procedure for the following experiment. "Prepare pure copper sulphate from the given impure sample of copper sulphate." 3