

Chemistry (New Scheme)	9th...2018 Gujranwala Board	Paper I (Essay Type)
Time: 1:45 Hours	(Group-II) Section-I	Max Marks: 48

**Note: Section-I is compulsory. Attempt any two (2) questions from Section-II.**

**2. Write short answers to any FIVE (5) questions. 10**

- Define empirical formula and give two examples.
- Differentiate between homogeneous mixture and heterogeneous mixture.
- What is the number of protons and neutrons in an element having atomic mass 238 and atomic number 92?
- An element have atomic number 15. Write down its electronic configuration using sub-shells.
- How many electrons can be accommodated in different shells of an atom?
- What is meant by groups and periods in periodic table?
- Define electron affinity.

(viii) Explain the trend of electronegativity in groups and periods.

**3. Write short answers to any FIVE (5) questions. 10**

- Define triple covalent bond with examples.
- Why ionic compounds are solid?
- Write down two properties of covalent compounds.
- What is meant by "absolute zero"?
- Define freezing point.
- What is different between dilute solution and concentrated solution?

(vii) What is percentage  $\frac{\text{volume}}{\text{mass}} \times 100$ ?

(viii) Why solutions do not show tyndal effect?

**4. Write short answers to any FIVE (5) questions. 10**

- Define reduction.
- Write any two rules of assigning oxidation number.
- What is meant by "electrolysis"?
- Why does aluminium not rust?
- Write any two uses of sodium.
- Why is silver not used in pure form?
- Write the chemical reaction of water with bromine.
- Give any two chemical properties of metals.

### PART-II

**5. (a) Write down important postulates of Bohr's atomic theory. (4)**

**(b) Discuss differences between molecule and molecular ion. (5)**

**6. (a) Write five major properties of metals. (4)**

**(b) What is evaporation? Which factors effect evaporation? Explain them. (5)**

**7. (a) Discuss the redox reaction taking place in the rusting of iron in detail. (4)**

**(b) Write the four characteristics of colloids. (5)**