**SYLLABUS (2018-2019)**

**CLASS IX – CHEMISTRY**

**Chapter 1: Matters in our surroundings**

Definition of matter and its physical states, characteristics of matter and its physical states, melting, freezing, vaporisation, condensation, sublimation.

**Chapter 2: Is matter around us pure**

Elements, compounds and mixtures, solutions, colloids and suspension, separation of mixtures, physical and chemical changes.

**Chapter 3: Atoms and molecules**

Introduction, law of chemical combination, Dalton’s atomic theory, atomic and molecular masses, mole concept.

**Chapter 4: Structure of atoms**

Introduction, electrons, protons and neutrons, valency, valence electron, chemical formula, isotopes and isobars.

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|  | **Chapter 1** | **Chapter 2** | **Chapter 3** | **Chapter 4** |
| **P.T. – I** |  |  |  |  |
| **P.T. – II** |  |  |  |  |
| **P.T. – III** |  |  |  |  |
| **TERM-END EXAM** |  |  |  |  |

**PRACTICALS:**

1. Preparation of:
2. A true solution of common salt, sugar, and alum.
3. A suspension of soil, chalk powder and fine sand in water.
4. A colloidal solution of starch in water and egg albumin/milk in water and distinction between these on the basis of- transparency, filtration criterion, stability.
5. Preparation of
6. A mixture
7. A compound

Using iron filings and sulphur powder and distinction between these on the basis of:

1. Appearance, i.e. homogeneity and heterogeneity.
2. Behaviour towards magnet
3. Behaviour towards carbon disulphide as a solvent
4. Effect of heat
5. Separation of components of a mixture of sand, common salt and ammonium chloride (or Camphor).
6. Performing the following reactions and classifying them as physical or chemical changes:
7. Iron and copper sulphate solution in water
8. Burning of magnesium ribbon in air.
9. Zinc with dilute sulphuric acid
10. Heating of copper sulphate crystals
11. Sodium sulphate with barium chloride in the form of their solutions in water.

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