

First year Chemistry
Semester-1

Theory: Chemistry-1: Inorganic, Organic & Physical Chemistry-1 (core)

Block-1: Inorganic Chemistry – 1

- Unit-1: Chemistry of Group-IA Elements
- Unit-2: Chemistry of Group-IIA Elements
- Unit-3: Principles of Semi-micro analysis

Block-2: Organic chemistry -1

- Unit-4: Structural theory of organic chemistry
- Unit-5: Alkanes and Cyclo Alkanes
- Unit-6: Alkenes, and Dienes.

Block-3: Physical Chemistry-1

- Unit – 7: Atomic Structure-1
- Unit – 8: Atomic Structure-2
- Unit – 9: Gaseous state

Block -4: General Chemistry -1

- Unit – 10: Periodic table
- Unit – 11: Concept of Chemical Bonding and theories of chemical bonding (VBT).
- Unit – 12: Molecular Orbital Theory

Practical: Chemistry-1: Semi Micro qualitative analysis

Block – 1: General principles and procedure in semi Micro analysis

- Unit – 1: Introduction to semi micro analysis
- Unit – 2: Reactions and identification of Anions.
- Unit – 3: Reactions and identification of Cations-1.
- Unit – 4: Reactions and identification of Cations-2.

Block – 2: Semi micro analysis of mixture of salts.

- Unit – 5: Systematic Qualitative semi micro analysis
- Unit – 6: Model analysis of a known binary salt mixture-1.
- Unit – 7: Model analysis of a known binary salt mixture-2
- Unit – 8: Analysis of the given unknown binary salt mixture.