

B.Sc II Year – Paper-II

120 hrs (30 weeks)

UNIT-I (Inorganic Chemistry – II)

1. Chemistry of d-block elements
2. Chemistry of f-block elements
3. Theories of bonding in metals
4. Metal carbonyls and related compounds

9 h
8 h
6 h
7 h

30 hrs (1 h /w)

UNIT-II (Organic Chemistry – II)

1. Halogen compounds
2. Hydroxy compounds
3. Carbonyl compounds
4. Carboxylic acids and derivatives
5. Active methylene compounds
6. Exercises in interconversions

4 h
6 h
10 h
5 h
3 h
2 h

30 hrs (1 h /w)

UNIT-III (Physical Chemistry – II)

1. Phase Rule
2. Dilute solutions
3. Electrochemistry

5 h
8 h
17 h

30 hrs (1 h /w)

UNIT-IV (General Chemistry – II)

1. Molecular symmetry
2. Theory of quantitative analysis
3. Evaluation of analytical data
4. Introductory treatment to
 - a. Pericyclic reactions
 - b. Synthetic strategies
 - c. Asymmetric synthesis

5 h
8 h
4 h
5 h
4 h
4 h

30 hrs (1 h /w)

LABORATORY COURSE – II

90 hrs (3 h /w)

Practical Paper-2 - II (Inorganic Chemistry)

Titrimetric analysis and Gravimetric analysis

