

# **B.Sc. (Life Sciences & Physical Sciences)-Chemistry**

## **Column 1: Outline of the Syllabus (Blocks and Units details)**

### **Semester- I: Inorganic Chemistry I and Organic Chemistry I**

Following are four Blocks in **Inorganic Chemistry I and Organic Chemistry I** paper and each block has four units. Further there are two blocks in the Practical syllabus each having four units.

**Block 1: Periodic Properties and Chemical Bonding**

**Block 2: Chemistry of S and P Block Elements**

**Block 3: Basic Concepts of Organic Chemistry**

**Block 4: Aliphatic and Aromatic Hydrocarbons**

### **Semester - II: Organic Chemistry II and Physical Chemistry I**

Following are four Blocks in **Organic Chemistry II and Physical Chemistry I** paper and each block has four units. Further there are two blocks in the Practical syllabus each having four units.

**Block 1: Halogen Compounds**

**Block 2: Hydroxy Compounds :**

**Block3: Chemistry of Solutions**

**Block 4: Gaseous state:**

### **Semester- III: Organic Chemistry III and Physical Chemistry II**

Following are four Blocks in **Organic Chemistry III and Physical Chemistry II** paper and each block has four units. Further there are two blocks in the Practical syllabus each having four units.

**Block 1: Carbohydrates:**

**Block 2: Carbonyl Compounds and Active Methylene Compounds**

**Block3: Thermodynamics and Thermochemistry**

**Block 4: Chemical Equilibrium**

## **Column 2: Source of Self Learning Material (Self-Prepared/Borrowed from...)**

Self Prepared

## **Column 3: Reference of Self Learning Material (List of reference books mentioned in the syllabus).**

### **Semester- I: Inorganic Chemistry I and Organic Chemistry I**

- Principles of Inorganic Chemistry by B.R.Puri and L.R.Sharma
- Advanced Inorganic Chemistry by B.R.Puri and L.R.Sharma
- Advanced Organic Chemistry by Arun Bahl and B.S.Bahl
- Organic Chemistry by RT Morrison and R.N.Boyd
- Organic Chemistry by T.W.Graham Solomon, C.B.Fryhle and S.A.Dnyden
- Organic Chemistry Volume I&II by I.L.Finar
- Advanced Organic Chemistry by Jerry March
- Essentials of Physical Chemistry by B.S.Bahl and G.D.Tuli
- Principles of Physical Chemistry by B.R.Puri and L.R.Sharma
- Textbook of Physical Chemistry by S.Glasstone
- Elements of Physical Chemistry by S.Glasstone
- Principles of Physical Chemistry by Maron and Prutton
- Elements of Physical Chemistry by P.W.Atkins
- Advanced Physical Chemistry by Gurdeep Raj

### **Semester - II: Organic Chemistry II and Physical Chemistry I**

- Advanced Organic Chemistry by Arun Bahl and B.S.Bahl
- Organic Chemistry by RT Morrison and R.N.Boyd
- Organic Chemistry by T.W.Graham Solomon, C.B.Fryhle and S.A.Dnyden
- Organic Chemistry Volume I&II by I.L.Finar
- Advanced Organic Chemistry by Jerry March
- Essentials of Physical Chemistry by B.S.Bahl and G.D.Tuli
- Principles of Physical Chemistry by B.R.Puri and L.R.Sharma
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- Elements of Physical Chemistry by S.Glasstone
- Principles of Physical Chemistry by Maron and Prutton
- Elements of Physical Chemistry by P.W.Atkins
- Advanced Physical Chemistry by Gurdeep Raj

### **Semester- III: Organic Chemistry III and Physical Chemistry II**

- Advanced Organic Chemistry by Arun Bahl and B.S.Bahl

- Organic Chemistry by RT Morrison and R.N.Boyd
- Organic Chemistry by T.W.Graham Solomon, C.B.Fryhle and S.A.Dnyden
- Organic Chemistry Volume I&II by I.L.Finar
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**Table 2: Mode of Evaluation (Weightage)**

S. No.	Programme Name	Assignment	Practical	Project	Term End Examination
1.	B.Sc. (Life Sciences & Physical Sciences) Chemistry	30	50	-	70