## **SEMESTER-I**

### 1. Core Courses (CR):

Course No.	Title	Contact hours/Week	No. of Credits
CH24101CR	Inorganic Chemistry	(03L + 01T)	04
CH24102CR	Organic Chemistry	(03L + 01T)	04
CH24103CR	Physical Chemistry	(03L + 01T)	04
CH24104CR	Environmental Chemistry & Analytical Monitoring.	(01L + 01T)	02

### 2. Discipline Centric Electives (DCE):

Course No.	Title	Contact hours/Week	No. of Credits
CH24105DCE	Laboratory Course in	04 Lab Sessions of 03	04
	Chemistry -I	hours each total 45	
		sessions	
CH24106DCE	Symmetry & Group Theory	(01L + 01T)	02
CH24107DCE	IR, Raman & Electronic	(01L + 01T)	02
	Spectroscopy		

### 3. Generic Electives (GE):

Course No.	Title	Contact hours/Week	No. of Credits
CH24001GE	Surfactants and their Applications	(01L + 01T)	02

### 4. Open Elective Courses (OE):

Course No.	Title	Contact hours/Week	No. of Credits
CH24001OE	Chemistry in Everyday Life	(01L + 01T)	02

### **SEMESTER-II**

### 1. Core Courses (CR):

Course No.	Title	Contact hours/Week	No. of Credits
CH24201CR	Inorganic Chemistry	(03L + 01T)	04
CH24202CR	Organic Chemistry	(03L + 01T)	04
CH24203CR	Physical Chemistry	(03L + 01T)	04
CH24204CR	Green Chemistry	(01L + 01T)	02

### 2. Discipline Centric Elective (DCE):

Course No.	Title	Contact hours/Week	No. of Credits
CH24205DCE	Laboratory Course in	04 Lab Sessions of 03	04
	Chemistry -II	hours each total 45	
		sessions	
CH24206DCE	Bio-Inorganic Chemistry	(01L + 01T)	02
CH24207DCE	NMR and ESR Spectroscopy	(01L + 01T)	02

#### 3. Generic Elective Courses (GE):

Course No.	Title	Contact hours/Week	No. of Credits
CH24002GE	Metal Ions in Living Systems	(01L + 01T)	02

### 4. Open Elective Course (OE):

Course No.	Title	Contact hours/Week	No. of Credits
CH24002OE	Chemistry of Bio-molecules	(01L + 01T)	02

## **SEMESTER-III**

## 1. Core Courses (CR):

Course No.	Title	Contact hours/Week	No. of Credits
CH24301CR	Inorganic Chemistry - Selected Topics	(03L + 01T)	04
CH24302CR	Organic Chemistry	(03L + 01T)	04
CH24303CR	Physical Chemistry	(03L + 01T)	04
CH24304CR	Non-Equilibrium Thermodynamics	(01L + 01T)	02

## 2. Discipline Centric Elective (DCE):

Course No.	Title	Contact hours/Week	No. of Credits
CH24305DCE	Laboratory Course in	04 Lab Sessions of 03	04
	Chemistry -III	hours each total 45	
		sessions	
CH24306DCE	Chromatographic Techniques	(01L + 01T)	02
CH24307DCE	Solid State Chemistry	(01L + 01T)	02

## 3. Generic Elective (GE):-

Course No.	Title	Contact hours/Week	No. of Credits
CH24003GE	Bio-Organic Chemistry	(01L + 01T)	02

# 4. Open Elective Course (OE):

Course No.	Title	Contact hours/Week	No. of Credits
CH24003OE	Medicinal Inorganic Chemistry	(01L + 01T)	02

# **SEMESTER-IV**

# 1. (i) Core Courses (CR):

Course No.	Title	Contact hours/Week	No. of Credits
CH24401CR	Advanced Inorganic Chemistry	(03L + 01T)	04
CH24402CR	Advanced Organic Chemistry	(03L + 01T)	04
CH24403CR	Advanced Physical Chemistry	(03L + 01T)	04
CH24404CR	Project Seminar and Dissertation	(01L + 01T)	02

# 2. Discipline Centric Electives (DCE)\*\*:

Course No.	Title	Contact hours/Week	No. of Credits
CH24405DCE	Lab Project in Chemistry	05 Lab Sessions of 03	04
		Hours.	
CH24406DCE	Inorganic Materials	(01L + 01T)	02
CH24407DCE	Supramolecular Chemistry & Crystal	(01L + 01T)	02
	Engineering		
CH24408 DCE	Medicinal Chemistry	(01L + 01T)	02
CH24409 DCE	Chemistry of Natural Products	(01L + 01T)	02
CH24410 DCE	Computational and Advanced	(01L + 01T)	02
	Quantum Chemistry		
CH24411DCE	Applied Electrochemistry	(01L + 01T)	02

Course No.	Title	Contact hours/Week	No. of Credits
CH21004GE	Synthetic Polymers and their	(01L + 01T)	02
	Applications		

# 3. Open Elective (OE):

Course No.	Title	Contact hours/Week	No. of Credits
CH21004OE	Food Chemistry	(01L + 01T)	02