

# Course Structure

## Chemistry

### (A) Major Core Courses

Sl. No.	Sem.	Type of Course	Name of Course	Credits	Marks
1.	I	MJC-1 (T)	Inorganic Chemistry : Atomic Structure & Chemical Bonding Organic Chemistry : Fundamental of Organic Chemistry, stereochemistry & aliphatic hydrocarbons	4	100
		MJC-1 (P)	Inorganic Chemistry Lab: Volumetric analysis. Organic Chemistry Lab : Detection, Purification, Separation of organic Compounds.	2	100
2.	II	MJC-2 (T)	Physical Chemistry : States of matter and ionic equilibria.	4	100
		MJC-2 (P)	Physical Chemistry Lab: Determination of Physical Properties of liquids and pH- metry.	2	100
3.	III	MJC-3	Organic Chemistry : Basics and Hydrocarbons	5	100
4.	III	MJC-4 (T)	Physical Chemistry II: Chemical Thermodynamics and its Applications (T)	3	100
		MJC-4 (P)	Physical Chemistry II: Chemical Thermodynamics and its Applications (P)	1	100
5.	IV	MJC-5 (T)	Inorganic Chemistry II: s- and p Block Elements (T)	3	100
		MJC-5 (P)	Inorganic Chemistry II: s- and p Block Elements (P)	2	100
6.	IV	MJC-6 (T)	Organic Chemistry II: Oxygen Containing Functional Groups (T)	3	100
		MJC-6 (P)	Organic Chemistry II: Oxygen Containing Functional Groups (P)	2	100
7.	IV	MJC-7	Physical Chemistry III: Phase Equilibria and Electrochemical Cells	5	100
8.	V	MJC-8 (T)	Inorganic Chemistry III: Coordination Chemistry (T)	3	100
		MJC-8 (P)	Inorganic Chemistry III: Coordination Chemistry (P)	2	100
9.	V	MJC-9	Organic Chemistry III: Heterocyclic Chemistry	5	100
10.	VI	MJC-10 (T)	Physical Chemistry IV: Conductance & Chemical Kinetics (T)	3	100
		MJC-10 (P)	Physical Chemistry IV: Conductance & Chemical Kinetics (P)	1	100
11.	VI	MJC-11 (T)	Organic Chemistry IV: Biomolecules (T)	3	100
		MJC-11 (P)	Organic Chemistry IV: Biomolecules (P)	2	100
12.	VI	MJC-12	Physical Chemistry V: Quantum Chemistry & Spectroscopy	5	100
13.	VII	MJC-13	Inorganic Chemistry IV: Organometallic Chemistry	5	100
14.	VII	MJC-14	Research Methodology	5	100
15.	VII	MJC-15	Organic Chemistry V: Spectroscopy	6	100
16.	VIII	MJC-16	Analytical Methods in Chemistry (T)	4	100

Sub Total = 80

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## Course Structure

### Chemistry

#### (B) Minor Courses to be offered by the Department for students of other Departments of Science

Sl. No.	Sem	Type of Course	Name of Course	Credits	Marks
1.	I	MIC-1 (T)	Inorganic Chemistry : Atomic Structure & Chemical Bonding. Organic Chemistry : Fundamentals of Organic Chemistry, stereochemistry & aliphatic hydrocarbons.	2	100
		MIC-1 (P)	Inorganic Chemistry Lab : Volumetric analysis Organic Chemistry Lab : Detection, Purification & Separation of Organic Compounds.	1	100
2.	II	MIC-2 (T)	Physical Chemistry : States of Matter & Ionic Equilibrium	2	100
		MIC-2 (P)	Physical Chemistry Lab : Determination of S.T. Viscosity & Molecular weight.	1	100
3.	III	MIC-3	Organic Chemistry I: Basics and Hydrocarbons	3	100
4.	IV	MIC-4	Physical Chemistry II: Chemical Thermodynamics and its Applications	3	100
5.	V	MIC-5	Inorganic Chemistry II: s- and pBlock Elements	3	100
6.	V	MIC-6	Organic Chemistry II: Oxygen Containing Functional Groups	3	100
7.	VI	MIC-7	Physical Chemistry III: Phase Equilibria and Electrochemical Cells	3	100
8.	VI	MIC-8	Inorganic Chemistry III: Coordination Chemistry	3	100
9.	VII	MIC-9	Organic Chemistry III: Heterocyclic Chemistry	4	100
10.	VIII	MIC-10	Physical Chemistry IV: Conductance & Chemical Kinetics	4	100

Sub Total = 32

**Note:** The Department may reduce the syllabus of the Minor Courses as per the credit distribution. The Department concerned may also decide practical courses.

Asst. Prof.  
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