

Department of Science

CURRICULUM & CREDIT FRAMEWORK AND FORMATIVE ASSESSMENT FOR MASTERS IN CHEMISTRY (2 YEAR PROGRAM) Scheme of Examinations under National Education Policy 2020

M.Sc. (Chemistry)

First Year Semester I					
Sr.No	Courses	Course Title	Course Code	Remarks	Credits
1	Major 1	Coordination and Crystal Chemistry	24CHE201DS01	Compulsory	4
2	Major 2	Quantum, Thermodynamics and Electrochemistry	24CHE201DS02	Compulsory	4
3	Major 3	Organic Bonding, Reactions and Stereochemistry	24CHE201DS03	Compulsory	4
4	Major 4	Inorganic Chemistry Practical-I	24CHE201DS04	Compulsory	4
5	Major 5	Physical Chemistry Practical-I	24CHE201DS05	Compulsory	4
6	Skill Enhancement Course(SEC)	Organic Chemistry Practical-I	24CHE201SE01	Compulsory	4

Scheme for Distribution of Marks:

Sr. No	Course Title	Course Code	Theory Marks		Practical Marks		Total Marks	Exam Time	Credit Distribution		
			Int.	Ext.	Int.	Ext.			L	T	P
1	Coordination and Crystal Chemistry	24CHE201DS01	30	70	-	-	100	3 hrs	4	0	0
2	Quantum, Thermodynamics and Electrochemistry	24CHE201DS02	30	70	-	-	100	3 hrs	4	0	0
3	Organic Bonding, Reactions and Stereochemistry	24CHE201DS03	30	70	-	-	100	3 hrs	4	0	0
4	Inorganic Chemistry Practical-I	24CHE201DS04	-	-	30	70	100	8 hrs	0	0	4
5	Physical Chemistry Practical-I	24CHE201DS05	-	-	30	70	100	8 hrs	0	0	4
6	Organic Chemistry Practical-I	24CHE201SE01	-	-	30	70	100	8 hrs	0	0	4

First Year Semester II					
Sr.No	Courses	Course Title	Course Code	Remarks	Credits
1	Major 1	Inorganic Spectroscopy and Advanced Inorganic Chemistry	24CHE202DS01	Compulsory	4
2	Major 2	Physical Spectroscopy and Advanced Inorganic Chemistry	24CHE202DS02	Compulsory	4
3	Major 3	Organic Spectroscopy and Advanced Inorganic Chemistry	24CHE202DS03	Compulsory	4
4	Major 4	Inorganic Chemistry Practical-II	24CHE202DS04	Compulsory	4
5	Major 5	Physical Chemistry Practical-II	24CHE202DS05	Compulsory	4
6	Skill Enhancement Course(SEC)	Organic Chemistry Practical-II	24CHE202SE01	Compulsory	4

Scheme for Distribution of Marks:

Sr. No	Course Title	Course Code	Theory Marks		Practical Marks		Total Marks	Exam Time	Credit Distribution		
			Int.	Ext.	Int.	Ext.			L	T	P
1	Inorganic Spectroscopy and Advanced Inorganic Chemistry	24CHE202DS01	30	70	-	-	100	3 hrs	4	0	0
2	Physical Spectroscopy and Advanced Inorganic Chemistry	24CHE202DS02	30	70	-	-	100	3 hrs	4	0	0
3	Organic Spectroscopy and Advanced Inorganic Chemistry	24CHE202DS03	30	70	-	-	100	3 hrs	4	0	0
4	Inorganic Chemistry Practical-II	24CHE202DS04	-	-	30	70	100	8 hrs	0	0	4
5	Physical Chemistry Practical-II	24CHE202DS05	-	-	30	70	100	8 hrs	0	0	4
6	Organic Chemistry Practical-II	24CHE202SE01	-	-	30	70	100	8 hrs	0	0	4

Second Year Semester III					
Sr.No	Courses	Course Title	Course Code	Remarks	Credits
1	Major 1	Nuclear Radiochemistry	25CHE203DS01	Compulsory	4
2	Major 2	Instrumental Techniques	25CHE203DS02	Compulsory	4
3	Major 3	Bio-inorganic Chemistry	25CHE203DS03	Compulsory	4
4	Major 4	Inorganic Chemistry Special Practical-I	25CHE203DS04	Compulsory	4
5	Major 5	Inorganic Chemistry Special Practical-II	25CHE203DS05	Compulsory	4
6	Skill Enhancement Course(SEC)	Inorganic Chemistry Special Practical-III	25CHE203SE01	Compulsory	4

Scheme for Distribution of Marks:

Sr. No	Course Title	Course Code	Theory Marks		Practical Marks		Total Marks	Exam Time	Credit Distribution		
			Int.	Ext.	Int.	Ext.			L	T	P
1	Nuclear Radiochemistry	25CHE203DS01	30	70	-	-	100	3 hrs	4	0	0
2	Instrumental Techniques	25CHE203DS02	30	70	-	-	100	3 hrs	4	0	0
3	Bio-inorganic Chemistry	25CHE203DS03	30	70	-	-	100	3 hrs	4	0	0
4	Inorganic Chemistry Special Practical-I	25CHE203DS04	-	-	30	70	100	8 hrs	0	0	4
5	Inorganic Chemistry Special Practical-II	25CHE203DS05	-	-	30	70	100	8 hrs	0	0	4
6	Inorganic Chemistry Special Practical-III	25CHE203SE01	-	-	30	70	100	8 hrs	0	0	4

Second Year Semester IV					
Sr.No	Courses	Course Title	Course Code	Remarks	Credits
1	Major 1	Medicinal Aspects of Inorganic Chemistry	25CHE204DS01	Compulsory	4
2	Major 2	Organo-transition metal Chemistry	25CHE204DS02	Compulsory	4
3	Major 3	Analytical Techniques	25CHE204DS03	Compulsory	4
4	Major 4	Inorganic Chemistry Special Practical-IV	25CHE204DS04	Compulsory	4
5	Major 5	Inorganic Chemistry Special Practical-V	25CHE204DS05	Compulsory	4
6	Skill Enhancement Course(SEC)	Inorganic Chemistry Special Practical-VI	25CHE204SE01	Compulsory	4

Scheme for Distribution of Marks:

Sr. No	Course Title	Course Code	Theory Marks		Practical Marks		Total Marks	Exam Time	Credit Distribution		
			Int.	Ext.	Int.	Ext.			L	T	P
1	Medicinal Aspects of Inorganic Chemistry	25CHE204DS01	30	70	-	-	100	3 hrs	4	0	0
2	Organo-transition metal Chemistry	25CHE204DS02	30	70	-	-	100	3 hrs	4	0	0
3	Analytical Techniques	25CHE204DS03	30	70	-	-	100	3 hrs	4	0	0
4	Inorganic Chemistry Special Practical-IV	25CHE204DS04	-	-	30	70	100	8 hrs	0	0	4
5	Inorganic Chemistry Special Practical-V	25CHE204DS05	-	-	30	70	100	8 hrs	0	0	4
6	Inorganic Chemistry Special Practical-VI	25CHE204SE01	-	-	30	70	100	8 hrs	0	0	4

Link: [Syllabi of UG and PG Programs revised in July 2025 - Google Drive](#)