

SCHEME UG A1: UNDERGRADUATE PROGRAMME (MULTIDISCIPLINARY)

Semester 1

Course Code	Course Title	Course ID	L	T	P	L	T	P	Total Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
Core Course(s)														
CC-A1	Chemistry-I		3		2	3		1	4	25	50	5	20	100

Semester 2

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
Core Course(s)														
CC-A2	Chemistry-II		3		2	3		1	4	25	50	5	20	100

Semester 3

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
Core Course(s)														
CC-A3	Chemistry-III		3		2	3		1	4	25	50	5	20	100

Semester 4

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
Core Course(s)														
CC-A4	Chemistry-IV		3		2	3		1	4	25	50	5	20	100

Semester 5

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
Core Course(s)														
CC-A5	Chemistry-V		3		2	3		1	4	25	50	5	20	100

Internship is to be done during summer break after 4th Semester, Marks will be added in 5th Semester.

Semester 6

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
Core Course(s)														
CC-A6	Chemistry-VI		3		2	3		1	4	25	50	5	20	100

The curriculum of semester 7 and 8 will be provided in due course of time.



SCHEME UG A2: UNDERGRADUATE PROGRAMME (SINGLE MAJOR)

Semester 1

Course Code	Course Title	Course ID	L	T	P	L	T	P	Total Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
Core Course(s)														
CC-A1	Inorganic Chemistry-I		3		2	3		1	4	25	50	5	20	100
CC-A2	Organic Chemistry-I		3		2	3		1	4	25	50	5	20	100
CC-A3	Physical Chemistry-I		3		2	3		1	4	25	50	5	20	100
Minor/ Vocational Course(s)														
MIC-1	One from Pool		2			2			2	15	35			50
Multidisciplinary Course(s)														
MDC-1	One from Pool		2		2	2		1	3	15	35	5	20	75
Ability Enhancement Course(s)														
AEC-1	One from Pool		2			2			2	15	35			50
Skill Enhancement Course(s)														
SEC-1	One from Pool		2		2	2		1	3	15	35	5	20	75
Value-added Course(s)														
VAC-1	One from Pool								2					50
Total Credits									24					600

Semester 2

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
Core Course(s)														
CC-A4	Inorganic Chemistry-II		3		2	3		1	4	25	50	5	20	100
CC-A5	Organic Chemistry-II		3		2	3		1	4	25	50	5	20	100
CC-A6	Physical Chemistry-II		3		2	3		1	4	25	50	5	20	100
Minor/ Vocational Course(s)														
MIC-2	One from Pool		2			2			2	15	35			50
Multidisciplinary Course(s)														
MDC-2	One from Pool		2		2	2		1	3	15	35	5	20	75
Ability Enhancement Course(s)														
AEC-2	One from Pool		2			2			2	15	35			50
Skill Enhancement Course(s)														
SEC-2	One from Pool		2		2	2		1	3	15	35	5	20	75
Value-added Course(s)														
VAC-2	One from Pool								2					50
Total Credits									24					600

Semester 3

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
Core Course(s)														
CC-A7	Inorganic Chemistry-III		3		2	3		1	4	25	50	5	20	100
CC-A8	Organic Chemistry-III		3		2	3		1	4	25	50	5	20	100
CC-A9	Physical Chemistry-III		3		2	3		1	4	25	50	5	20	100
Minor/ Vocational Course(s)														
MIC-3	One from Pool		3		2	3		1	4	25	50	5	20	100
Multidisciplinary Course(s)														
MDC-3	One from Pool		2		2	2		1	3	15	35	5	20	75
Ability Enhancement Course(s)														
AEC-3	One from Pool		2			2			2	15	35			50
Skill Enhancement Course(s)														
SEC-3	One from Pool		2		2	2		1	3	15	35	5	20	75
Total Credits									24					600

Semester 4

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
Core Course(s)														
CC-A10	Inorganic Chemistry-IV		3		2	3		1	4	25	50	5	20	100
CC-A11	Organic Chemistry-IV		3		2	3		1	4	25	50	5	20	100
CC-A12	Physical Chemistry-IV		3		2	3		1	4	25	50	5	20	100
Minor/ Vocational Course(s)														
MIC-4	One from Pool		3		2	3		1	4	25	50	5	20	100
Ability Enhancement Course(s)														
AEC-4	One from Pool		2			2			2	15	35			50
Value-added Course(s)														
VAC-3	One from Pool		2			2			2	15	35			50
Total Credits									20					500

Semester 5

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
Core Course(s)														
CC-A13	Inorganic Chemistry-V		3		2	3		1	4	25	50	5	20	100
CC-A14	Organic Chemistry-V		3		2	3		1	4	25	50	5	20	100
CC-A15	Physical Chemistry-V		3		2	3		1	4	25	50	5	20	100
Minor/ Vocational Course(s)														
MIC-5	One from Pool		3		2	3		1	4	25	50	5	20	100
Skill Enhancement Course(s)														
Internship									4					100
Total Credits									20					500

Semester 6

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
Core Course(s)														
CC-A16	Inorganic Chemistry-VI		3		2	3		1	4	25	50	5	20	100
CC-A17	Organic Chemistry-VI		3		2	3		1	4	25	50	5	20	100
CC-A18	Physical Chemistry-VI		3		2	3		1	4	25	50	5	20	100
Minor/ Vocational Course(s)														
MIC-6	One from Pool		3		2	3		1	4	25	50	5	20	100
MIC-7	One from Pool		3		2	3		1	4	25	50	5	20	100
Total Credits									20					500

**The curriculum of semester 7 and 8 will be provided in due course of time.*

MULTIDISCIPLINARY COURSE (MDC) FROM THE DEPARTMENT FOR POOL OF THE COURSES IN THE UNIVERSITY
(These courses are to be offered to students of different discipline/Subject)

Semester 1

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
MDC-1	Introductory Chemistry-I		2		2	2		1	3	15	35	05	20	75

Semester 2

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
MDC-2	Introductory Chemistry-II		2		2	2		1	3	15	35	05	20	75

Semester 3

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
MDC-3	Introductory Chemistry-III		2		2	2		1	3	15	35	05	20	75

Minor Course from the department for pool of the Courses in the University

(These courses are offered by each department for students of other departments/same department to gain a broader understanding beyond the major discipline)

Semester 1

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
MIC-1	Green Chemistry		2			2			2	15	35			50

Semester 2

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
MIC-2	Bioinorganic Chemistry		2			2			2	15	35			50

Semester 3

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
MIC-3	Chemistry of biomolecules-I		3		2	3		1	4	25	50	5	20	100

Semester 4

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
MIC-4	Chemistry of biomolecules-II		3		2	3		1	4	25	50	5	20	100

Semester 5

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
MIC-5	Chemistry of Fertilizers and Pesticides or Chemistry of Cosmetics and Perfumes		3		2	3		1	4	25	50	5	20	100

Semester 6

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
MIC-6	Agriculture Chemistry		3		2	3		1	4	25	50	5	20	100
MIC-7	Green Laboratory Practices Or Maintenance of laboratory instruments		3		2	3		1	4	25	50	5	20	100

SKILL ENHANCEMENT COURSE FROM THE DEPARTMENT FOR POOL OF THE COURSES IN THE UNIVERSITY

(These courses are offered by each department for students of other departments/same department and is designed to provide value-based and/or skill-based knowledge and should contain both theory and lab/hands-on/training/field work.)

Semester 1

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
SEC-1	Chemistry lab operation and safety measures		2		2	2		1	3	15	35	05	20	75

Semester 2

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
SEC-2	Analytical Chemistry		2		2	2		1	3	15	35	05	20	75

Semester 3

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
SEC-3	Food Chemistry		2		2	2		1	3	15	35	05	20	75

VALUE ADDED COURSE FROM THE DEPARTMENT FOR POOL OF THE COURSES IN THE UNIVERSITY

(All the departments will offer value added course for semester 3 for the students of same or different departments. In the first year, students will study (i) Human Values and Ethics and (ii) Environmental Studies as value added course)

Semester 1

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
VAC-1	<u>Human Values and Ethics</u> Or <u>Environmental Studies</u>		2						2	15	35			50

Semester 2



Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
VAC-2	Human Values and Ethics OR Environmental Studies		2						2	15	35			50

Semester 4

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
VAC-3	Chemistry in everyday life-Soaps, detergents & dyes		2						2	15	35			50



ABILITY ENHANCEMENT COURSE FROM THE DEPARTMENT FOR POOL OF THE COURSES IN THE UNIVERSITY

(These courses are offered by department of Indian and Foreign Languages for students of other departments/same department and leads to enhancement in the ability of learn Regional and foreign languages)

Semester 1

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
AEC-1	English Language and Communication: Level-1 OR हिंदी भाषा एव. सम्प्रेषण-1 OR संस्कृत भाषा एव. सम्प्रेषण-1								2					50

Semester 2

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
AEC-2	English Language and Communication: Level-2 OR हिंदी भाषा एव. सम्प्रेषण-2 OR संस्कृत भाषा एव. सम्प्रेषण-2								2					50

Course Code	Course Title	Course ID	Semester 3						Credits	MARKS				
			L	T	P	L	T	P		TI	TE	PI	PE	Total
			(Hrs)			Credits								
AEC-3	English Language and Communication: 3 OR हिंदी भाषा एव. सम्प्रेषण-3 OR संस्कृत भाषा एव. सम्प्रेषण-3								2					50

Course Code	Course Title	Course ID	Semester 4						Credits	MARKS				
			L	T	P	L	T	P		TI	TE	PI	PE	Total
			(Hrs)			Credits								
AEC-4	English Language and Communication: Level-4 OR हिंदी भाषा एव. सम्प्रेषण-4 OR संस्कृत भाषा एव. सम्प्रेषण-4								2					50

VOCATION COURSE FROM THE DEPARTMENT FOR POOL OF THE COURSES IN THE UNIVERSITY

(These courses are offered by each department for students of other departments/same department and is focused on practical work, preparing students for a particular skilled profession.)

Course Code	Course Title	Course ID	Semester 4						Credits	MARKS				
			L	T	P	L	T	P		TI	TE	PI	PE	Total
			(Hrs)			Credits								
VOC-1	Chemistry of Fertilizers and Pesticides or Chemistry of		3		2	3		1	4	25	50	5	20	100



	Cosmetics and Perfumes													
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Semester 5

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
VOC-2	Agriculture Chemistry		3		2	3		1	4	25	50	5	20	100

Semester 6

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
VOC-3	Green Laboratory Practices Or Maintenance of laboratory instruments		3		2	3		1	4	25	50	5	20	100

