Rai University | NAAC ACCREDITED

EVOLVING THINKING MINDS

Curriculum Scheme

M.Sc. Chemistry (Organic Chemistry)

Course Code	Course Name	L	T	P	Credit
	SEMESTER-I				
06000101	English Communication and Life Skills-I	3	0	0	3
06100102	Advanced Organic Chemistry-I	3	0	2	4
06100112	Advanced Analytical Chemistry-I	3	0	2	4
06100132	Advanced Inorganic Chemistry-I	3	0	2	4
06100142	Advanced Physical Chemistry-I	3	0	2	4
	TOTAL	**15**	**0**	**8**	**19**
	SEMESTER-II				
06000201	English Communication and Life Skills-II	3	0	0	3
06100202	Advanced Organic Chemistry-II	3	0	2	4
06100211	Advanced Analytical Chemistry-II	3	0	2	4
06100232	Advanced Physical Chemistry-II	3	0	2	4
06100242	Advanced Inorganic Chemistry-II	3	0	2	4
	TOTAL	**15**	**0**	**8**	**19**
	SEMESTER-III				
06100306	Disconnection approach and Organic Synthesis	4	0	0	4
06100307	Medicinal Chemistry and Drug Discovery	4	0	0	4
06100308	Applied Chemical analysis and Environment Monitoring	4	0	0	4
06100309	Research Methodology	4	0	0	4
06100310	Organic Chemistry Practical	0	0	8	4
06010310	Summer Internship/Summer Training	0	0	8	4
	TOTAL	**16**	**0**	**16**	**24**
	SEMESTER-IV				
06100407	Bioorganic Chemistry	4	0	0	4
06100408	Advanced Medicinal Chemistry	4	0	0	4
06100409	Industrial Chemistry	4	0	0	4
06100410	Nanotechnology and Chemical Analysis	4	0	0	4
06100419	Research Project	0	0	12	6
	TOTAL	**16**	**0**	**12**	**22**

Curriculum Scheme M.Sc. Chemistry (Analytical Chemistry)					
Course Code	**Course Name**	**L**	**T**	**P**	**Credit**
SEMESTER-I					
06000101	English Communication and Life Skills-I	3	0	0	3
06100102	Advanced Organic Chemistry-I	3	0	2	4
06100112	Advanced Analytical Chemistry-I	3	0	2	4
06100132	Advanced Inorganic Chemistry-I	3	0	2	4
06100142	Advanced Physical Chemistry-I	3	0	2	4
	TOTAL	**15**	**0**	**8**	**19**
SEMESTER-II					
06000201	English Communication and Life Skills-II	3	0	0	3
06100202	Advanced Organic Chemistry-II	3	0	2	4
06100211	Advanced Analytical Chemistry-II	3	0	2	4
06100232	Advanced Physical Chemistry-II	3	0	2	4
06100242	Advanced Inorganic Chemistry-II	3	0	2	4
	TOTAL	**15**	**0**	**8**	**19**
SEMESTER-III					
06100316	Advanced Instrumentation Techniques-I	4	0	0	4
06100317	Separation Techniques	4	0	0	4
06100308	Applied Chemical analysis and Environment Monitoring	4	0	0	4
06100309	Research Methodology	4	0	0	4
06100318-P	Analytical Chemistry Practical	0	0	8	4
06010310	Summer Internship/Summer Training	0	0	8	4
	TOTAL	**16**	**0**	**16**	**24**
SEMESTER-IV					
06100416	Advanced Instrumentation Technique-II	4	0	0	4
06100417	Advanced Separation and Detection Techniques	4	0	0	4
06100418	Modern Analytical Chemistry	4	0	0	4
06100410	Nanotechnology and Chemical Analysis	4	0	0	4
06100419	Research Project	0	0	12	6
	TOTAL	**16**	**0**	**12**	**22**

Curriculum Scheme M.Sc. Chemistry (Industrial Chemistry)					
Course Code	**Course Name**	**L**	**T**	**P**	**Credit**
SEMESTER-I					
06000101	English Communication and Life Skills-I	3	0	0	3
06100102	Advanced Organic Chemistry-I	3	0	2	4
06100112	Advanced Analytical Chemistry-I	3	0	2	4
06100132	Advanced Inorganic Chemistry-I	3	0	2	4
06100142	Advanced Physical Chemistry-I	3	0	2	4
	TOTAL	**15**	**0**	**8**	**19**
SEMESTER-II					
06000201	English Communication and Life Skills-II	3	0	0	3
06100202	Advanced Organic Chemistry-II	3	0	2	4
06100211	Advanced Analytical Chemistry-II	3	0	2	4
06100232	Advanced Physical Chemistry-II	3	0	2	4
06100242	Advanced Inorganic Chemistry-II	3	0	2	4
	TOTAL	**15**	**0**	**8**	**19**
SEMESTER-III					
06100327	Unit Operations	4	0	0	4
06100328	Materials Chemistry	4	0	0	4
06100329	Petrochemicals, Oils and Soap	4	0	0	4
06100309	Research Methodology	4	0	0	4
06100330	Industrial Chemistry Practical	0	0	8	4
06010310	Summer Internship/Summer Training	0	0	8	4
	TOTAL	**16**	**0**	**16**	**24**
SEMESTER-IV					
06100425	Drug Chemistry and Pharmaceutical Technology	4	0	0	4
06100426	Inorganic Chemical Industries	4	0	0	4
06100427	Selected Topics in Industrial Chemistry	4	0	0	4
06100428	Chemistry of Industrially Important Materials	4	0	0	4
06100419	Research Project	-	0	12	6
	TOTAL	**16**	**0**	**12**	**22**