

COURSE STRUCTURE

Semester – I

Course Code	Name of the Course	Hours			Credits	
		L	T	P	Theory	Practical
R20 ACH 101	General Chemistry	4	-	-	4	-
R20 ACH 102	Organic Chemistry-I	4	-	-	4	-
R20 ACH 103	Inorganic Chemistry-I	4	-	-	4	-
R20 ACH 104	Physical Chemistry-I	4	-	-	4	-
R20 ACH 105	Organic Chemistry Practical-I	-	-	6	-	3
R20 ACH 106	Inorganic Chemistry Practical	-	-	6	-	3
Sub-Total		16	-	12	16	6
Total		28 hours per week			22 Credits per semester	

L - Lecture, T- Tutorial & P – Practical

Semester – II

Course Code	Name of the Course	Hours			Credits	
		L	T	P	Theory	Practical
R20 ACH 201	Organic Spectroscopy	4	-	-	4	-
R20 ACH 202	Organic Chemistry-II	4	-	-	4	-
R20 ACH 203	Inorganic Chemistry-II	4	-	-	4	-
R20 ACH 204	Physical Chemistry-II	4	-	-	4	-
R20 ACH 205	Organic Chemistry Practical-II	-	-	6	-	3
R20 ACH 206	Physical Chemistry Practical	-	-	6	-	3
R20 OEACH 207	(Open Elective -I) 207.1. Chemistry in Daily life (OR) 207.2. Environmental Chemistry (OR) 207.3. Scientific Research Methodology	4	-	-	4	
Sub-Total		20	-	12	20	6
Total		32 hours per week			26 Credits per semester	

Semester –III

Course Code	Paper Title	Hours			Credits	
		L	T	P	Theory	Practical
R20 ACH 301	Separation methods	4	-	-	4	-
R20 ACH 302	Spectroscopic methods	4	-	-	4	-
R20 ACH 303	Applied analysis	4	-	-	4	-
R20 ACH 304	Instrumental methods of analysis	4	-	-	4	-
R20 ACH 305	Classical methods of analysis practical	-	-	6	-	3
R20 ACH 306	Instrumental and spectral methods of analysis practical	-	-	6	-	3
R20 OEACH 307	(Open Elective -II) 307.1. Water Analysis (OR) 307.2. Techniques for Modern Industrial Applications (OR) 307.3. Polymer Chemistry	4	-	-	4	-
	Sub-Total	20	-	12	20	6
	Total	32hours per week			26 Credits per semester	

Semester – IV

Course Code	Paper Title	Hours			Credits	
		L	T	P	Theory	Practical
R20 ACH 401	MOOCS	4	-	-	4	-
R20 ACH 402.1 (OR) R20 ACH 402.2	(ELECTIVE-I) Chemical and spectral methods of analysis (OR) Green chemistry	4	-	-	4	-
R20 ACH 403.1 (OR) R20 ACH 403.2	(ELECTIVE-II) Traditional and Environmental methods of analysis (OR) Nano Chemistry	4	-	-	4	-
R20 ACH 404	Quality control and standard methods of analysis	4	-	-	4	-
R20 ACH 405	Standard methods of analysis practical	-	-	6	-	3
R20 ACH 406	In House Minor Research Project			8	-	4
	Sub-Total	16	-	14	16	7
	Total	30 hours per week			23 Credits per semester	