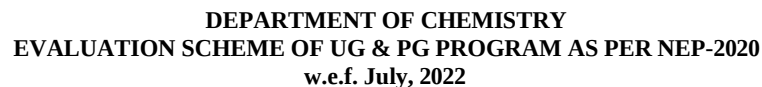
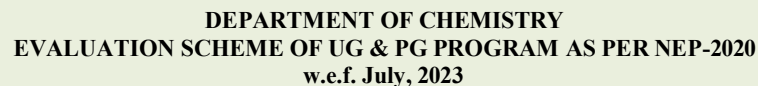


S.N.	Course Code	Course Title	(T)Theory (P) Practical	Course Type	Periods per Week			Evaluation Scheme			End Semester	Subject Total	Total Credit	Attributes								United Nations Sustainable Development Goals (SDGs)
					Lecture	Tutorial	Practicals	Class Test	Teacher Assessment	Total				Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Values	Professional Ethics		
1.	B190101T/CH131	Fundamentals of Industrial Chemistry	T	Core Major (Compulsory)	3	1	0	15	10	25	75	100	04	✓		✓					-	
2.	B020101T/CH132	Fundamentals of Chemistry	T		3	1	0	15	10	25	75	100	04	✓							 	
3.	B190102P/CH133	Basic Analytical Methods	P		0	0	4	15	10	25	75	100	02	✓	✓	✓					 	
4.	B020102P/CH134	Quantitative Analysis	P		0	0	4	15	10	25	75	100	02	✓	✓	✓						
5.	B190103T/CH135	Water Treatment and Analysis	T	Major (Optional)	3	1	0	15	10	25	75	100	04	✓		✓		✓			 	
6.	B190104P/CH136	Water Quality Analysis	P		0	0	4	15	10	25	75	100	02	✓	✓	✓		✓			 	
7	B000101V/CH137	Plastic Waste Management	T + P	Vocational	1	0	2	-	-	-	100	100	03	✓	✓	✓		✓			 	
8.	Z010101T/BE105	Food Nutrition and Hygiene	T	Co-curricular (Compulsory)	2	0	0	15	10	25	75	100	02	✓		✓		✓				
TOTAL					12	3	14	105	70	175	625	800	23									

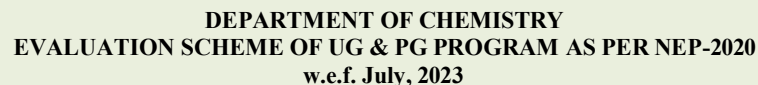


S.N.	Course Code	Course Title	(T)Theory (P) Practical	Course Type	Periods per Week			Evaluation Scheme			End Semester	Subject Total	Total Credit	Attributes							United Nations Sustainable Development Goals (SDGs)	
					Lecture	Tutorial	Practicals	Class Test	Teacher Assessment	Total				Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Values	Professional Ethics		
1.	B190201T/CH138	Material Science and Techniques in Chemical Industries	T	Core Major (Compulsory)	3	1	0	15	10	25	75	100	04	✓		✓					 	
2.	B020201T/CH139	Bioorganic and Materials Chemistry	T		3	1	0	15	10	25	75	100	04	✓								
3.	B190202P/CH140	Materialistic Analysis	P		0	0	4	15	10	25	75	100	02	✓	✓	✓		✓				
4.	B020202P/CH141	Biochemical Analysis	P		0	0	4	15	10	25	75	100	02	✓	✓	✓						
5.	B190203T/CH142	Inorganic Chemical Process Industry	T	Major (Optional)	3	1	0	15	10	25	75	100	04	✓		✓		✓				
6.	B190204P/CH143	Titrimetric Analysis	P		0	0	4	15	10	25	75	100	02	✓	✓	✓				✓	  	
7.	B030202T/MT148 A040209T/LN109	Basic Mathematics & Statistic/Basics of Communication	T	Minor Course	3	1	0	15	10	25	75	100	04	✓	✓	✓		✓	✓	✓	  	
8.	B000201V/CH144	Laboratory safety & Sample Handling	T + P	Vocational	1	0	2	-	-	-	100	100	03	✓		✓		✓	✓	✓		
9.	Z020201T/NS110	First Aid and Health	T	Co-curricular (Compulsory)	2	0	0	15	10	25	75	100	02	✓		✓		✓	✓	✓		
TOTAL					15	04	14	120	80	200	700	900	27									



(Diploma in Industrial Instrumentation and Chemical Analysis) 2nd Year / 3rd Semester

S.N.	Course Code	Course Title	(T)Theory (P) Practical	Course Type	Periods per Week			Evaluation Scheme			End Semester	Subject Total	Total Credit	Attributes							United Nations Sustainable Development Goals (SDGs)	
					Lecture	Tutorial	Practicals	Class Test	Teacher Assessment	Total				Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Values	Professional Ethics		
1.	B190301T/CH231	Process Instrumentation and Industrial Chemical Analysis	T	Core Major (Compulsory)	3	1	0	15	10	25	75	100	04	✓		✓						
2.	B020301T/CH232	Chemical Dynamics & Coordination Chemistry	T		3	1	0	15	10	25	75	100	04	✓		✓						
3.	B190302P/CH233	Industrial Chemical and Instrumentation Analysis	P		0	0	4	15	10	25	75	100	02	✓	✓	✓			✓			
4.	B020302P/CH234	Physical Analysis	P		0	0	4	15	10	25	75	100	02	✓	✓	✓						
5.	B190303T/CH235	Chemical Process and Unit Operation in Industry	T	Major (Optional)	3	1	0	15	10	25	75	100	04	✓		✓			✓			
6.	B190304P/CH236	Chemical Preparation and Analysis	P		0	0	4	15	10	25	75	100	02	✓	✓	✓					✓	
7.	B000301V/CH237	Food Testing and Quality Control	T + P	Vocational	1	0	2	-	-	-	100	100	03	✓		✓			✓	✓	✓	 
8.	Z030301T/ES225	Human Values and Environment studies	P	Co-curricular (Compulsory)	2	0	0	15	10	25	75	100	02	✓		✓			✓	✓	✓	
TOTAL					12	3	14	105	70	175	625	800	23									



S.N.	Course Code	Course Title	(T)Theory (P) Practical	Course Type	Periods per Week			Evaluation Scheme			End Semester	Subject Total	Total Credit	Attributes							United Nations Sustainable Development Goals (SDGs)	
					Lecture	Tutorial	Practicals	Class Test	Teacher Assessment	Total				Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Values	Professional Ethics		
1.	B190401T/CH238	Process Chemistry	T	Core Major (Compulsory)	3	1	0	15	10	25	75	100	04	✓		✓						 8 DECENT WORK AND ECONOMIC GROWTH  9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
2.	B020401T/CH239	Quantum Mechanics and Analytical Techniques	T		3	1	0	15	10	25	75	100	04	✓		✓						 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
3.	B190402P/CH240	Qualitative and Synthetic Methods	P		0	0	4	15	10	25	75	100	02	✓	✓	✓						 12 RESPONSIBLE CONSUMPTION AND PRODUCTION
4.	B020402P/CH241	Instrumental Analysis	P		0	0	4	15	10	25	75	100	02	✓	✓	✓						 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
5.	B190403T/CH242	Industrial Waste Treatment & Management	T	Major (Optional)	3	1	0	15	10	25	75	100	04	✓		✓			✓			 6 CLEAN WATER AND SANITATION
6.	B190404P/CH243	Industrial Waste Analysis	P		0	0	4	15	10	25	75	100	02	✓	✓	✓			✓		✓	 6 CLEAN WATER AND SANITATION
7.	- A040405T/LN234 - F010404TA/BM292 - B030402T/MT237	- Effective Professional Communication Skills - Entrepreneurship Development - Numerical analysis & testing of hypothesis	T	Minor Course	3	1	0	15	10	25	75	100	04	✓	✓	✓				✓	✓	 4
8.	B000401V/CH244	Organic Farming	T + P	Vocational	1	0	2	-	-	-	100	100	03	✓	✓	✓			✓	✓	✓	 3 GOOD HEALTH AND WELL-BEING  12 RESPONSIBLE CONSUMPTION AND PRODUCTION
9.	Z040401T	Physical Education and Yoga	T	Co-curricular (Compulsory)	2	0	0	15	10	25	75	100	02	✓	✓	✓			✓	✓	✓	 3 GOOD HEALTH AND WELL-BEING
TOTAL					15	04	14	120	80	200	700	900	27									



B.Sc. Industrial Chemistry

Year: Third / Semester: Fifth (Odd Semester)

S. N.	Course Code	Course Title	Theory / Practical	Course Type	Periods/ Per week			Continuous Assessment			End Semester Examination (ESE)	Subject Total	Total Credit Points	Attributes							United Nations Sustainable Development Goals (SDGs)	
					Lecture (L)	Tutorial (T)	Practical (P)	Class Test (CT)	Teacher Assessment (TA)	Total				Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics		
1	B190501T/CH331	Industrial Chemicals	Theory	Core Major (Compulsory)	3	1	0	15	10	25	75	100	04	✓	✓	✓		✓		✓	8	9
2	B190502T/CH332	Pollution, its Management and Industrial Economics	Theory		3	1	0	15	10	25	75	100	04	✓	✓	✓		✓		✓	9	
3	B190503P/CH333	Industrial Chemicals and pollution Management	Practical		0	0	4	15	10	25	75	100	02	✓	✓	✓		✓	✓	✓	12	
4	B190505T/CH334	Industrial Aspects of Chemistry	Theory		3	1	0	15	10	25	75	100	04	✓	✓	✓		✓		✓	9	
5	B190506T/CH335	Food and Dairy Chemistry	Theory		3	1	0	15	10	25	75	100	04	✓	✓	✓		✓	✓	✓	6	
6	B020503P/CH339	Qualitative Analysis	Practical		0	0	4	15	10	25	75	100	02	✓	✓	✓		✓	✓	✓	12	
7	Z050501T	Analytic Ability and Digital Awareness	Theory	Co-curricular (Compulsory)	2	0	0	15	10	25	75	100	02	✓	✓	✓		✓	✓	✓	3	
8	B190504R/CH336	Industrial Chemistry Research Project-I	Practical	Core Major	0	0	6	0	0	0	100	100	03	✓	✓	✓		✓	✓	✓	12	9
TOTAL					14	4	14	105	80	175	625	800	25								12	9



B.Sc. Industrial Chemistry

Year: Third / Semester: Sixth (Even Semester)

S. No.	Course Code	Course Title	(T)Theory (P) Practical	Course Type	Periods per Week			Evaluation Scheme			End Semester	Subject Total	Total Credit	Attributes							United Nations Sustainable Development Goals (SDGs)		
					Lecture	Tutorial	Practical	Class Test	Teacher Assessment	Total				Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Values	Professional Ethics			
1.	B020601T/CH353	Organic Synthesis-B	T	Core Major	3	1	-	15	10	25	75	100	04	√		√						 	
2.	B020602T/CH354	Chemical Energetics and Radiochemistry	T		3	1	-	15	10	25	75	100	04	√		√		√					 
3.	B020603P/CH355	Analytical Methods	P		-	-	4	15	10	25	75	100	02	√	√	√		√	√	√			 
4.	B190604R/CH346	Industrial Chemistry Research Project-2	R	Research Project	-	-	6	-	-	-	-	100	03	√	√	√		√	√	√		  	
5.	Z060601T	Communication Skills and Personality Development	T	Co-curricular	2	0	0	15	10	25	75	100	02	√	√	√		√	√	√			
POLYMER SCIENCE (01*)																							
6.	B190601T/CH343	Synthetic Polymer	T	Core Major	3	1	-	15	10	25	75	100	04	√	√	√							
7.	B190602T/CH344	Polymerization Techniques and Characterization	T		3	1	-	15	10	25	75	100	04	√	√	√							
8.	B190603P/CH345	Synthesis and Analysis of Polymers	P		-	-	4	15	10	25	75	100	02	√	√	√		√					 
PHARMACEUTICAL CHEMISTRY (02*)																							
9.	B190605T/CH347	Pharmaceutical and Phytochemicals	T	Core Major	3	1	-	15	10	25	75	100	04	√	√	√							
10.	B190606T/CH348	Medicinal Chemistry and Toxicology	T		3	1	-	15	10	25	75	100	04	√	√	√							
11.	B190607P/CH349	Experimental Pharmaceutical Chemistry-I	P		-	-	4	15	10	25	75	100	02	√	√	√		√					 
AGROCHEMICALS (03*)																							
12.	B190609T/CH350	General & Halogenated Insecticides	T	Core Major	3	1	-	15	10	25	75	100	04	√	√	√							
13.	B190610T/CH351	Fungicides and Herbicides	T		3	1	-	15	10	25	75	100	04	√	√	√							
14.	B190611P/CH352	Analysis of Agrochemicals-I	P		-	-	4	15	10	25	75	100	02	√	√	√		√					 
TOTAL					14	04	14	105	70	175	525	800	25										