Deparment of Chemistry

1.3.1. List and description of the courses which address the Gender, Environment and Sustainability, Human Values, Professional Ethics and Indian Knowledge System into the Curriculum

	Knowledge System into the Curriculum										
S.No.	Course Code	Name of the Course	Ge	EVS	HV	PE	IKS	Outcome			
	2023-2024										
1	CU231CC1	Core Course I: General Chemistry - I		Ø		V		To classify the elements in the periodic table, types of bonds, reaction intermediates electronic effects in organic compounds, types of reagents and to analyse the relationship existing between electronic configuration, bonding, geometry of molecules and reactions; structure reactivity and electronic effects.			
2	CU232CC1	Core Coure II : General Chemistry - II						To assess the application of acids, indicators, buffers, compounds of s and p- block elements and hydrocarbons.			
3	CU232CP1	Core Lab Course II: Organic Estimation and Preparation of Organic Compounds				Ø		To estimate the organic compounds and synthesise organic compounds.			
4	CU232EC1	Elective Course II: Chemistry for Biological Sciences - II				\Box	V	To estimate of fat and oil samples and calculate saponification value.			
5	CU232EP1	Elective Lab Course II: Systematic Analysis of Organic Compounds						To develop skill in analyzing organic functional groups.			
6	CU232NM1	Non Major Elective NME II: Cosemetics and Personal Grooming				\square		To learn the ingredients of various cosmetics.			
7	CU232SE1	Skill Enhancement Course SEC I: Dairy Chemistry						To analyze the quality of milk.			
8	CC2031	Major Core III : General Chemistry - III		\square		\square		To predict the chemistry of nitrogen and to explain the various photochemical processes.			
9	CC2032	Major Elective : I a. Pharmaceutical Chemistry						To interpret the chemical structure and pharmacological activities of drugs and to identify common diseases, their causes and treatment.			
10	CC2033	Major Elective : I b. Nano and Polymer Chemistry						To apply the principle of nanochemistry and synthesise novel compound and to analyze the properties of nanoparticles.			
11	CC2034	Major Elective : I c. Applied Electro Chemistry)		Ø		To interpret the different methods of electroplating.			
12	CC20P2	Major Practical II : Semi micro inorganic mixture analysis		Ø		Ø		To understand the principles of analysing inorganic compounds.			
13	CA2031	Allied II Theory: Inorganic and Physical Chemistry		N		N		To acquire knowledge on atomic structure and bonding.			
14	CA20P1	Allied II Practical: Volumetric and Organic Substance Analysis				\triangle		To understand and remember the concepts and theory of qualitative and quantitative analysis.			
15	APS203	Add on Course III : Professional English for physical sciences			V			To develop language skills.			
16	FCV202	Foundation course II :Personality Development			V			To identify various dimensions and importance of effective personality.			
17	CC2041	Major Core IV : General Chemistry - IV				\square		To apply the reaction mechanisms in the synthesis of components used in industrial and medicinal fields.			
18	CC2042	Major Elective : II a. Green Chemistry		S		N		To interpret green method for organic synthesis.			
19	CC2043	Major Elective : II b. Forensic Chemistry				N		To understand the importance of forensic chemistry.			
20	CC2044	Major Elective : II c. Instrumental Methods of Analysis				\square		To understand the instrumental methods of analysis of chemical compounds.			
21	CC20P2	Major Practical II : Semi micro inorganic mixture analysis				\square		To study the principles of qualitative analysis.			
22	CA2042	Allied II Theory: Physical Chemistry		Ø		\square		To apply the principles of physical properties for structural determination.			
23	CA20P1	Allied II Practical: Volumetric and Organic Substance Analysis				\triangle		To recognize the indicators used in volumetric analysis.			
24	APS204	Add on course IV : Professional English for physical sciences						To develop language skills.			
25	FCV202	Foundation course II : Personality Development						To identify various dimensions and importance of effective personality.			
26	CC2051	Major Core V : Organic Chemistry - I				\square		To apply the synthetic methods to synthesize new compounds.			
27	CC2052	Major Core VI : Inorganic Chemistry - I				Ø		To understand the chemistry of inner transition elements and organometallic compounds.			

28	CC2053	Major Core VII : Physical Chemistry - I		l		\square		To know the concepts of conductance, strong and weak
20	CC2033	Tragor Core vir. I hysical Chemistry - 1				٣		electrolytes.
29	CC2054	Major Elective : III a Bio Chemistry						To understand the biological action of carbohydrates.
30	CC2055	Major Elective : III b Dairy Chemistry				\overline{A}		To understand the biological action of milk.
31	CC2056	Major Elective : III c Analytical Chemistry				\square		To learn the concepts of precipitation techniques and related analysis.
32	CC20P3	Major Practical III : Gravimetric estimation and Organic preparation				\triangle		To gain skill in gravimetric estimation.
33	CC20P4	Major Practical IV: Organic estimation ,organic analysis and determination of physical constants						To develop skill in analyzing and estimating organic compounds.
34	CC20P5	Major Practical V : Physical Chemistry Experiments				☑		To develop skill in doing conductivity and potentiometric titrations.
35	AEC201	Ability Enhancement Course (AEC) : Environmental studies		\square				To recall the components of different ecosystems.
36	CC2061	Major Core VIII : Organic Chemistry - II				\square		To know the synthesis and structure of carbohydrates, alkaloids, terpenoids and dyes.
37	CC2062	Major Core IX : Inorganic Chemistry -II		Ø				To understand the types of nuclearreactions and their applications.
38	CC2063	Major Core X : Physical Chemistry - II				\square		To understand the theories ofreaction rate, adsorption and catalysis.
39	CC20P3	Major Practical III: Gravimetric estimation and Organic preparation						To prepare organic compounds.
40	CC20P4	Major Practical IV : Organic estimation ,organic analysis and determination of physical constants						To analyse the characteristics of organic compounds.
41	SEC203	Chemistry for competitive examinations						To analyze the hardness of water.
42	CP231CP1	Core Lab Course I: Organic Chemistry Practical		\square				To recall the basic principles of organic separation, qualitative analysis and preparation.
43	CP231EC2	Elective Course I : Nano Materials and Nano Technology						To discuss the various methods of synthesizing nanomaterials.
44	CP232CP1	Core Lab Course II Inorganic Chemistry Practical		\square				To recall and understand the basic principles in the analysis of cations from a given mixture.
45	CP232EC2	Elective Course III: b) Green Chemistry		\square				To recall the basic chemical techniques used in conventional industrial preparations and in green innovations.
46	CP232SE1	Skill Enhancement Course I: Health Science			\square			To acquire knowledge on first aid.
47	PG2033	Elective III (a): Advanced Topics in ChemistryAdvanced Topics in Chemistry		\square				To apply the principle of nanochemistry and green chemistry to design and synthesise novel compounds.
48	PG2044	Elective IV (a): Energy for future						To understand the importance of various sources of non- conventional energy.
49	LST202	Life Skill Training (LST) – II			\square			To identify the root cause of social evils and it's consequences.
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50	CC2011	Major Core I : General Chemistry - I						To understand the structure and naming of various organic compounds.
51	CC20P1	Major Practical I : Volumetric Analysis and Inorganic Complex Preparation						To develop skills in quantitative analysis.
52	CA2011	Allied I Theory: Chemistry for Life Sciences						To understand the importance of photochemistry and catalysis.
53	APS201	Add on course I : Professional English for physical sciences						To develop the language skills of students by offering adequate practice in professional contexts.
54	CNM201	Non Major Elective (NME) :Applied Chemistry - I				Ø		To apply the chemical reactions to synthesize day to day articles.
55	SEC201	Meditation and Exercise					Ø	To promote good - health and emotional stability among students.
56	FCV201	Foundation course I : Values for Life						To understand the human values, its importance and components.
57	CC2021	Major Core II : General Chemistry - II				☑		To understand the principles and theories of chemical bonding.
58	CA20P1	Allied I Practical : Volumetric and Organic Substance Analysis						To understand the principles of volumetric analysis.

59	CNM201	Non Major Elective (NME) : Applied Chemistry -	I		1	\square		To analyse the characteristics and advantages of
39	C1 11112U1	I		ت		٣		agrochemicals.
60	APS202	Add on course II : Professional English for						To use language for speaking with confidence in an intelligible
		physical sciences						and acceptable manner.
61	CNM202	Non Major Elective (NME) :Applied Chemistry -		_		V		To understand the process of manufacture of cosmetics and
62	SEC303	II Computer Literacy						perfumes. To understand the basic working of MS office which includes
62	SEC202	Computer Literacy						ms word, excel and powerpoint.
63	FCV201	Foundation course I : Values for Life			\square			To comprehend the different personal values and its
								components.
64	SLP201	Service Learning Programme (SLP): Community			\square			To gain an understanding of rural life, culture and social
65	CC2031	Engagement Course Major Core III: General Chemistry - III				\square		realities. To explain the various photochemical processes.
03	CC2031	Wajor Core III . General Chemistry - III		٧		٧		To explain the various photochemical processes.
66	CC2032	Major Elective : I a. Pharmaceutical Chemistry						To interpret the chemical structure and pharmacological
								activities of drugs.
67	CC2033	Major Elective : I b. Nano and Polymer Chemistry				\square		To apply the principle of nanochemistry and synthesise novel compounds.
		Chemistry						compounds.
68	CC2034	Major Elective : I c. Applied Electro Chemistry						To interpret the different methods of electroplating.
69	CC20P2	Major Practical II : Semi micro inorganic mixture				\triangle		To understand the principles of analysing inorganic
70	CA2031	analysis Allied II Theory: Inorganic and Physical						compounds. To acquire knowledge on atomic structure and bonding.
70	CA2031	Chemistry		٧		٧		10 acquire knowledge on atomic structure and bounding.
71	CA20P1	Allied II Practical: Volumetric and Organic						To understand and remember the concepts and theory of
		Substance Analysis			_			qualitative and quantitative analysis.
72	APS203	Add on Course III : Professional English for			\square			To develop language skills.
73	FCV202	physical sciences Foundation course II :Personality Development			\square			To identify various dimensions and importance of effective
13	TC V 202	1 oundation course if it cisonanty Development			U			personality.
74	CC2041	Major Core IV : General Chemistry - IV						To apply the reaction mechanisms in the synthesis of
								components used in industrial and medicinal fields.
75	CC2042	Major Elective : II a. Green Chemistry		$\overline{\square}$	 			To interpret green method for organic synthesis.
13	CC2042	iviajoi Elective . II a. Green Chemistry		٧		٧		To interpret green method for organic synthesis.
76	CC2043	Major Elective : II b. Forensic Chemistry						To understand the importance of forensic chemistry.
77	CC2044	Major Elective : II c. Instrumental Methods of			-		_	To understand the instrumental methods of analysis of
, ,	CC20 44	Analysis				٣		chemical compounds.
78	CC20P2	Major Practical II : Semi micro inorganic mixture						To study the principles of qualitative analysis.
		analysis		_	<u> </u>			
79	CA2042	Allied II Theory: Physical Chemistry				\bigcirc		To apply the principles of physical properties for structural
80	CA20P1	Allied II Practical: Volumetric and Organic			-	\square		determination. To recognize the indicators used in volumetric analysis.
30	0.12011	Substance Analysis				٠		
81	APS204	Add on course IV : Professional English for			\square			To develop language skills.
51	.11 0207	physical sciences			ت ا			
82	FCV202	Foundation course II: Personality Development						To identify various dimensions and importance of effective
0.2	000051	Miles Com V. O						personality.
83	CC2051	Major Core V : Organic Chemistry - I				\square		To apply the synthetic methods to synthesize new compounds.
84	CC2052	Major Core VI : Inorganic Chemistry - I						To understand the chemistry of inner transition elements and
					<u> </u>			organometallic compounds.
85	CC2053	Major Core VII : Physical Chemistry - I				$ \square $		To understand the working of electro chemical cells, EMF
86	CC2054	Major Elective : III a Bio Chemistry			-			measurement and their applications. To know the functions of lipids, amino acids , proteins and
30	CC2034	major Dicerve . III a Dio Chemistry		ت		٣		nucleic acids.
87	CC2055	Major Elective: III b Dairy Chemistry						To understand the biological action of milk.
88	CC2056	Major Elective : III c Analytical Chemistry			1	\bigcirc		To learn the concepts of precipitation techniques and related
90	CC20D2	Major Practical III - Cravinastria astimatica and			-		-	analysis. To gain skill in gravimetric estimation.
89	CC20P3	Major Practical III : Gravimetric estimation and Organic preparation				N		10 gam skin in gravimetric estimation.
		J						
90	CC20P4	Major Practical IV: Organic estimation ,organic				\triangle		To determine the physical constants of organic compounds
0.1	CC20Ds	analysis and determination of physical constants						accurately.
91	CC20P5	Major Practical V : Physical Chemistry Experiments				\square		To develop skill in doing conductivity and potentiometric titrations.
		Experiments			1	<u> </u>	<u> </u>	tradions.

92	AEC201	Ability Enhancement Course (AEC):		\square			To recall the components of different ecosystems.
93	FCV203	Environmental studies Foundation course III : Human Rights Education			\square		To interpret the problems of human rights and find solution.
94	CC2061	Major Core VIII : Organic Chemistry - II					To know the synthesis and structure of
							carbohydrates, alkaloids, terpenoids and dyes.
95	CC2062	Major Core IX : Inorganic Chemistry -II		\square		\square	To understand the types of nuclear reactions and their applications.
96	CC2063	Major Core X : Physical Chemistry - II				\square	To understand the theories of reaction rate, adsorption and catalysis.
97	CC20P3	Major Practical III : Gravimetric estimation and Organic preparation		Ø		\square	To prepare organic compounds.
98	CC20P4	Major Practical IV : Organic estimation ,organic analysis and determination of physical constants					To analyse the characteristics of organic compounds.
99	SEC203	Chemistry for competitive examinations		N N			To analyze the hardness of water.
100	PG20P1	Practical I: Inorganic Chemistry - I					To analyze inorganic compounds using semi-micro qualitative analysis and paper chromatography.
101	PG20P2	Practical II: Organic Chemistry					To understand the methods for the separation of organic compounds.
102	PG2033	Elective III (a): Advanced Topics in Chemistry		Ø			To apply the principle of nanochemistry and green chemistry to design and synthesise novel compounds.
103	PG2044	Elective IV (a): Energy for Future					To understand the importance of various sources of non- conventional energy.
104	LST201	Life Skill Training (LST) – I			\square		To understand the importance of soft skills.
105	LST202	Life Skill Training (LST) – II					To identify the root cause of social evils and it's consequences.
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106	CC2011	Major Core I : General Chemistry - I		Ø		\square	To understand the structure and naming of various organic compounds.
107	CC20P1	Major Practical I : Volumetric Analysis and Inorganic Complex Preparation					To develop skills in quantitative analysis.
108	CA2011	Allied I Theory: Chemistry for Life Sciences				\square	To understand the importance of photochemistry and catalysis.
109	APS201	Add on course I : Professional English for physical sciences				☑	To develop the language skills of students by offering adequate practice in professional contexts.
110	CNM201	Non Major Elective (NME) :Applied Chemistry - I		\square		☑	To apply the chemical reactions to synthesize day to day articles.
111	SEC201	Meditation and Exercise				\square	To promote good - health and emotional stability among students.
112	FCV201	Foundation course I : Values for Life					To understand the human values, its importance and components.
113	CC2021	Major Core II : General Chemistry - II		Ø		\square	To understand the principles and theories of chemical bonding.
114	CA20P1	Allied I Practical : Volumetric and Organic Substance Analysis				\square	To understand the principles of volumetric analysis.
115	CNM201	Non Major Elective (NME) :Applied Chemistry - I		Ø			To analyse the characteristics and advantages of agrochemicals.
116	APS202	Add on course II : Professional English for physical sciences				☑	To use language for speaking with confidence in an intelligible and acceptable manner.
117	CNM202	Non Major Elective (NME) :Applied Chemistry - II					To understand the process of manufacture of cosmetics and perfumes.
118	SEC202	Computer Literacy				\square	To understand the basic working of MS office which includes ms word, excel and powerpoint.
119	FCV201	Foundation course I : Values for Life					To comprehend the different personal values and its components.
120	SLP201	Service Learning Programme (SLP): Community Engagement Course			\square		To gain an understanding of rural life, culture and social realities.
121	CC2031	Major Core III : General Chemistry - III		V		$\overline{\Box}$	To predict the chemistry of nitrogen.

122	CC2032	Major Elective : I a. Pharmaceutical Chemistry			\square	\square	To interpret the chemical structure and pharmacological activities of drugs.
123	CC2033	Major Elective : I b. Nano and Polymer Chemistry			\square		To apply the principle of nanochemistry and synthesise novel compounds.
124	CC2034	Major Elective : I c. Applied Electro Chemistry					To interpret the different methods of electroplating.
125	CC20P2	Major Practical II : Semi micro inorganic mixture analysis			Ø		To understand the principles of analysing inorganic compounds
126	CA2031	Allied II Theory: Inorganic and Physical Chemistry			Ø		To acquire knowledge on atomic structure and bonding.
127	CA20P1	Allied II Practical : Volumetric and Organic Substance Analysis					To understand and remember the concepts and theory of qualitative and quantitative analysis.
128	APS203	Add on Course III : Professional English for physical sciences					To develop language skills.
129	FCV202	Foundation course II :Personality Development					To identify various dimensions and importance of effective personality.
130	CC2041	Major Core IV : General Chemistry - IV			Ø		To apply the reaction mechanisms in the synthesis of components used in industrial and medicinal fields.
131	CC2042	Major Elective : II a. Green Chemistry					To interpret green method for organic synthesis.
132	CC2043	Major Elective : II b. Forensic Chemistry			\square		To understand the importance of Forensic chemistry.
133	CC2044	Major Elective : II c. Instrumental Methods of Analysis			\square		To understand the instrumental methods of analysis of chemical compounds.
134	CC20P2	Major Practical II : Semi micro inorganic mixture analysis			\square		To study the principles of qualitative analysis.
135	CA2042	Allied II Theory: Physical Chemistry					To apply the principles of physical properties for structural determination.
136	CA20P1	Allied II Practical : Volumetric and Organic Substance Analysis			N		To recognize the indicators used in volumetric analysis.
137	APS204	Add on course IV : Professional English for physical sciences		\Box			To develop language skills.
138	FCV202	Foundation course II : Personality Development		\triangle			To identify various dimensions and importance of effective personality.
139	CC1751	Major Core V: Organic Chemistry - III			$\overline{\mathbb{Q}}$		To study about phenols and their derivatives.
140	CC1752	Major Core VI : Inorganic Chemistry - II			\square		To study the characteristics of p-block elements, noble gases and their compounds.
141	CC1753	Major Core VII : Physical Chemistry - II			\square		To know and learn the principles of thermodynamics and colligative properties.
142	CC1754	Major Elective III (a): Green Chemistry			\square		To know the principles of green chemistry.
143	CC1754	Major Elective III (b): Applied Chemistry					To understand the industrial applications of electro chemistry.
144	CC1754	Major Elective III (c): Leather Chemistry					To know the principles involved in leather industry.
145	CC17P5	Major Practical V & VI : Organic Estimation and Inorganic Semi-micro Analysis	_		N		To develop skill in analyzing inorganic mixtures and estimating organic compounds.
146	CC1761	Major Core VIII : Organic Chemistry -IV	\square		(To learn about carboxylic acids and carbohydrates.
147	CC1762	Major Core IX : Inorganic Chemistry -III			∇		To know the nomenclature, isomerism in co-ordination compounds.
148	CC1763	Major Core X : Physical Chemistry - III			Ø		To acquire the knowledge of phase diagram and chemical kinetics.
149	CC1764	Major Elective IV (a): Bio Chemistry					To know the biological action of carbohydrates.
150	CC1764	Major Elective IV (b): Instrumental methods			N		To understand the instrumental methods to analyze chemical compound.
151	CC1764	Major Elective IV (c): Forensic Chemistry			\square		To understand the applications of forensic chemistry.
152	CC17P5	Major Practical V: Organic Estimation and Inorganic Semi-micro Analysis			Ø		To train the students in organic estimation.

153	CC17P6	Major Practical VI: Gravimetric Analysis and						To develop skills in gravimetric analysis.
		Inorganic complex preparation						
154	CC17P7	Major Practical VII: Physical Chemistry				\overline{A}		To develop skill in doing conductivity and potentiometric titrations.
155	CC17S1	Soil Science and Agricultural Chemistry		\square				To know the different types of soil.
156	CC17S2	Chemistry of Cosmetics				$\overline{\mathbb{N}}$		To know the preparation of cosmetics.
157	CSK175	Chemistry for Competitive Examinations - I		\square				To prepare the students for competitive exams.
158	PG20P1	Practical I: Inorganic Chemistry - I		\square				To analyze inorganic compounds using semi-micro qualitative analysis and paper chromatography.
159	PG20P2	Practical II : Organic Chemistry		Ø				To understand the methods for the separation of organic compounds.
160	PG2033	Elective III (a): Advanced Topics in Chemistry						To apply the principle of nanochemistry and green chemistry to design and synthesise novel compounds.
161	PG2044	Elective IV (a): Energy for Future						To understand the importance of various sources of non- conventional energy.
162	LST201	Life Skill Training (LST) – I						To apply the tools and techniques for effective communication.
163	LST202	Life Skill Training (LST) – II						To identify the root cause of social evils and it's consequences.
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164	CC2011	Major Core I : General Chemistry - I		\square				To understand the structure and naming of various organic compounds.
165	CC20P1	Major Practical I : Volumetric Analysis and Inorganic Complex Preparation				\square		To develop skills in quantitative analysis.
166	CA2011	Allied I Theory: Chemistry for Life Sciences						To understand the importance of photochemistry and catalysis.
167	APS201	Add on course I : Professional English for physical sciences						To develop the language skills of students by offering adequate practice in professional contexts.
168	CNM201	Non Major Elective (NME) :Applied Chemistry - I				Ø		To apply the chemical reactions to synthesize day to day articles.
169	SEC201	Meditation and Exercise				\overline{A}	\overline{A}	To promote good - health and emotional stability among students.
170	FCV201	Foundation course I : Values for Life						To understand the human values, its importance and components.
171	CC2021	Major Core II : General Chemistry - II		N		\square		To learn the preparation, properties and importance of aliphatic hydrocarbons and alicyclic compounds.
172	CA20P1	Allied I Practical : Volumetric and Organic Substance Analysis						To understand the principles of volumetric analysis.
173	CNM201	Non Major Elective (NME) :Applied Chemistry - I						To analyse the characteristics and advantages of aerochemicals.
174	APS202	Add on course II : Professional English for physical sciences						To use language for speaking with confidence in an intelligible and acceptable manner.
175	CNM202	Non Major Elective (NME) :Applied Chemistry - II				\Box		To understand the process of manufacture of cosmetics and perfumes.
176	SEC202	Computer Literacy						To understand the basic working of MS office which includes ms word, excel and powerpoint.
177	FCV201	Foundation course I: Values for Life						To comprehend the different personal values and its components.
178	SLP201	Service Learning Programme (SLP) : Community Engagement Course						To gain an understanding of rural life, culture and social realities.
179	CC1731	Major Core III : Organic Chemistry - I				S		To learn about the electronic displacements and polar effects in organic compounds.
180	CC1732	Major Elective I (a): Dairy Chemistry						To make the students to understand the various aspects of health and hygiene and to practicelab to land.
181	CC1732	Major – Elective - I (b)Nutritional Chemistry						To make the students understand the different types of nutrients essential for the growth.
182	CC1732	Major Elective I (c) : Applied Electro Chemistry				N		To learn about industrial electro chemistry, hydrometallurgy, electro metallurgy and pyrometallurgy.

183	CC17P3	Major Practical III : Organic Preparation and			\square	To find out the exact melting and boiling point of organic
100	001713	Determination of Physical Constants				substances.
184	CA1731	Allied II Theory: General Chemistry	V			To understand the general characteristics of aromatic compounds.
185	CA17P1	Allied II Practical : Volumetric and Organic Analysis			V	To develop skill in doing volumetric estimations.
186	CC1741	Major Core IV : Organic Chemistry - II			\overline{A}	To understand oxygen derivatives and carbonyl derivatives.
187	CC1742	Major Elective II (a): Industrial Chemistry			(S	To understand the applications of chemical industries.
188	CC1742	Major Elective II(b): Polymer Chemistry			V	To know about the different types of polymerization reaction
189	CC1742	Major Elective II (c): Pharmaceutical Chemistry				To learn the biological role of Ca, Zn and Cu.
190	CC17P3	Major Practical III : Organic Preparation and Determination of Physical Constants				To develop skill in preparing organic compounds.
191	CC17P4	Major Practical IV : Organic Analysis				To develop skill in doing organic substance analysis.
192	CA1741	Allied II Theory: Inorganic and Physical Chemistry				To gain knowledge on basic concepts of electrochemistry.
193	CC1751	Major Core V : Organic Chemistry - III	N		\overline{A}	To study about phenols and their derivatives.
194	CC1752	Major Core VI : Inorganic Chemistry - II				To study the characteristics of p-block elements, noble gases and their compounds.
195	CC1753	Major Core VII : Physical Chemistry - II				To impart knowledge about the symmetry elements and symmetry operations.
196	CC1754	Major Elective III (a): Green Chemistry				To study the important techniques and green synthesis of compounds.
197	CC1754	Major Elective III (b): Applied Chemistry				To understand the industrial applications of electro chemistr
198	CC1754	Major Elective III (c): Leather Chemistry			\Box	To understand the process of tanning, properties and uses of leather.
199	CC17P5	Major Practical V & VI : Organic Estimation and Inorganic Semi-micro Analysis				To develop skill in analyzing inorganic mixtures and estimating organic compounds.
200	CC1761	Major Core VIII : Organic Chemistry -IV				To learn about carboxylic acids and carbohydrates.
201	CC1762	Major Core IX : Inorganic Chemistry -III			N	To know the nomenclature, isomerism in co-ordination compounds.
202	CC1763	Major Core X : Physical Chemistry - III				To acquire the knowledge of phase diagram and chemical kinetics.
203	CC1764	Major Elective IV (a): Bio Chemistry	\square			To know the biological action of carbohydrates.
204	CC1764	Major Elective IV (b): Instrumental methods			abla	To understand the instrumental methods to analyze chemica compound.
205	CC1764	Major Elective IV (c): Forensic Chemistry			abla	To understand the applications of forensic chemistry.
206	CC17P5	Major Practical V : Organic Estimation and Inorganic Semi-micro Analysis			\overline{V}	To train the students in organic estimation.
207	CC17P6	Major Practical VI: Gravimetric Analysis and Inorganic complex preparation				To develop skills in gravimetric analysis.
208	CC17P7	Major Practical VII : Physical Chemistry			abla	To develop skill in doing conductivity and potentiometric titrations.
209	CC17S1	Soil Science and Agricultural Chemistry				To know the different types of soil.
210	CC17S2	Chemistry of Cosmetics				To understand harmful effects of the ingredients.
211	PG20P1	Practical I: Inorganic Chemistry - I			_	To analyze inorganic compounds using semi-micro qualitati analysis and paper chromatography.
212	PG20P2	Practical II: Organic Chemistry	Ø			To understand the methods for the separation of organic compounds.
213	LST201	Life Skill Training (LST) – I		\square		To understand the importance of soft skills.
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214	PG1733	Elective III (a): Advanced Topics in Chemistry		\square			To apply the principle of nanochemistry and green chemistry to design and synthesise novel compounds.
215	PG1744	Elective IV (a): Energy for FutureEnergy for future		\square			To understand the importance of various sources of non- conventional energy.
216	LST172	Life Skill Training (LST) – II					To identify the root cause of social evils and it's consequences.
L			2	019-20)20		
217	CC1711	Major Core I : Inorganic Chemistry - I		\square		\square	To understand the various types of chemical bond formation in
210	CC17D1	Major Dragtical I. Valuratria Analysia I				\square	molecules.
218 219	CC17P1 CA1711	Major Practical I : Volumetric Analysis - I Allied I – Theory: General Chemistry				$\overline{\mathbb{N}}$	To develop skill in doing volumetric estimations. To acquire knowledge about the atomic structure and bonding
220	CA17P1	Allied I Practical: Volumetric and Organic				\square	in molecules. To learn the principles of volumetric analysis.
		Analysis					
221	CNM171	NMEC : Molecules of Life				∇	To make the students understand the different types of nutrients like carbohydrates, vitamins and minerals essential for the growth of mankind.
222	CC1721	Major Core II : Physical Chemistry - I				\square	To acquire knowledge about gaseous state, liquid state and solid state.
223	CC17P1	Major Practical I : Volumetric Analysis – I				\square	To develop skill in doing volumetric estimations.
224	CC17P2	Major Practical II : Volumetric Analysis - II				\square	To develop skill in doing volumetric estimations.
225	CA1721	Allied I Theory: Inorganic and Physical Chemistry				Ø	To acquire knowledge about thermodynamics and electrochemistry.
226	CNM172	NMEC : Fuel Chemistry		Ø		\Box	To gain knowledge on different types of fuels, applications of fuels and petrochemicals.
227	CC1731	Major Core III : Organic Chemistry - I				\square	To learn about the electronic displacements and polar effects in organic compounds.
228	CC1732	Major Elective I (a): Dairy Chemistry				\square	To learn about the dairy products.
229	CC1732	Major – Elective - I (b)Nutritional Chemistry				\supset	To make the students understand the different types of nutrients essential for the growth.
230	CC1732	Major Elective I (c): Applied Electro Chemistry				\square	To learn about industrial electro chemistry, hydrometallurgy, electro metallurgy and pyrometallurgy.
231	CC17P3	Major Practical III : Organic Preparation and Determination of Physical Constants				Ø	To develop skill in preparing organic compounds.
232	CA1731	Allied II Theory: General Chemistry				\overline{Q}	To understand the shape of atomic orbitals.
233	CA17P1	Allied II Practical : Volumetric and Organic Analysis				N	To develop skill in doing volumetric estimations.
234	CC1741	Major Core IV : Organic Chemistry - II				N	To study the chemistry of halogenated hydrocarbons.
235	CC1742	Major Elective II (a): Industrial Chemistry					To understand the applications of chemical industries.
236	CC1742	Major Elective II(b): Polymer Chemistry				V	To know about the different types of polymerization reactions.
237	CC17P3	Major Practical III : Organic Preparation and Determination of Physical Constants					To develop skill in preparing organic compounds.
238	CC17P4	Major Practical IV : Organic Analysis				\square	To develop skill in doing organic substance analysis.
239	CA1741	Allied II Theory: Inorganic and Physical Chemistry		Ø		\square	To know the importance of hydrogen cell.
240	CC1751	Major Core V : Organic Chemistry - III					To study about phenols and their derivatives.
241	CC1752	Major Core VI : Inorganic Chemistry - II					To study the characteristics of p-block elements, noble gases and their compounds.
242	CC1753	Major Core VII : Physical Chemistry - II				Ø	To know and learn the principles of thermodynamics and colligative properties.
243	CC1754	Major Elective III (a): Green Chemistry		\square		\square	To know the principles of green chemistry.

244	CC1754	Major Elective III (b): Applied Chemistry				To understand the industrial applications of electro chemistry.
245	CC1754	Major Elective III (c): Leather Chemistry				To understand the process of tanning, properties and uses of leather.
246	CC17P5	Major Practical V & VI : Organic Estimation and Inorganic Semi-micro Analysis				To develop skill in analyzing inorganic mixtures and estimating organic compounds.
247	CC1761	Major Core VIII : Organic Chemistry -IV	1		abla	To learn about carboxylic acids and carbohydrates.
248	CC1762	Major Core IX : Inorganic Chemistry -III				To know the nomenclature, isomerism in co-ordination compounds.
249	CC1763	Major Core X : Physical Chemistry - III				To acquire the knowledge of phase diagram and chemical kinetics.
250	CC1764	Major – Elective - IV (a) Bio Chemistry	(Ø		To know the biological action of carbohydrates.
251	CC1764	Major Elective IV (b): Instrumental methods			$\overline{\mathbf{A}}$	To understand the instrumental methods to analyze chemical compound.
252	CC1764	Major Elective IV (c): Forensic Chemistry				To understand the applications of forensic chemistry.
253	CC17P5	Major Practical V: Organic Estimation and Inorganic Semi-micro Analysis				To train the students in organic estimation.
254	CC17P6	Major Practical VI : Gravimetric Analysis and Inorganic complex preparation				To develop skills in gravimetric analysis.
255	CC17P7	Major Practical VII : Physical Chemistry				To develop skill in doing conductivity and potentiometric titrations.
256	CC17S1	Soil Science and Agricultural Chemistry	(Ø		To know the different types of soil.
257	CC17S2	Chemistry of Cosmetics			\square	To know the preparation of cosmetics.
258	PG17P1	Practical I : Organic Chemistry	(Ø		To analyse the elements and functional groups using microscale analysis.
259	PG17P2	Practical II: Inorganic Chemistry	(To analyze inorganic compounds using semi-micro qualitative analysis and paper chromatography.
260	PG1733	Elective III (a): Advanced Topics in Chemistry	(\square		To apply the principle of nanochemistry and green chemistry to design and synthesise novel compounds.
261	PG1744	Elective IV (a): Energy for future		abla		To apply the principle of energy conversion to the production of energy for the future.
262	LST171	Life Skill Training (LST) – I				To apply the tools and techniques for effective communication.
263	LST172	Life Skill Training (LST) – II				To identify the root cause of social evils and it's consequences.