Column1	Column2	Column3	Column4	_Column42	Column5
			DEPARTMENT OF P U EDUCATION		ACADEMIC PROGRAM FOR THE YEAR 2018-19
UBJECT		CODE			ACADEMIC PROGRAM FOR THE YEAR 2018-19
			PUC (4 THEORY+2 PRACTICE HOURS A WEEK)	PRACTICE SESSIONS	
CHEMISTRY	CLASS		<mark>34</mark>	TRICITEE SESSIONS	PRACTICALS (1 CLASS OF 2 HOURS DURATION PER WEEK PER BATCH
DAY	DATE	DAY			
			Unit - 1: The Solid State		
			 to describe general characteristics of solid state 		
DAY 1	02-May-18	WEDNESDAY	 to distinguish between amorphous and crystalline solids. 		
			 classify crystalline solids on the basis of the nature of binding forces 		
			define crystal lattice and unit cell		
241/2	02.1440	THURSDAY			
DAY 2	03-IVIAY-18	THURSDAY	ste avalain class positing of posticles		
			to explain close packing of particles to describe different types of voids and closed packed structures		
DAY 3	04-May-18	ERIDAY	to describe different types of voids and closed packed structures		
JAI J	04 IVIDY 10	TRIDAT	•to calculate the packing efficiency of different types cubic unit cells		
			to corelate the packing efficiency of different types cubic drift cells to corelate the density of a substance with it's unit cell properties		
		1	to conclude the density of a substance with it's unit cell properties		
DAY 4	05-Mav-18	SATURDAY			
DAY 5	06-May-18				
AY 6	07-May-18			PRACTICE SESSIONS	
DAY 7	08-May-18	TUESDAY		PRACTICE SESSIONS	
DAY 8	09-May-18	WEDNESDAY	•to describe imperfections in solids and their effect on properties		
			•to corelate the electrical and magnetic properties of solids		Seef and Object to December of any
					Surface Chemistry : Preparation of one Lyophillic(Starch sol) and Lyophobic sol(Ferric
					hydroxide sol) , To purify prepared sol by dialysis
DAY 9		THURSDAY			inyurokiuc son, i o purny prepareu sor by utatysis
DAY 10	11-May-18		Election Duty		
DAY 11		SATURDAY	Election Duty		
DAY 12	13-May-18	SUNDAY		<u> </u>	
			Numericals on formula of a compound and number of voids filled		Chemical Kinetics : Effect of concentration on rate of
DAY 13	14-May-18	MONDAY			reaction between Sodium thiosulphate and hydrochloric acid.
DAY 14	15-May-18		Numericals on density		nyurochioric aciu.
OAY 15		WEDNESDAY	Indiffericals off defisity	PRACTICE SESSIONS	
AY 16		THURSDAY		PRACTICE SESSIONS PRACTICE SESSIONS	
10	1,ay 10		Unit - 6: General Principles and processes of Isolation of Elements	THE COURT OF SESSIONS	
		1	•to explain the terms minerals, ores, concentration, calcination, roasting,		
	1	I	refining, etc.		
		1	•to understand the principles of oxidation and reduction as applied to the		
OAY 17	18-May-18	FRIDAY	extraction procedures		
			•to apply the thermodynamic concepts like that of Gibbs energy and		
		1	entropy to the principles of extraction of		
		1	1. aluminium		
		1	2.copper,		
		1	3.zinc.		
AY 18		SATURDAY			
AY 19	20-May-18	SUNDAY			
		1	4.lron		
		1	extraction of copper from low grade ores and scrapes		Effect of temperature on rate of reaction between
		1	•extraction of clorine from Brime solution(oxidation)		Sodium thiosulphate and hydrochloric acid.
		l	 extraction of gold and silver involving leaching with Cyanide ion(CN⁻) 		* *************************************
DAY 20	21-May-18	MONDAY		1	
	22.14	THECOAY	•refining techniques: Distillation, Liquation, Electrolysis, Zone Refining		
DAY 21	22-May-18	TUESDAY		DDACTICE CECCIONS	

PRACTICE SESSIONS

DAY 22

23-May-18 WEDNESDAY

			DED COMPANIES OF DAY ED VIGOR MANAGEMENT	\neg	
			DEPARTMENT OF P U EDUCATION		ACADEMIC PROGRAM FOR THE YEAR 2018-19
SUBJECT		CODE			
CHEMISTRY	CLASS		PUC (4 THEORY+2 PRACTICE HOURS A WEEK) 34	PRACTICE SESSIONS	PRACTICALS (I CLASS OF 2 HOURS DURATION PER WEEK PER BATCH
DAY	DATE	DAY	34		
DAY 23		THURSDAY		PRACTICE SESSIONS	
			Vapour Phase Refining and Chromatographic methods	THE SESSIONS	
DAY 24	25-May-18	FRIDAY	Uses of alluminium, copper,Zinc and Iron		
			Unit 10: Haloalkanes and Haloarenes		
			 classification of Haloalkanes and Haloarenes on the basis of 		
			1. number of Halogen atoms		
			2. compounds containing SP ³ C-X bond		
			3. compounds containing SP ² C-X bond		
DAY 25		SATURDAY	•IUPAC nomenclature of Haloalkanes and Haloarenes		
DAY 26	27-May-18	SUNDAY			
			•nature of C-X bond		
			•methods of preparation		m 1
			from alcohols from hydrocarbons		To determine the heat of solution of potassium nitrate crystals or copper sulphate.
			3. by electrophilic substitution		To determine the heat of neutralization of strong acid
			4. sandmayer's reaction		(HCl) with a strong base (NaOH).
			5. from alkenes		()
DAY 27	28-May-18	MONDAY	6. halogen exchange method		
			•physical properties		
			•chemical reactions		
			1. Reactions of haloalkanes		
			a.Nucleophilic substitution reaction (with exampes)		
DAY 28	29-May-18		b.Mechanism of substitution nucleophilic bimolecular (S _N 2)		
DAY 29		WEDNESDAY		PRACTICE SESSIONS	
DAY 30	31-May-18	THURSDAY		PRACTICE SESSIONS	
			•Mechanism of substitution nucleophilic unimolecular (S _N 1)		
DAY 31	01-Jun-18	FRIDAY	Stereochemical aspects of nucleoplic substitution reactions		
			•Stereochemical aspects of nucleoplic substitution reactions (Contd.)		
			2.Elimination reactions		
			Reactions with metals Preparation of Grignard reagents and its reactivity		
			Wurtz reaction		
DAY 32	02-lun-18	SATURDAY	Wuitz reaction		
DAY 33	03-Jun-18				
			Reactions of Haloarenes		
			1.Nucleophilic substitution reaction		
			to explain why aryl halides are less reactive towards nucleophilic		
			susbstitution reactions using the following reasons		
			a. Resonance effect		
			b. Difference in hybridisation of carbon atom C-X bond		
		1	c. Instability of phenyl cation		
DAY 24	04 hus 40	MONDAY	d. Possibe repulsion between nucleophile and electron rich		
DAY 34	U4-Jun-18	IVIONDAY	arenes •Electrophilic substitution reactions		
DAY 35	05-Jun-18	TUESDAY	Polyhalogen compounds		
DAY 36		WEDNESDAY	-i orynaiogen compounds	PRACTICE SESSIONS	
DAY 37		THURSDAY		PRACTICE SESSIONS	
			Unit 2: Solutions		
		1	•Types of solutions		
	1	I	•expressing concentration of solutions		
DAY 38	08-Jun-18	FRIDAY			

SUBJECT		CODE	DEPARTMENT OF P U EDUCATION		ACADEMIC PROGRAM FOR THE YEAR 2018-19
CHEMISTRY	CLASS	34	PUC (4 THEORY+2 PRACTICE HOURS A WEEK)	PRACTICE SESSIONS	PRACTICALS (1 CLASS OF 2 HOURS DURATION PER WEEK PER BATCH
DAY	DATE	DAY			
			Solubility Solubility of a solid in a liquid, effect of temperature and effect of pressure.		
			2.Solubility of a gas in a liquid Henry's Law		
DAY 39	00 1 10	SATURDAY	Mathematical expression of Henry's law		
DAY 40	10-Jun-18				
DAY 41	11-Jun-18		Henry's law constant K _H Explanation of solubility of the gas in the liquid using K _H Application of Henry's law in industry Effect of temperature on the solubility of gases in liquids		THE DANIELL'S CELL :To set up a Daniell cell and To study the variation of cell potential in $Zn Zn^{2^*} Cu^{2^*} Cu$ with change in concentration of electrolytes (CuSO ₄ or ZnSO ₄) at room temperature.
9/11 4 <u>1</u>	11300110		Vapour pressure of liquid solutions 1. vapour pressure of liquid liquid solutions Raoult's law and mathematical expression Raoult's law as a special case of Henry's law 2. Vapour pressure of solids in liquids Ideal and non-ideal solutions		
DAY 42	12-Jun-18	TUESDAY	differences between Ideal and non-ideal solutions		
DAY 43		WEDNESDAY		PRACTICE SESSIONS	
DAY 44	14-Jun-18	THURSDAY		PRACTICE SESSIONS	
DAY 45	15-Jun-18		Azeotropes Minimum boiling Azeotropes and Maximum boiling Azeotropes Colligative properties and determination of molar mass 1.Relative lowering of vapour pressure 2.Elivation of boiling point		
DAY 46	16-Jun-18	SATURDAY	RAMZAN		
DAY 47	17-Jun-18	SUNDAY			
			3. Depression of freezing point. 4. Osmosis and Osmotic pressure •Isotonic Solutions, hypertonic and hypotonic solutions •Reverse Osmosis and water purification •abnormal molar mass		
DAY 48	18-Jun-18	MONDAY			
DAY 49	19-Jun-18	TUESDAY	Numericals on concentration of solutions Numericals on Henry's law		
DAY 50	20 1 10	WEDNESDAY	Numericals on relative lowering of vapour pressure Numericals on elivation of boiling point		
DAY 50 DAY 51		WEDNESDAY THURSDAY		DDACTICE CECCIONS	+
DAY 51 DAY 52	21-Jun-18 22-Jun-18			PRACTICE SESSIONS PRACTICE SESSIONS	
DAY 53		SATURDAY	Numericals on depression of freezing point Numericals on osmotic pressure	FRACTICE SESSIONS	
DAY 54	24-Jun-18				
DAY 55		MONDAY	Unit 4 : Chemical Kinetics Introduction, Rate of a chemical reaction (Average and instantaneous) Units of the rate.		Paper Chromatography: To separate the coloured components present in a mixture of red and blue ink by ascending paper chromatography and find their R _f values.

			DEPARTMENT OF P U EDUCATION		ACADEMIC PROGRAM FOR THE YEAR 2018-19	
SUBJECT		CODE	PUC (4 THEORY+2 PRACTICE HOURS A WEEK)		ACHDEMIC PROGRAM FOR THE LEAR 2010-17	
CHEMISTRY	CLASS	34	<mark>- </mark>	PRACTICE SESSIONS	PRACTICALS (I CLASS OF 2 HOURS DURATION PER WEEK PER BATCH	
AY	DATE	DAY				
AY 56	26-Jun-18	TUESDAY	Problems on calculation of average rate. Factors influencing the rate of a reaction			
			Order of a reaction units for rate constants of zero, first and second order			
AY 57		WEDNESDAY	reactions		4	
AY 58		THURSDAY		PRACTICE SESSIONS	<u> </u>	1
AY 59	29-Jun-18	FRIDAY		PRACTICE SESSIONS		
AY 60		SATURDAY	Molecularity of a reaction. Derivation of integrated rate equations for zero and first order reactions.			
AY 61	01-Jul-18	SUNDAY				
			Expression for K for first order gas phase reaction. Problems on the above expressions.		Preparation of inorganic compounds : To prepare double salt of ferrous ammonium sulphate	
DAY 62	02 141 19	MONDAY			or Mohr's salt, Potash alum.	
ZAT 04	02-Jul-18	MONDAI	Half life period, derivation of expressions for T1/2 of zero and first order	+	+	
DAY 63	03-Jul 10	TUESDAY	reactions. Problems on half life period.			
,,,, 05	03-301-10	- COUNT	Pseudo first order reaction examples. Temperature dependence of the rate		<u> </u>	1
DAY 64	04-1:11-19	WEDNESDAY	of the reaction.			
DAY 65		THURSDAY	of the reaction.	PRACTICE SESSIONS		i
DAY 66	06-Jul-18			PRACTICE SESSIONS		
			Arhenius equation ,	Traterior Sessions		
DAY 67	07-Jul-18	SATURDAY	Numericals			
OAY 68	08-Jul-18	SUNDAY				
DAY 69	09-Jul-18	MONDAY	Effect of the temperature on the rate of the reaction. Collision theory		. Preparation of Organic compounds :To prepare a pure sample of dibenzal acetone. To prepare a pure sample of p- nitroacetanilide from acetanilide To prepare a sample of β - naphthol aniline dye (phenylazo- β -naphthol)	
			Unit 11- alcohols, phenols and ethers			
			Alcohols :Classification, nomenclature, structure of functional group			
DAY 70	10-Jul-18	TUESDAY				
			Methods of preparation from alkenes, aldehydes and ketones ones,			
			carboxylic acid, grignard reagent			
AY 71		WEDNESDAY	Physical Properties - Boiling point and solubility	DR LOWISE SESSIONS		1
AY 72		THURSDAY		PRACTICE SESSIONS	<u> </u>	ł
AY 73	13-Jul-18			PRACTICE SESSIONS	<u> </u>	ł
DAY 74		SATURDAY	Chemical properties - Acidity, Esterification, acylation, oxidation			1
JR1 73	15-Jul-18	JUNUAT	Dehydration of alcohols, mechanism of dehydration, De-hydrogenation,			ı
		1	Lucas reagent test, Manufacture of methanol and ethanol, Uses of		Test for the Functional Groups Present in Organic	
DAY 76	16-Jul-18	MONDAY	methanol and ethanol		Compounds	
DAY 77		TUESDAY	Phenols - Classification, nomenclature, preparation			1
DAY 78		WEDNESDAY	Physical properties, Chemical properties - Acidity, Esterification.			1
DAY 79		THURSDAY	year page 1 and an arrange properties a control of an arrange and a control of a co			
08 YAC	20-Jul-18					1 TEST
OAY 81		SATURDAY				
		SUNDAY				
DAY 82	22-Jul-18					
DAY 82		MONDAY		PRACTICE SESSIONS	Study of Carbohydrates, Fats and Protiens in Pure Form and Detection of their Presence in Given Food Stuffs.	

SUBJECT		CODE	DEPARTMENT OF P U EDUCATION		ACADEMIC PROGRAM FOR THE YEAR 2018-19
CHEMISTRY	CLASS	3	PUC (4 THEORY+2 PRACTICE HOURS A WEEK)	PRACTICE SESSIONS	PRACTICALS (I CLASS OF 2 HOURS DURATION PER WEEK PER BATCH
DAY	DATE	DAY			
			Nitration, Halogenation of Phenol, Kolbe's reaction, Reimer Tiemann		
DAY 85		WEDNESDAY	reaction, Phenol with Zinc dust and oxidation of Phenol		
DAY 86	26-Jul-18	THURSDAY	Ethers		
			Unit 12: Aldehdyes, Ketones and Carboxylic acids		
			Introduction, Nomenclature of aldehydes and ketones		
DAY 87	27-Jul-18		Nature of carbonyl group		
DAY 88		SATURDAY	Preparation of aldehydes and ketones		
DAY 89 DAY 90		SUNDAY		PRACTICE SESSIONS	. Determination of Concetration / Molarity of KMnO ₄ solution by Titrating it against a standard solution of Oxalic Acid
DAY 91		TUESDAY		PRACTICE SESSIONS	
DAY 92		WEDNESDAY	Properties - Physical Properties, Chemical Properties, addition reactions Mechanism of addition of HCN	THE SESSIONS	
			Condensation reactions, Clemmensen reduction, Wolff-Kishner reduction		
DAY 93	02-Aug-18	THURSDAY			
DAY 94	03-Aug-18	FRIDAY	Tests to distinguish aldehydes and ketones - Haloform reaction, Aldol condensation		
DAY 95		SATURDAY	Cannizaro's reaction, Uses of aldehydes and ketones, Carboxylic acids - Nomenclature		
DAY 96	05-Aug-18	SUNDAY			
DAY 97	06-Aug-18	MONDAY		PRACTICE SESSIONS	. Determination of Concetration / Molarity of KMnO4 solution by Titrating it against a standard solution of Ferruous Ammonium Sulphate.
DAY 98	07-Aug-18	TUESDAY		PRACTICE SESSIONS	
			Structure of carboxylic group, methods of preparation of carboxylic acids		
DAY 99		WEDNESDAY			
DAY 100	09-Aug-18	THURSDAY	Physical properties and reactions of carboxylic acids		
DAY 101	10-Aug-18	FRIDAY	HVZ reaction and electrophilic reactions and uses of carboxylic acids		
DAY 102		SATURDAY	Unit 7: P-Block elements Nitrogen family - occurance, electronic configuration, oxidation state, atomic and ionic radii, ionisation energy, electro negativity		
DAY 103	12-Aug-18	SUNDAY			
DAY 104		MONDAY		PRACTICE SESSIONS	Qualitative Analysis: Determination of one cation and one anion in a given salt.
2E		TUESDAY		PRACTICE SESSIONS	
DAY 106	15-Aug-18	WEDNESDAY	INDEPENDENCE DAY		
DAY 107	16-Aug-18	THURSDAY	Chemical properties of P block elements, preparation of di-nitrogen, properties and uses of di-nitrogen		
DAY 108	17-Aug-18	FRIDAY	Ammonia - Preparation, manufacture by Haber's process, properties and uses		
DAY 109	10 Aug 10	SATURDAY	Oxides of nitrogen - Methods of preparation, structure, apperance and chemical nature Nitric acid - Manufacture by Ostwald's process		
DAY 110	19-Aug-18		INICIACIO - INIGINALIDACIONE DY OSCINDIO S PROCESS		
DAY 110		MONDAY	Properties and uses of Nitric acid Phosphorus - Allotropic forms, Preparation, properties and uses of Phosphine		Qualitative Analysis: Determination of one cation and one anion in a given salt.
DAY 112		TUESDAY		PRACTICE SESSIONS	
DΔY 113		WEDNESDAY	BAKRID		

			DEPARTMENT OF P U EDUCATION		ACADEMIC PROGRAM FOR THE YEAR 2018-19	
SUBJECT		CODE	PUC (4 THEORY+2 PRACTICE HOURS A WEEK)	PRACTICE SESSIONS		-
CHEMISTRY	CLASS	3		PRACTICE SESSIONS	PRACTICALS (1 CLASS OF 2 HOURS DURATION PER WEEK PER BATCH	
	DATE	DAY]
DAY 114	23-Aug-18	THURSDAY		PRACTICE SESSIONS]
			Phosphorus Halides - Preparation, properties and structure			
			Oxoacids of phosphorus			
			Group 16 elements - Occurrence, electronic configuration, electron gain			
DAY 115	24-Aug-18	FRIDAY	enthalpy and other physical properties			4
			Chemical properties of Group 16 elements			
			Di-oxygen - preparation, properties and uses			
DAY 116 DAY 117	25-Aug-18 26-Aug-18	SATURDAY	Ozone - preparation, properties and uses			-
DAY 117	26-Aug-18	SUNDAY	Sulphur - Allotropic forms			4
			Sulphur-di-oxide - preparation, properties and uses			
DAY 118	27-Aug-18	MONDAY	Oxoacids of sulphur			
5,11 110	27 Aug-10		Sulphuric acid - manufacture by contact process, properties, uses.Group 17			1
DAY 119	28-Aug-18	THESDAY	elements physical and chemical properties			1
DAY 120		WEDNESDAY	elements physical and chemical properties	PRACTICE SESSIONS		1
DAY 121		THURSDAY		PRACTICE SESSIONS		1
	30 / 108 10		Chlorine preparation, properties and uses.			1
DAY 122	31-Aug-18	FRIDAY	Hydrogen chloride preparation, properties and uses			
	,		Oxo Acids of Halogens, inter halogen compounds. Group 18 elements			1
DAY 123	01-Sep-18	SATURDAY	The state of the s			
DAY 124	02-Sep-18	SUNDAY				
			UNIT 5 : SURFACE CHEMISTRY : Adsorption: adsorbate, adsorbent,			-
			examples, distinction between adsorption and absorption. H, S and G for		Qualitative Analysis: Determination of one cation and	
			adsorption of gas on a solid. Physisorption and chemisorption-		one anion in a given salt.	
			characteristics and differences. Factors affecting adsorption of a gas on a		one amon in a given sait.	
DAY 125	03-Sep-18	MONDAY	solid			_
			. Applications of adsorption . Catalysis: homogeneous and heterogeneous			
			catalysis, examples, activity and selectivity of a catalyst ,examples, shape			
			selective catalysis, examples. Enzyme catalysis: examples, characteristics			
			(to be mentioned), mechanism.			
DAY 126 DAY 127		TUESDAY WEDNESDAY		DDACTICE CECCIONIC		-
DAY 127 DAY 128		THURSDAY		PRACTICE SESSIONS PRACTICE SESSIONS		-
DAY 128	06-Sep-18	THURSDAY	Colloids: colloidal state-distinction of true solution, colloids, and suspension			4
			based on particle size. Classification of colloids-types of colloidal systems-			
			examples, lyophilic and lyophobic— differences and examples,			
			macromolecular, multimolecular and associated colloids, examples			1
DAY 129	07-Sep-18	FRIDAY	macromorecular, martimorecular and associated colloids, examples			
DATE ILI	07 Sep 10	11110711	formation of micelle, cleansing action of soaps. Preparation of colloids-			1
			chemical methodssulphur and ferric hydroxide sols, Bredig's arc method			1
DAY 130	08-Sep-18	SATURDAY	for metal sols, peptisation			
DAY 131	09-Sep-18					
DAY 132	10-Sep-18					
DAY 133	11-Sep-18	TUESDAY				
DAY 134	12-Sep-18	WEDNESDAY				
DAY 135		THURSDAY	GANESH CHATURTHI			
DAY 136	14-Sep-18					
DAY 137		SATURDAY				MIE
DAY 138	16-Sep-18					4
DAY 139	17-Sep-18					
DAY 140	18-Sep-18					
DAY 141	10-Sen-18	WEDNESDAY				

			DEPARTMENT OF P U EDUCATION]	ACADEMIC BROCKAM FOR THE VEAR 2019 10
SUBJECT		CODE			ACADEMIC PROGRAM FOR THE YEAR 2018-19
CHEMISTRY	CLASS	3	PUC (4 THEORY+2 PRACTICE HOURS A WEEK) 4	PRACTICE SESSIONS	PRACTICALS (1 CLASS OF 2 HOURS DURATION PER WEEK PER BATCH
DAY	DATE	DAY			
DAY 142	20-Sep-18	THURSDAY			
DAY 143	21-Sep-18	FRIDAY	LAST DAY OF MOHARRUM		
			Purification- dialysis, electro-dialysis, ultrafiltration (in brief). Properties of		
			colloids: Tyndall effect, Brownian movement, charge on colloidal particles,		
DAY 144		SATURDAY	examples, electrophoresis,		
DAY 145	23-Sep-18	SUNDAY			
			Coagulation – methods of coagulation of lyophobic sols, Hardy- Schulze		
			rule-examples, coagulating value. Protective colloid - example.		Qualitative Analysis: Determination of one cation and
DAVAAC	24.6 40	MONDAY	Applications: In industries, medicines, purification of drinking water.		one anion in a given salt.
DAY 146 DAY 147	24-Sep-18 25-Sep-18		Emulsions : types , examples	PRACTICE SESSIONS	
DAY 147 DAY 148		WEDNESDAY		PRACTICE SESSIONS PRACTICE SESSIONS	
DAT 146	20-3ep-18	WEDINESDAT	UNIT-III Electrochemistry :Redox reaction – As fundamental reaction in		
			electrochemical cells, electronic and electrolytic conductors – differences,		
DAY 149	27-Sen-18	THURSDAY	strong and weak electrolytes, examples-		
D/11 113	27 Sep 10	1110100711	Ionic conductance- factors affecting ionic conductance, conductivity and		
			molar conductivity of electrolytic solutions- definitions, mathematical		
			expressions, relationship between them, SI units, numerical problems.		
DAY 150	28-Sep-18	FRIDAY	, , , , , , , , , , , , , , , , , , , ,		
			Variation of conductivity and molar conductivity with concentration, graph		
			for variation of Λ_m vs $C^{1/2}$ for strong and weak electrolytes using equation		
			$\Lambda_{\rm m} = E_{\rm m}^{\rm o} - A c^{1/2}$ (measurement of conductivity from Wheatstone network		
			not included), limiting molar conductivities, Kohlrausch law and		
DAY 151	29-Sep-18	SATURDAY	applications,		
DAY 152	30-Sep-18	SUNDAY			
			Numerical problems on calculation of Λ_m^0 for weak electrolytes.		
			Electrolysis –Faraday's laws of electrolysis (elementary idea) , concept of nF		Qualitative Analysis: Determination of one cation and
			required to discharge one mole of M ⁿ⁺ ions, numerical problems on I law.		one anion in a given salt.
DAY 153	01-Oct-18	MONDAY	Galvanic cells : Electrode potential		
DAY 154	02-Oct-18	TUESDAY	MAHATHMA GANDHI JAYANTHI		
DAY 155	03-Oct-18	WEDNESDAY		PRACTICE SESSIONS	
DAY 156	04-Oct-18	THURSDAY		PRACTICE SESSIONS	
			Half cell concept, standard electrode potential, galvanic cell,		
			Daniell cell, cell potential, EMF (emf), E ⁰ _{cell} = E ⁰ _{right} - E ⁰ _{left}		
			Measurement of electrode potential – SHE - diagram,		
			half cell representation, half cell reaction,		
DAY 157	05-Oct-18	FRIDAY	E ⁰ taken as 0.0 V (at all temperatures).		
			Measurement of E ⁰ of Zn and Cu using SHE (experimental details not		
			expected) numerical problems on E ⁰ Importance of standard electrode		
			potentials- to decide and compare the strengths of oxidising and reducing		
			agents . Nernst equation (derivation not required) : Nernst equation at 298		
			K for single electrode potential and cell potential,		
DAY 158	06-Oct-18	SATURDAY			
DAY 159	07-Oct-18				
DAY 160	08-Oct-18	MONDAY	MAHALAYA AMMAVASYA		
			Numerical problems to calculate half cell and cell potentials (only for		
			metal electrodes). Relationship between equilibrium constant.Relationship		Qualitative Analysis: Determination of one cation and
			between equilibrium constant and E ⁰ _{cell} (derivation not required),		one anion in a given salt.
			numerical problems. Relationship between standard Gibbs energy and		_
DAY 161	09-Oct-18	TUESDAY	E ⁰ cell ,numerical problems.	1	

SUBJECT		CODE	DEPARTMENT OF P U EDUCATION		ACADEMIC PROGRAM FOR THE YEAR 2018-19	
CHEMISTRY	CLASS	3	PUC (4 THEORY+2 PRACTICE HOURS A WEEK) 4	PRACTICE SESSIONS	PRACTICALS (1 CLASS OF 2 HOURS DURATION PER WEEK PER BATCH	
DAY	DATE	DAY				
			Factors affecting the products of electrolysis, examples – molten and aqueous solution of NaCl only. Batteries: types-difference, examples,			
DAY 162		WEDNESDAY	Leclanche cell (dry cell)			
DAY 163		THURSDAY		PRACTICE SESSIONS		
DAY 164	12-Oct-18	FRIDAY	Lead acid battery—anode, cathode, electrolyte, reactions at anode and cathode (diagram not required), Fuel cell – definition – examples, $\rm H_2\text{-}O_2$ fuel cell – schematic diagram, anode, cathode, electrolyte, reactions at anode and cathode. Corrosion – rusting of iron- anodic, cathodic reactions, composition of rust, methods of prevention	PRACTICE SESSIONS		
DAY 165		SATURDAY				
DAY 166	14-Oct-18					
DAY 167		MONDAY				
DAY 168	16-Oct-18					
DAY 169		WEDNESDAY	NAME OF THE PROPERTY OF THE PR			
DAY 170 DAY 171	18-Oct-18 19-Oct-18	THURSDAY	MAHANAVAMI VIJAYADASHMI			
DAY 171	20-Oct-18	SATURDAY	VIJATADASHIVII			
DAY 173						MID TERM
DAY 173 DAY 174	22-Oct-18	SUNDAY MONDAY	 			TERM
DAY 175	23-Oct-18	TUESDAY				VACATION
	24-Oct-18	WEDNESDAY	VALMIKI JAYANTHI			
DAY 176 DAY 177	25-Oct-18	THURSDAY				
DAY 178	26-Oct-18	FRIDAY				
DAY 179	27-Oct-18	FRIDAY SATURDAY				
DAY 180	28-Oct-18	SUNDAY				
DAY 181	29-Oct-18	MONDAY	UNIT VIII d and f Block Elements General introduction, electronic configuration, characteristics of transition metals (d-block) - variation in atomic and ionic size.			
DAY 182	30-Oct-18	TUESDAY	Electronic configuration of 3d series elements, general trends in properties of the first row transition metals (3d series) – metallic character, ionization enthalpies, oxidation states		Qualitative Analysis: Determination of one cation and one anion in a given salt.	
DAY 183		WEDNESDAY	Magnetic properties, colour, catalytic properties, formation of interstitial compounds, alloy formation.			
DAY 184		THURSDAY	KANNADA RAJYOTHSAVA			
DAY 185	02-Nov-18			PRACTICE SESSIONS		
DAY 186 DAY 187	03-Nov-18 04-Nov-18	SATURDAY		PRACTICE SESSIONS		
DAY 188	05-Nov-18	MONDAY	Potassium dichromate: preparation from chromite ore (FeCr $_2$ O $_4$). Properties – oxidizing property – with Γ , H $_2$ S, Sn 2* , Fe 2* etc.		Qualitative Analysis: Determination of one cation and one anion in a given salt.	<u>l</u>
DAY 189 DAY 190		WEDNESDAY	NARAKA CHATURDASH Interconversion of chromates and dichromates in aqueous solution depending on pH. Potassium permanganate: Preparation from MnO ₂ by fusion with KOH and acidification.			
DAY 191		THURSDAY	RALIPADYAMI DEFPAWALI Properties of potassium permanganate – Action of heat, oxidising property oxidation of 1^r , Fe^{2^s} , $C_2Q_4^{2^s}$, H_2 Setc. In acidic medium, $S_2Q_3^{2^s}$, I^r etc in neutral / alkaline medium	-		
DAY 192	09-Nov-18	FKIDAY	<u> </u>			
DAY 193	10-Nov-18	SATURDAY	f-block elements: Lanthanoids-electronic configuration, atomic size- lanthanoid contraction and its consequences			

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SUBJECT		CODE	DEPARTMENT OF P U EDUCATION		ACADEMIC PROGRAM FOR THE YEAR 2018-19
CHEMISTRY	CLASS		PUC (4 THEORY+2 PRACTICE HOURS A WEEK) 34	PRACTICE SESSIONS	PRACTICALS (I CLASS OF 2 HOURS DURATION PER WEEK PER BATCH
AY	DATE	DAY			
AY 194	11-Nov-18	SUNDAY			
AY 195	12-Nov-18	MONDAY		PRACTICE SESSIONS	Qualitative Analysis: Determination of one cation and one anion in a given salt.
DAY 196	13-Nov-18	TUESDAY		PRACTICE SESSIONS	
DAY 197	14-Nov-18	WEDNESDAY	Oxidation states of f – block elements, chemical reactivity –general characteristics. Actinoids: electronic configuration		
DAY 198	15-Nov-18	THURSDAY	ionic size – actinoid contraction – compared to lanthanoid contraction, oxidation states– general characteristics compared with lanthanoids.		
			Unit 13: Amines. Structure of amines. Classification. Nomenclature of		
DAY 199	16-Nov-18		amines.		
DAY 200		SATURDAY	Preparation of amines. Physical properties.		
DAY 201	18-Nov-18	SUNDAY			
DAY 202		MONDAY		PRACTICE SESSIONS	Qualitative Analysis: Determination of one cation and one anion in a given salt.
DAY 203	20-Nov-18	TUESDAY		PRACTICE SESSIONS	
DAY 204	21-Nov-18	WEDNESDAY	EID MILAD		
DAY 205	22-Nov-18	THURSDAY	Basic character of amines. Structure-basicity relationship of amines.		
DAY 206	23-Nov-18		Chemical reactions of amines		
AY 207	24-Nov-18	SATURDAY	Diazonium salts. Methods of preparation. Physical properties.		
AY 208			/··· /		
AY 209	26-Nov-18	SUNDAY MONDAY	KANAKLDAS JAYANTHI		
DAY 210		TUESDAY	Chemical reactions of diazonium salts. Importance of diazonium salts in synthesis of aromatic compounds.		Qualitative Analysis: Determination of one cation and one anion in a given salt.
DAY 211		WEDNESDAY	synthesis of dromade compounds.	PRACTICE SESSIONS	
DAY 212		THURSDAY		PRACTICE SESSIONS	
DAY 213	30-Nov-18		Unit 9: Coordination compounds. Werner's theory of coordination compounds. Difference between a double salt and a complex	Therete sessions	
DAY 214		SATURDAY	Definitions of some important terms pertaining to coordination compounds.		
)ΔY 215	02-Dec-18		compounds.		
DAY 216		MONDAY	Nomenclature of Coordination compounds.		
DAY 217		TUESDAY	Isomerism in coordination compounds. Stereoisomerism and structural		
DAY 217 DAY 218		WEDNESDAY	isomerism	PRACTICE SESSIONS	+
AY 218 AY 219		THURSDAY		FRACTICE SESSIONS	
OAY 220	07-Dec-18				
OAY 221		SATURDAY			
OAY 222	09-Dec-18				
DAY 223		MONDAY		PRACTICE SESSIONS	Qualitative Analysis: Determination of one cation and one anion in a given salt.
			Bonding in coordination compounds. Valence bond theory and its		-
DAY 224	11-Dec-18	TUESDAY	limitations.		
AY 225	12-Dec-18	WEDNESDAY	Crystal field theory. Colour in coordination compounds. Limitations of crystal field theory.		
	1	İ	Bonding in metal carbonyls. Stability of coordination compounds.		
DAY 226	13-Dec-18	THURSDAY	Importance and applications of coordination compounds. Unit 14: Biomolecules. Carbohydrates. Classification of carbohydrates.		
DAY 227	14-Dec-18	EDIDAY	Monosaccharides. Preparation of glucose.		
JM1 441		SATURDAY	inonosacchanides. Preparation of glucose.	PRACTICE SESSIONS	
DAY 228					

SUBJECT		CODE	DEPARTMENT OF P U EDUCATION		ACADEMIC PROGRAM FOR THE YEAR 2018-19	
	CLASS	34	PUC (4 THEORY+2 PRACTICE HOURS A WEEK)	PRACTICE SESSIONS	PRACTICALS (1 CLASS OF 2 HOURS DURATION PER WEEK PER BATCH	
AY	DATE	DAY				
AY 230	17-Dec-18	MONDAY		PRACTICE SESSIONS	Qualitative Analysis: Determination of one cation and one anion in a given salt.	_
Y 231	18-Dec-18	TUESDAY	Structure of glucose. Cyclic structure of glucose. Structure of fructose.			
AY 232		WEDNESDAY	Disaccharides, polysaccharides, importance of carbohydrates.			
Y 233		THURSDAY	Proteins. Amino acids.Classification of amino acids.			
AY 234	21-Dec-18		Peptides, structure of proteins. Denaturation of proteins.			
AY 235 AY 236	22-Dec-18 23-Dec-18	SATURDAY SUNDAY		PRACTICE SESSIONS		
AY 237	24-Dec-18	MONDAY		PRACTICE SESSIONS	Qualitative Analysis: Determination of one cation and one anion in a given salt.	<u> </u>
AY 238	25-Dec-18		CHRISTMAS			4
AY 239		WEDNESDAY	Enzymes. Vitamins. Classification of vitamins. Nucleic acids.	 		4
AY 240 AY 241	27-Dec-18 28-Dec-18	THURSDAY	Structure of Nucleic acids. Biological functions of Nucleic acids. Unit 15: Polymers. Polymer. Polymerisation. Classification of Polymers based on source and structure.			1
AY 242	29-Dec-18	SATURDAY	Classification of polymers based on mode of polymerisation and molecular force]
AY 243	30-Dec-18	SUNDAY				4
AY 244		MONDAY		PRACTICE SESSIONS	Qualitative Analysis: Determination of one cation and one anion in a given salt.	
AY 245	01-Jan-19	TUESDAY		PRACTICE SESSIONS		
AY 246	02-Jan-19	WEDNESDAY	Types of polymerisation reactions. Addition polymerisation. Preparation of some important addition polymers.			
AY 247	03-Jan-19	THURSDAY	Condensation polymerisation and copolymers. (including examples)			
AY 248	04-Jan-19	FRIDAY	Rubber. Molecular mass of polymers. Biodegradable polymers.			1
AY 249		SATURDAY	Unit 16: Chemistry in Everyday life. Drugs and their classification. Drug- target interation			
AY 250	06-Jan-19					
AY 251		MONDAY				_
AY 252		TUESDAY				_
AY 253	09-Jan-19	WEDNESDAY				4
AY 254 AY 255	10-Jan-19 11-Jan-19	THURSDAY				2NDPUC PREPARAT
AY 256		SATURDAY		1		EVOIN
AY 257	12-Jan-19					
AY 258		MONDAY				1
AY 259		TUESDAY				1
AY 260		WEDNESDAY				
AY 261		THURSDAY				
AY 262	18-Jan-19			PRACTICE SESSIONS		1
AY 263	19-Jan-19	SATURDAY		PRACTICE SESSIONS]
AY 264	20-Jan-19		Therapeutic action of different classes of drugs. Antacids. Antihistamines.			
AY 265		MONDAY				4
AY 266	22-Jan-19	TUESDAY	Neurologically active drugs. Antimicrobials. Antifertility drugs.			4
AY 267	23-Jan-19	WEDNESDAY	Chemicals in food. Artificial sweetening agents. Food preservatives.			
AY 268	24-Jan-19	THURSDAY	Cleansing agents. Soaps. Types of soaps. Synthetic detergents. Types and uses.			

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CHEMISTRY	CLASS	34	PUC (4 THEORY+2 PRACTICE HOURS A WEEK)	PRACTICE SESSIONS	PRACTICALS (1 CLASS OF 2 HOURS DURATION PER WEEK PER BATCH	
DAY	DATE	DAY				
DAY 269	25-Jan-19			PRACTICE SESSIONS		1
DAY 270		SATURDAY		PRACTICE SESSIONS		1
DAY 271	27-Jan-19			PRACTICE SESSIONS		
DAY 272		MONDAY				1
DAY 273		TUESDAY		+		1
DAY 274		WEDNESDAY				-
DAY 275		THURSDAY				1
DAY 276	01-Feb-19					1
DAY 276 DAY 277		SATURDAY				4
						<u> </u>
DAY 278	03-Feb-19					
DAY 279	04-Feb-19					-
DAY 280	05-Feb-19			+		4
DAY 281		WEDNESDAY				4
DAY 282		THURSDAY		1		1
DAY 283	08-Feb-19					
DAY 284		SATURDAY				
DAY 285	10-Feb-19					
DAY 286	11-Feb-19					
DAY 287	12-Feb-19					
DAY 288		WEDNESDAY				1PU ANNUAL EXAM
DAY 289	14-Feb-19	THURSDAY				
DAY 290	15-Feb-19					
DAY 291	16-Feb-19	SATURDAY				
DAY 292	17-Feb-19					
DAY 293	18-Feb-19	MONDAY				
DAY 294	19-Feb-19	TUESDAY				
DAY 295	20-Feb-19	WEDNESDAY				
DAY 296	21-Feb-19	THURSDAY				
DAY 297	22-Feb-19	FRIDAY				
DAY 298	23-Feb-19	SATURDAY				1
DAY 299	24-Feb-19	SUNDAY				
DAY 300	25-Feb-19	MONDAY				1
DAY 301	26-Feb-19	TUESDAY				1
DAY 302		WEDNESDAY				1
DAY 303		THURSDAY				1
DAY 304	01-Mar-19					1
DAY 305		SATURDAY				1
DAY 306	03-Mar-19					
DAY 307	04-Mar-19					
DAY 308	05-Mar-19			+		1
DAY 309		WEDNESDAY		+		1
DAY 310		THURSDAY		1		1
DAY 311	08-Mar-19			1		1
DAY 311		SATURDAY		+		1
DAY 312	10-Mar-19					•
						•
DAY 314	11-Mar-19					-
DAY 315	12-Mar-19			+	<u> </u>	-1
DAY 316		WEDNESDAY		+		4
DAY 317		THURSDAY				4
DAY 318	15-Mar-19					4
DAY 319		SATURDAY				.
DAY 320	17-Mar-19	SUNDAY				

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SUBJECT		CODE	DEPARTMENT OF P U EDUCATION		ACADEMIC PROGRAM FOR THE YEAR 2018-19
CHEMISTRY	CLASS	34	PUC (4 THEORY+2 PRACTICE HOURS A WEEK)	PRACTICE SESSIONS	PRACTICALS (I CLASS OF 2 HOURS DURATION PER WEEK PER BATCH
DAY	DATE	DAY			
DAY 321	18-Mar-19	MONDAY			
DAY 322	19-Mar-19	TUESDAY			
DAY 323	20-Mar-19	WEDNESDAY			