

ANNUAL CURRICULAR					PLAN (Year)								
NAME OF THE LECTURER <u>S.R. Tejaswi</u>					CLASS : <u>IBSc (MPG)</u> Semester : <u>II</u>				Paper : <u>II</u> <u>Physical &amp; General chemistry</u>				
MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value- Addition Provided/ Taught	CURRICULAR ACTIVITY				CO-CURRICULAR ACTIVITY				
					Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	
Nov	2 <sup>nd</sup>	2	Syllabus Dictation, Gaseous state-Compression factors, deviation of real gases from Gas laws	Statements of Boyle's law, Charles law & Avogadro's law.	-	-	-	-	-	-	-	-	-
			Vander Waal's equation of state, Andrews isotherms of CO <sub>2</sub> .		-	-	-	-	-	-	-	-	-
	3 <sup>rd</sup>	5	Critical phenomena, Relationship b/n critical constants & Vander Waal's constants. Law of corresponding states. Joule-Thomson effect.	Methods for the liquification of gases. Linde's & Claude's	-	-	-	-	-	-	-	-	-
	4 <sup>th</sup>	4	Introduction of liquid state, structural difference b/n solids, liquid & gases.		-	-	-	-	-	-	-	-	-
	5 <sup>th</sup>	4	Liquid crystals, definition, classification, application of liquid crystals as LCD devices.		-	-	-	-	-	-	-	-	-
Dec	2 <sup>nd</sup>	5	Introduction of colloids definition of colloids, preparation of	Types of colloids - lyophilic & lyophobic	-	-	-	-	-	-	-	-	-

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ANNUAL CURRICULAR					PLAN (Year) Physical & General Chemistry								
NAME OF THE LECTURER <u>S. R. Tejaswi</u>					CLASS : <u>IBSc (MPG)</u> Semester : <u>II</u>				Paper : <u>II</u>				
MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value- Addition Provided/ Taught	CURRICULAR ACTIVITY				CO- CURRICULAR ACTIVITY				
					Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	
			Solids in liquid, purification, properties - kinetic, optical.		-	-	-	-	-	-	-	-	-
	3 <sup>rd</sup>	5	Electrical properties, Hardy Schulze-law, Protective colloid		-	-	-	-	-	-	-	-	-
			Emulsions- preparations Properties & uses. Liquids in solids (gels)		-	-	-	-	-	-	-	-	-
			Preparation, uses. Adsorption: physical adsorption, chemisorption.		-	-	-	-	-	-	-	-	-
	4 <sup>th</sup>	5	Freundlich, Langmuir adsorption isotherms, Applications of adsorption.		-	-	-	-	-	-	-	-	-
			Introduction of chemical bonding, VBT, Hybridization, valence bond theory applied to $ClF_3$ , $Ni(CO)_4$	limitations of VBT	-	-	-	-	-	-	-	-	-
			Molecular orbital theory - LCAO method, construction of MO diagram. MO diagrams for $N_2$ , $O_2$ .		-	-	-	-	-	-	-	-	-

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SIR C.R.REDDY COLLEGE FOR WOMEN, ELURU  
CURRICULUM LECTURER WISE 2019 - 2020

ANNUAL CURRICULAR					PLAN (Year)								
NAME OF THE LECTURER <u>S.R. Tejaswi</u>					CLASS : <u>IB Sc (MPC)</u> Semester : <u>II</u>				Paper : <u>II</u>				
MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value- Addition Provided/ Taught	CURRICULAR ACTIVITY				CO-CURRICULAR ACTIVITY				
					Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	
Jan	1 <sup>st</sup>	4	MO diagrams for hetero nuclear diatomic molecules CO & NO.			-	-	-	-	-	-	-	-
			solids lattice-symmetry in crystals, law of constancy of interfacial angles, the law of rationality of indices, law of symmetry.			-	-	-	-	-	-	-	-
	2 <sup>nd</sup>	3	Definition of Lattice points, Space lattice, unit cell. Bravais lattices & crystal system.		Remedial & Revision for I mid exam	01	Yes	-	-	-	-	-	-
	4 <sup>th</sup>	5	X-ray diffraction & crystal structure, Bragg's law. Defects in crystals stoichiometric & non-stoichiometric defects.	Types of binary solutions.	Remedial class	01	Yes	-	-	-	-	-	-
			Introduction to sol <sup>n</sup> - liq-liq ideal solutions, Raoult's law.	Definitions of terms used in solutions.		-	-	-	-	-	-	-	-
	5 <sup>th</sup>	4	Ideally dilute sol <sup>n</sup> - Henry's law, Non-Ideal Sol <sup>n</sup> vapour - pressure - composition & vapour pressure temp curves. Azeotrope.			-	-	-	-	-	-	-	-
			HCl-H <sub>2</sub> O, Ethanol-water			-	-	-	-	-	-	-	-

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ANNUAL CURRICULAR					PLAN (Year) Physical & General chemistry								
NAME OF THE LECTURER S.R. Tejaswi					CLASS : I BSc (MPG <sub>2</sub> ) Semester : II				Paper : II				
MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value- Addition Provided/ Taught	CURRICULAR ACTIVITY				CO- CURRICULAR ACTIVITY				
					Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	
			systems & fractional distillation.		-	-	-	-	-	-	-	-	-
Feb	1st	1	Partially miscible - liquids - phenol-water		-	-	-	-	-	-	-	-	-
			tri ethylamine - H <sub>2</sub> O, Nicotine-water system		-	-	-	-	-	-	-	-	-
	2nd	5	effect of impurity on consolute temperature.		-	-	-	-	-	-	-	-	-
			Immiscible liquids & Steam distillation, Nernst distribution law, cal of the partition coefficient.		-	-	-	-	-	-	-	-	-
			App of distribution law. Introduction of		-	-	-	-	-	-	-	-	-
			Stereochemistry - Molecular representations.		-	-	-	-	-	-	-	-	-
	3rd	5	optical isomerism with examples Glyceraldehyde,	elements of symmetry	-	-	-	-	-	-	-	-	-
			lactic acid, tartaric acid & Alanine.	Racemisation & resolution.	-	-	-	-	-	-	-	-	-

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ANNUAL CURRICULAR					PLAN (Year) physical & General chemistry								
NAME OF THE LECTURER S.R. Tejaswi					CLASS : I BSc (MPC) Semester: II				Paper : II				
MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value- Addition Provided/ Taught	CURRICULAR ACTIVITY				CO-CURRICULAR ACTIVITY				
					Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	
			D,L-configuration		Revision for II mid exam	01	Yes	-	-	-	-	-	-
	5 <sup>th</sup>	4	R,S configuration methods & E,Z-configuration with examples.	Mesomers, Geometrical Isomerism.		-	-	-	-	-	-	-	-
March	1 <sup>st</sup>	01		← Remedial class		-	-	-	-	-	-	-	-
	2 <sup>nd</sup>	04		← Remedial classes -02	student semer	01	Yes	-	-	-	-	-	-
	3 <sup>rd</sup>	05		← Remedial classes -02		-	-	-	-	-	-	-	-

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ANNUAL CURRICULAR					PLAN (Year)								
NAME OF THE LECTURER: S.R. Tejaswi					CLASS: cluster A, Semester: VI (cluster)				Instrumental methods of Analysis Paper: cluster - A - VIII				
MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value Addition Provided/ Taught	CURRICULAR ACTIVITY				CO-CURRICULAR ACTIVITY				
					Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	
Nov	2 <sup>nd</sup>	3	Introduction to spectroscopic methods of analysis - treatment of analytical		-	-	-	-	-	-	-	-	-
			data, error analysis, classification of analytical methods.		-	-	-	-	-	-	-	-	-
	3 <sup>rd</sup>	4	Types of Instrumental methods. Consideration of EMR.		-	-	-	-	-	-	-	-	-
			IR spectroscopy - Absorption & Scattering, light sources, separation of spectrum		-	-	-	-	-	-	-	-	-
	4 <sup>th</sup>	3	Detection of signal, Interpretation of spectrum, advantages of FTIR, samples & results expected.	FTIR instrumentation.	-	-	-	-	-	-	-	-	-
	5 <sup>th</sup>	4	Applications of quality assurance & quality control.		-	-	-	-	-	-	-	-	-
			UV spectroscopy - emission absorption, fluorescence, photo acoustic, excitation sources.		-	-	-	-	-	-	-	-	-
Dec	1 <sup>st</sup>	4	Wavelength dispersion, detection of signal, single & double beam		Remedial class	01	Yes	-	-	-	-	-	-

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ANNUAL CURRICULAR					PLAN (Year)							
NAMR OF THE LECTURER <u>V. RAJA RAJESWARI</u>					CLASS : <u>II BSC</u>			Semester : <u>IV</u>		Paper : <u>IV</u>		
MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value Addition Provided/ Taught	CURRICULAR ACTIVITY				CO- CURRICULAR ACTIVITY			
					Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date
Nov	2	3	Introduction. Phase rule - phase rule, concept of phase	-	-	-	-	-	-	-	-	-
			Components, degrees of freedom.	-	-	-	-	-	-	-	-	-
	3	5	Thermodynamic derivation of Gibbs phase rule.	Explanation of phase diagram	-	-	-	-	-	-	-	-
			water system, Ag-Pb system, NaCl-water system, Freezing mixture	-	-	-	-	-	-	-	-	-
	4	4	Dilute solutions colligative properties.	Definitions of concentration like molarity	-	-	-	-	-	-	-	-
			Raoult's law, $\frac{P-P^0}{P^0}, \Delta T_b, \Delta T_f$ and their reactions with mixt of solute	Normality, mole fraction, molality etc.	-	-	-	-	-	-	-	-
Dec	1	5	Experimental methods of determination. Osmotic pressure. Theory of dilute solutions.	-	-	-	-	-	-	-	-	-
			Determination of mixt from $T_f$ Van't Hoff	-	-	-	-	-	-	-	-	-
	2	5	Spectroscopy - Beer-Lambert's law and its limitations, transmittance	Definitions of wave length, frequency, EMR spectra, spectrum	-	-	-	-	-	-	-	-

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ANNUAL CURRICULAR					PLAN (Year)								
NAMR OF THE LECTURER V-RAJA RATESWARI					CLASS : <u>IBSC</u> Semester : <u>IV</u>				Paper :				
MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value Addition Provided/ Taught	CURRICULAR ACTIVITY				CO- CURRICULAR ACTIVITY				
					Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	
			absorbance molar absorptivity. Instrumentation, Application of Beer-Lambert's Law.	Types of Spectra	—	—	—	—	—	—	—	—	—
	3	5	Electronic spectroscopy Interaction of electromagnetic radiation with molecules and types of spectra. Energy levels of molecular orbitals, selection rules.	—	—	—	—	—	—	—	—	—	—
	4	3	Types of transitions, effects of conjugation chromophore, auxochrome	Types of shifts	—	—	—	—	Seminar	1	yes	—	—
Jan	1	3	IR - Different regions in IR, Modes of vibrations in diatomic molecules	Harmonic and An Harmonic oscillator Explanation	—	—	—	—	—	—	—	—	—
	2	3	Modes of vibrations in polyatomic molecules. characteristic bands	—	—	—	—	—	—	—	—	—	—

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NAMR OF THE LECTURER <u>V-RAJA RATESWARI</u>					CLASS : <u>IBSC</u>			Semester : <u>IV</u>		Paper : <u>IV</u>			
MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value Addition Provided/ Taught	CURRICULAR ACTIVITY				CO- CURRICULAR ACTIVITY				
					Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	
			of various functional groups. IR spectra of Alkanes, alcohols.	Explanation of Frank-Condon principle	-	-	-	-	-	-	-	-	-
	3		Aldehydes and amines	principle	-	1	-	-	-	-	-	-	-
	4	5	NMR - Principle, equivalent and non-equivalent protons.	-	-	-	-	-	Debate	1	yes	-	-
			position of signals. chemical shift, spin-spin coupling.	-	-	-	-	-	-	-	-	-	-
			coupling constant Applications of NMR.	-	-	-	-	-	-	-	-	-	-
Feb	1	5	Electrochemistry-I specific conductance, equivalent conductance.	Definitions of Current,	-	-	-	-	-	-	-	-	-
			variation of conductance with dilution, migration of ions.	Resistance, Conductance,	-	-	-	-	-	-	-	-	-
			Kohlrausch's law- Arrhenius theory and its limitations.	Explanation of Ohm's law	-	-	-	-	-	-	-	-	-
			Ostwald's dilution law. Debye-Huckel-Onsager's equation.	-	-	-	-	-	-	-	-	-	-

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NAMR OF THE LECTURER <u>V. RAJA RATESWARI</u>					CLASS : <u>II BSC</u> Semester : <u>IV</u>				Paper : <u>IV</u>				
MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value Addition Provided/ Taught	CURRICULAR ACTIVITY				CO- CURRICULAR ACTIVITY				
					Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	
Feb			Definition of transport number, determination by Hittorf's method.	-	-	-	-	-	-	-	-	-	-
			Application of conductivity measurements. Conductometric titrations	-	-	-	-	-	-	-	-	-	-
	2	5	<u>Electrochemistry-II</u> single electrode potential sign convention,	Representation of Half-cell and cell.	-	-	-	-	Quiz	1	Yes	-	-
			Reversible and irreversible cells. Nernst Equation -		-	-	-	-		-	-	-	-
			Reference electrode, standard Hydrogen electrode, calomel electrode, Indicator electrode, metal-metal ion electrode	Reactions at anode and cathode.	-	-	-	-	Group Discussion	1	Yes	-	-
			Inert electrode, Determination of emf of cell, potentiometric titrations	Overall reaction	-	-	-	-		-	-	-	-
					-	-	-	-		-	-	-	-
					-	-	-	-		-	-	-	-
					-	-	-	-		-	-	-	-

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ANNUAL CURRICULAR					PLAN (Year) Analytical Methods in Chemistry							
NAMR OF THE LECTURER B-Tulani Kotiswari bai					CLASS : III BSC CBZ + BSC			Semester : VI		Paper : VII A - Elective		
MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value Addition Provided/ Taught	CURRICULAR ACTIVITY				CO- CURRICULAR ACTIVITY			
					Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date
NOV	2nd	01	Syllabus dictation Introduction of Quantitative analysis	—	—	—	—	—	—	—	—	—
	3rd	04	a) Importance in various fields of science, steps involved in chemical analysis, principles of volumetric analysis Theory of Acid-Base Titrations - Theories of Acid-Base indicators and choice of Acid- Base indicators -	—	—	—	—	—	—	—	—	—
	4th	03	Redox Titrations and indicators. used in	—	—	—	—	—	—	—	—	—
			Redox titrations, Iodometric Titrations	—	—	—	—	—	—	—	—	—
	5th	03	Complexometric Tita- tions and precipita- tion Titrations choice of indicators for these Titrations. Principles of gravimetric analysis	—	—	—	—	—	—	—	—	—
Dec	1st	01	precipitation	—	—	—	—	—	—	—	—	—

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ANNUAL CURRICULAR					PLAN (Year)											
NAMR OF THE LECTURER <i>B. Tulani Koteswari bai</i>					CLASS : <i>III BSc CBZ 2019</i>				Semester : <i>VI</i>				Paper : <i>VII A - Elective</i>			
MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value Addition Provided/ Taught	CURRICULAR ACTIVITY				CO- CURRICULAR ACTIVITY							
					Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date				
	<i>2nd</i>	<i>4</i>	<i>Co-precipitation, Post-precipitation, Co-precipitation, Peptization, digestion, filtration and washing of precipitate, drying and ignition</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>			
			<i>Demonstration using Demeter</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>			
	<i>3rd</i>	<i>4</i>	<i>Treatment of analytical data : Types of errors, Significant figures and its importance, accuracy methods of expressing accuracy, error analysis - and minimization of errors.</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>			
			<i>Methods for determination of accuracy</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>			
	<i>4th</i>	<i>4</i>	<i>Precision- methods of expressing precision standard deviation and confidence limit Introduction, principle</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>			

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ANNUAL CURRICULAR					PLAN (Year)								
NAMR OF THE LECTURER: <u>B Tulani Kotawai bai</u>					CLASS: <u>III BSc CBZ+ B.P.</u> Semester: <u>VI</u>				Paper: <u>VIIA - Elective</u>				
MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value Addition Provided/ Taught	CURRICULAR ACTIVITY				CO-CURRICULAR ACTIVITY				
					Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	
			factors affecting solvent extraction, process of Solvent extraction.	Nernst distribution law - statement, exp for K.	—	—	—	—	—	—	—	—	—
	5th	01	Techniques - Batch extraction and Continuous extraction	—	—	—	—	—	—	—	—	—	—
	6th	01	Counter current extraction, Synergism, Application	—	—	—	—	—	—	—	—	—	—
Jan	1st	03	Application - Determination of Iron(III)	—	—	—	—	—	—	—	—	—	—
			Ion-exchange: Introduction, action of Ion-exchange resins,	—	—	—	—	—	—	—	—	—	—
			separation of inorganic mixtures, applications.	—	—	—	—	—	—	—	—	—	—
	2nd	03	Chromatography - Definition, classification of chromatographic methods, Principles of differential migration	—	—	—	—	—	—	—	—	—	—
	4th	03	Adsorption phenomena, Nature of adsorbents, solvent systems.	—	—	—	—	—	—	—	—	—	—

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NAMR OF THE LECTURER <u>B. Tulani Koteswari bai</u>					CLASS : <u>U BSc CBZ + PBC</u>			Semester : <u>VI</u>		Paper : <u>VIIA - (Elective)</u>			
MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value Addition Provided/ Taught	CURRICULAR ACTIVITY				CO- CURRICULAR ACTIVITY				
					Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	
			R <sub>f</sub> values, factors effecting R <sub>f</sub> values Paper-chromatography	—	—	—	—	—	—	—	—	—	—
			Principle, R <sub>f</sub> values, experimental procedure choice of paper and solvent systems.	—	—	—	—	—	—	—	—	—	—
	5th	03	Developments in Paper chromatography ascending, descending and Radial, Two dimensional chromatography - applications.	—	—	—	—	—	—	—	—	—	—
			TLC - Advantages, principles, factors effecting R <sub>f</sub> .	—	—	Remedial class	01	Yes	—	—	—	—	—
Feb	1st	01	Experimental procedure for TLC - adsorbents and solvents - preparation of plates.	—	—	—	—	—	—	—	—	—	—
	2nd	03	Development of the Chromatogram - Detection of the spots - Application	—	—	—	—	—	—	—	—	—	—

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NAMR OF THE LECTURER <u>B. Tulani Kotewar Bai</u>					CLASS : <u>III BSc CBZ</u> Semester : <u>VI</u>				Paper : <u>VII A - Elective</u>				
MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value Addition Provided/ Taught	CO-CURRICULAR ACTIVITY				CO-CURRICULAR ACTIVITY				
					Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	
			Column Chromatography : principles - experimental procedures - Stationary and mobile phase - Separation technique	—	—	—	—	—	—	—	—	—	—
			Applications of Column Chromatography, HPLC: Basic principles and applications	—	—	—	—	—	—	—	—	—	—
	3 <sup>rd</sup>	04		—	Assignment Submission	1	—	—	—	—	—	—	—
				—	Remedial & Revision for II mid	01	Yes	—	—	—	—	—	—
	5 <sup>th</sup>	03		—	Remedial classes	03	Yes	—	—	—	—	—	—
March	1 <sup>st</sup>	07		—	Remedial classes	01	Yes	—	—	—	—	—	—
	2 <sup>nd</sup>	04		—	Remedial classes	04	Yes	—	—	—	—	—	—
	—	—		—	Student Seminar	01	Yes	—	—	—	—	—	—
	—	—		—	—	—	—	—	—	—	—	—	—

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2018

**ANNUAL CURRICULAR**

**PLAN (Year)**

NAMR OF THE LECTURER

P. Ramya Krishna

CLASS: III BSc

Semester: VI

Paper: VI

cluster paper (A3)

MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value Addition Provided/ Taught	CURRICULAR ACTIVITY				CO-CURRICULAR ACTIVITY				
					Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	
Novem	2nd	3hrs	Analysis of analgesics & antipyretics like aspirin &	preparation of Aspirin	-	-	-	-	-	-	-	-	-
ber			paracetamol, chloroquine	preparation of paracetamol	-	-	-	-	-	-	-	-	-
	3rd	1hrs	Amoxycillin, chloramphenicol,	medicinal uses	-	-	-	-	-	-	-	-	-
			Analysis of penicillin, tetracycline		-	-	-	-	-	-	-	-	-
			Anti tuberculosis drug-isoniazid		-	-	-	-	-	-	-	-	-
	4th	3hrs	clinical analysis of blood composition of blood	composition of blood - blood grouping tests	-	-	-	-	-	-	-	-	-

Signature of the Lecturer

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ANNUAL CURRICULAR					PLAN (Year)								
NAMR OF THE LECTURER					CLASS :	Semester :	Paper :						
MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value Addition Provided/ Taught	CURRICULAR ACTIVITY				CO- CURRICULAR ACTIVITY				
					Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	
November	5th	4hrs	trace elements in the body	Trace elements	-	-	-	-	-	-	-	-	-
Nov			estimation of blood cholesterol	-	-	-	-	-	-	-	-	-	-
			blood glucose and enzymes	-	Seminar	01	yes	-	-	-	-	-	-
Decem	1st	4hrs	RBC, WBC, Blood gas analyses	-	will be shown RBC EUCBC counting	01	yes	-	-	-	-	-	-
			antiepileptic & anti convulsant	-	-	-	-	-	-	-	-	-	-
			drugs like phenobarbital	-	-	-	-	-	-	-	-	-	-
			and phenacetin	-	-	-	-	-	-	-	-	-	-
			Analysis of atarbi	-	-	-	-	-	-	-	-	-	-
	2nd	4hrs	Analysis of nonvasc, lipitor	-	-	-	-	-	-	-	-	-	-
			furosemide.	-	-	-	-	-	-	-	-	-	-

*P. Jayal*  
Signature of the Lecturer

Signature of the HOD *B. J. ...*

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2018

ANNUAL CURRICULAR					PLAN (Year)								
NAMR OF THE LECTURER <i>P. Ramya Krishna</i>					CLASS : <i>III BSc</i> Semester : <i>VI</i>				Paper : <i>cluster - paper (A3)</i>				
MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value Addition Provided/ Taught	CURRICULAR ACTIVITY				CO- CURRICULAR ACTIVITY				
					Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	
<i>Dec</i>	<i>3rd</i>	<i>4hrs</i>	<i>Analysis of provacid</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>
			<i>Analysis of anti histamine and sedatives like allegra, cetirizine.</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>
	<i>4th</i>	<i>2hrs</i>	<i>analysis of alprazolam</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>
			<i>trazodone</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>
<i>Jan</i>	<i>1st</i>	<i>2hrs</i>	<i>analysis of lorazepam</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>
			<i>Analysis of Remedial class</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>

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Signature of the Lecturer

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ANNUAL CURRICULAR					PLAN (Year)								
NAME OF THE LECTURER					CLASS :	Semester :			Paper :				
MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value Addition Provided/ Taught	CURRICULAR ACTIVITY				CO- CURRICULAR ACTIVITY				
					Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	
		3hrs	ambien, analysis of diazepam	-	-	-	-	-	-	-	-	-	-
January	2nd		← I mid exams →	-	-	-	-	-	-	-	-	-	-
	3rd		← Pongal holidays →	-	-	-	-	-	-	-	-	-	-
	4th	3hrs	Analysis of milk & milk products, acidity, total solids, fat, total nitrogen	project on analysis of milk	-	-	-	-	-	-	-	-	-
	5th	2hrs	Analysis of proteins, lactose phosphatase activity	will be shown milk lactose analysis	-	-	-	-	-	-	-	-	-

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2018

**ANNUAL CURRICULAR**

**PLAN (Year)**

NAMR OF THE LECTURER

P. Ramya Krishna

CLASS : III BSC Semester: III

Paper : cluster - paper (A3)

MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value Addition Provided/ Taught	CURRICULAR ACTIVITY				CO-CURRICULAR ACTIVITY			
					Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date
Feb	1st	1hr	Analysis of Casein & chloride	will be shown	-	-	-	-	-	-	-	-
	2nd	4hrs	Analysis of Food materials	Analysis of milk casein	-	-	-	-	-	-	-	-
			preservatives, Na <sub>2</sub> CO <sub>3</sub>	-	-	-	-	-	-	-	-	-
			sodium, benzoate, Sorbic acid.	-	-	-	-	-	-	-	-	-
	3rd	4hrs	colouring matters Brilliant blue FCF	Types of colouring matters	-	-	-	-	-	-	-	-
			Fast green FCF,	-	-	-	-	-	-	-	-	-
			Sunset yellow FCF, vanilla,	remedial class	-	-	-	-	-	-	-	-
	4th		diacetate, isoamyl acetate, limonene	II mid exams	-	-	-	-	-	-	-	-

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ANNUAL CURRICULAR					PLAN (Year)								
NAMR OF THE LECTURER					CLASS :		Semester :		Paper :				
MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value Addition Provided/ Taught	CURRICULAR ACTIVITY				CO- CURRICULAR ACTIVITY				
					Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	
Feb	5th	3hrs	Adulterants in rice, wheat, wheat flour, coconut oil, coffee powder, tea powder, milk										

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ANNUAL CURRICULAR					PLAN (Year)				Instrumental methods of Analysis				
NAMR OF THE LECTURER S.R. Tejaswi					CLASS : cluster A2 Semester : VI				Paper : VIII - A2				
MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value Addition Provided/ Taught	CURRICULAR ACTIVITY				CO- CURRICULAR ACTIVITY				
					Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	
			Instrument, Interpretation.		-	-	-	-	-	-	-	-	-
	2nd	4	Chromatography- Gas-liquid chromatography, super critical fluids, Importance of column technology, packing, capillary.		-	-	-	-	-	-	-	-	-
	3rd	4	Separation based on increasing no. of factors		-	-	-	-	-	-	-	-	-
			Detection simple vs specific, detection of further analysis.		-	-	-	-	-	-	-	-	-
	4th	2 hrs.	Mass spectroscopy- Making the gaseous molecules into ions.	Mass principle.	-	-	-	-	-	-	-	-	-
Jan	Jan 1st	3	Making liquids & solids into ions, separation of ions on basis of m/e ratio		-	-	-	-	-	-	-	-	-
	2nd		I mid Exams		Revision	-	Yes	-	-	-	-	-	-

S.R. Tejaswi  
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ANNUAL CURRICULAR					PLAN (Year) Instrumental methods of analysis								
NAMR OF THE LECTURER S.R. Tejaswi					CLASS : cluster A2 Semester : VI				Paper : VIII - A2				
MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value Addition Provided/ Taught	CURRICULAR ACTIVITY				CO-CURRICULAR ACTIVITY				
					Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	
	3 <sup>rd</sup>		Pongal Holidays	-	-	-	-	-	-	-	-	-	-
	4 <sup>th</sup>	3	Resolution, time & multiple separations Detection.	-	-	-	-	-	-	-	-	-	-
	5 <sup>th</sup>	2 hrs	Detection & interpretation. Mass spectrometry:-	-	-	-	-	student Seminar	01	Yes	-	-	-
			Atomic spectroscopy, atomic absorption.	-	-	-	-	-	-	-	-	-	-
Feb	1 <sup>st</sup>	1hr	Atomic emission	-	-	-	-	-	-	-	-	-	-
	2 <sup>nd</sup>	6hrs	Atomic fluorescence, excitation & getting sample into gas phase, wavelength separation & resolution.	-	-	-	-	-	-	-	-	-	-
	3 <sup>rd</sup>	4 hrs	Detection & Interpretation. NMR spectroscopy:-	-	-	-	-	-	-	-	-	-	-
			Principle, Instrumentation.	-	-	-	-	-	-	-	-	-	-

S.R. Tejaswi  
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ANNUAL CURRICULAR					PLAN (Year) Instrumental methods of Analysis								
NAME OF THE LECTURER S.R. Tejaswi					CLASS : cluster A <sub>2</sub> Semester : VI				Paper : III - A <sub>2</sub>				
MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value- Addition Provided/ Taught	CURRICULAR ACTIVITY				CO- CURRICULAR ACTIVITY				
					Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	
	4 <sup>th</sup>	←	II mid exams →		-	-	-	-	-	-	-	-	-
	5 <sup>th</sup>	3hrs	chemical shift & factors, spin coupling, applications.		-	-	-	-	-	-	-	-	-

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2018-2019

chemistry cluster PLAN (Year) Polymer chemistry  
CLASS : III B.Sc Semester : VI Paper : cluster A1

ANNUAL CURRICULAR  
NAME OF THE LECTURER K. SUJATHA

MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value Addition Provided/ Taught	CURRICULAR ACTIVITY				CO-CURRICULAR ACTIVITY			
					Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date
JAN	2	3	Introduction of polymers Basic definitions, Degree of polymeri- sation, classification of polymers, linear branched and cross linked polymers	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-		
			-	-	-	-	-	-	-	-		
	3	6	Addition and Con- densation polymers mechanism of polymeri- sation, Free radical polymerisation Ionic polymerisa- tion and Zeigla Natta polymerisa- tion	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-		
			-	-	-	-	-	-	-	-		
	4	5	Techniques of poly- merisation, bulk poly- merisation, sol poly- merisation and emulsion polymerisa- tion.	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-		
			-	-	-	-	-	-	-	-		

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ANNUAL CURRICULAR					chemistry cluster PLAN (Year)				polymer chemistry				
NAMR OF THE LECTURER K. SUJATHA					CLASS : III B.Sc Semester : VI				Paper : cluster A				
MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value Addition Provided/ Taught	CURRICULAR ACTIVITY				CO-CURRICULAR ACTIVITY				
					Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	
Nov	5	5	Number average and weight average	-	-	-	-	-	-	-	-	-	-
			molecular weight by viscometry & osmometry	-	1	Yes	-	-	-	-	-	-	-
Dec	1	1	Kinetics of free radical polymerization	-	-	-	-	-	-	-	-	-	-
	2	6	Glass transition temperature and determination of T <sub>g</sub> , Free	-	-	-	-	-	-	-	-	-	-
			Volume theory, WLF equation, Factors affecting T <sub>g</sub> ,	-	-	-	-	-	-	-	-	-	-
			Free Volume theory,	-	-	-	-	-	-	-	-	-	-
	3	6	WLF equation, Factors at plasticizers	-	-	-	-	-	-	-	-	-	-
			softeners, fillers	-	-	-	-	-	-	-	-	-	-
			lubricants	-	-	-	-	-	-	-	-	-	-
	4	5	Flow promoters, Anti aging additives	-	-	-	-	-	-	-	-	-	-

Signature of the Lecturer K. Sujatha

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ANNUAL CURRICULAR					PLAN (Year)								
NAMR OF THE LECTURER					CLASS : III B.Sc chem Semester : VI				Paper : cluster A1				
MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value Addition Provided/ Taught	CURRICULAR ACTIVITY				CO- CURRICULAR ACTIVITY				
					Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	
			Flame retardants	-	-	-	-	-	-	-	-	-	-
			colourants, blowing agents, cross linking agents, Flow promoters, photo stabilizers	-	-	-	-	-	-	seminar	01	Yes	-
			nucleating agents	-	-	-	-	-	-	-	-	-	-
Jan	1	5	Industrial applications of polyethylene, poly vinyl chloride	-	-	-	-	-	-	-	-	-	-
			Teflon, Terelene	-	-	-	-	-	-	-	-	-	-
	4	5	poly acrylonitrile	-	-	-	-	-	-	-	-	-	-
			nylon 66	-	-	-	-	-	-	-	-	-	-

Signature of the Lecturer K-Sujala

Signature of the HOD B. T. ...

Signature of the Principal

SIR C.R.REDDY COLLEGE FOR WOMEN, ELURU  
CURRICULUM LECTURER WISE 2019 - 2020

ANNUAL CURRICULAR					PLAN (Year)								
NAMR OF THE LECTURER					CLASS :		Semester :		Paper :				
MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value Addition Provided/ Taught	CURRICULAR ACTIVITY				CO- CURRICULAR ACTIVITY				
					Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	
Jan	5	4	silicones	-	-	-	-	-	-	-	-	-	-

Signature of the Lecturer *K. Suman*

Signature of the HOD *B. Dinesh*

Signature of the Principal *[Signature]*