

2019-2020 11-1917

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

ANNUAL CURRICULAR					PLAN (Year)									
NAME OF THE LECTURER <i>Dr. G. Ramu</i>					CLASS : <i>PMsc</i>				Semester : <i>II</i>		Paper : <i>1</i>		<i>General Chemistry</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		
			UNIT-I Hydrogen atom- Solutions of R(r) Eqn	—	—	—	—	—	—	—	—	—	—	
<i>Nov</i>	<i>1</i>	<i>4 hrs</i>	<i>l(0), d(0) equations probability density and shapes of orbitals</i>	—	—	—	—	—	—	—	—	—	—	
			<i>perturbation theory derivation and</i>	—	—	—	—	—	—	—	—	—	—	
			<i>Its application to He atom. variation theorem. and</i>	—	—	—	—	—	—	—	—	—	—	
<i>Nov</i>	<i>2</i>	<i>4 hrs</i>	<i>its application to Harmonic oscillator</i>	—	—	—	—	—	—	—	—	—	—	
			<i>Many e<sup>-</sup> atom. Hartree-fock self consistent field method.</i>	—	—	—	—	—	—	—	—	—	—	


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Signature of the Lecturer

*B.V. Prasad*  
Signature of the HOD

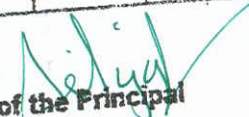
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**SIR C.R.REDDY COLLEGE FOR WOMEN, ELURU**  
**CURRICULUM LECTURER WISE 2019-2020**

ANNUAL CURRICULAR					PLAN (Year)								
NAME OF THE LECTURER: <u>Dr. G. Ramu</u>					CLASS: <u>I MSc</u>	Semester: <u>I</u>	Paper: <u>I - 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	
Dec	I	4hrs	UNIT-II Group theory Intro Symmetry Def. Elements	-	-	-	-	-	-	-	-	-	-
			Operations and Point group classification with	-	-	-	-	-	-	-	-	-	-
	II	4hrs	Schoenflies symbols Axioms of Group Theory	-	-	-	-	-	-	-	-	-	-
			Group multiplication tables for $C_{2v}$ & $C_{3v}$ point groups	-	-	-	-	-	-	-	-	-	-
Dec	III	4hrs	Similarity transformation and classes Representations	-	-	-	-	-	-	-	-	-	-
			RR and IRE's Mulliken symbols	-	-	-	-	-	-	-	-	-	-


  
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**CURRICULUM LECTURER WISE 2019-2020**

ANNUAL CURRICULAR					PLAN (Year)											
NAME OF THE LECTURER					CLASS :	Semester :	Paper :									
Dr. G. Ramu					MSc				I				I - General Chemistry			
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				
Dec	IV	4hrs	Orthogonality them and its implications	-	-	-	-	-	-	-	-	-	-			
			G <sub>2v</sub> , C <sub>3v</sub> character tables and its anatomy	-	-	-	-	-	-	-	-	-	-			
Jan	I*	4hrs	<u>UNIT-III</u> Errors, Accuracy precision	-	-	-	-	-	-	-	-	-	-			
			Classification of errors, its minimisation	-	-	-	-	-	-	-	-	-	-			
Jan	II	4hrs	Absolute, Relative errors, propagation of errors	-	-	-	-	-	-	-	-	-	-			
			Gaussian distribution. Central tendency. St. deviation.	-	-	-	-	-	-	-	-	-	-			

  
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**CURRICULUM LECTURER WISE 2019 - 2020**

ANNUAL CURRICULAR					PLAN (Year)									
NAME OF THE LECTURER: <u>Dr. G. Ramu</u>					CLASS: <u>2 MSc.</u>	Semester: <u>II</u>	Paper: <u>I - 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		
			Mean, Median Hypothesis: t and F test	-	-	-	-	-	-	-	-	-	-	-
Jan	3 <sup>rd</sup>	4hrs	Criteria of Rejection significant figures and computation rules	-	-	-	-	-	-	-	-	-	-	-
			<u>UNIT-IV</u> Introduction of computer parts	-	-	-	-	-	-	-	-	-	-	-
Feb	1 <sup>st</sup>	4hrs.	Computer memories languages, Algorithms	-	-	-	-	-	-	-	-	-	-	-
Feb	2 <sup>nd</sup>	4hrs.	flowcharts - const and variables statements: IF	-	-	-	-	-	-	-	-	-	-	-
Feb	3 <sup>rd</sup>	4hrs	types, GOTO, DIMENSION 100 statements	-	-	-	-	-	-	-	-	-	-	-

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B.V. Prasad  
Signature of the HOD

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**CURRICULUM LECTURER WISE 2019 - 2020**

ANNUAL CURRICULAR					PLAN (Year)									
NAME OF THE LECTURER <i>Dr. G. Ramu</i>					CLASS : <i>I Msc.</i>				Semester : <i>I</i>		Paper : <i>I. General chemistry</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>Feb</i>	<i>4<sup>th</sup></i>	<i>4 hrs.</i>	<i>Development of FORTRAN statement for formulae of diff</i>	-	-	-	-	-	-	-	-	-	-	
			<i>Chemical equations first order rate eqn, standard</i>	-	-	-	-	-	-	-	-	-	-	
<i>Mar</i>	<i>1<sup>st</sup></i>	<i>6 hrs</i>	<i>deviation, Vander walls eqn --- flow charts and algorithms</i>	-	-	-	-	-	-	-	-	-	-	
<i>Mar</i>	<i>2<sup>nd</sup></i>	<i>4 hrs.</i>	<i>programs.</i>	-	-	-	-	-	-	-	-	-	-	
				-	-	-	-	-	-	-	-	-	-	
<i>Mar</i>	<i>3<sup>rd</sup></i>	<i>4 hrs.</i>	<i>Revision</i>	-	-	-	-	-	-	-	-	-	-	

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Signature of the Lecturer

*B.V.P. [Signature]*  
Signature of the HOD

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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>B. Viritha</u>					CLASS: <u>TMSc</u>			Semester: <u>II</u>		Paper: <u>Inorganic chemistry-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	
NOV	1	4hrs	Introduction- metal-cluster components-defini- tion-evidences-for	-	-	-	-	-	-	-	-	-	-
NOV	2	4hrs	existence of M-M bonds -conditions favorable for formation of M-M bonds	-	-	-	-	-	-	-	-	-	-
			preparation, structure and bonding of $Re_2Cl_8^{2-}$ $Mo_2Cl_8^{4-}$ , $Re_2(RCOO)_4$	-	-	-	-	-	-	-	-	-	-
Dec	1	4hrs	$Mo_2(RCOO)_4(CH_2O)_2$ , $Cr_2(RCOO)_4(CH_2O)_2$ , $Cu_2(RCOO)_4(CH_2O)_2$	-	-	-	-	-	-	-	-	-	-
			$Cr_2Cl_9^{3-}$ , $Mo_2Cl_9^{3-}$ , $W_2Cl_9^{3-}$ , $Re_3Cl_9^{4-}$ , $Re_3Cl_2^{3-}$ , $Mo_6Cl_8^{2-}$	-	-	-	-	-	-	-	-	-	-
Dec	2	4hrs	$Nb_6X_{12}^{2+}$ and $Ta_6X_{12}^{2+}$ polyatomic clusters -2 in tetrahedra, chiral phases	-	-	-	-	-	-	-	-	-	-

B. Viritha  
Signature of the Lecturer

B. V. Purima  
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**CURRICULUM LECTURER WISE 2019 - 2020**

ANNUAL CURRICULAR					PLAN (Year)								
NAME OF THE LECTURER: <u>B. Vinitha</u>					CLASS: <u>IMSC</u>	Semester: <u>II</u>	Paper: <u>Inorganic chemistry 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	
Dec	3	4hrs	organometallic compounds-16 & 18 electron rules, Isoelectronic relationship	—	—	—	—	—	—	—	—	—	—
			Synthesis, Structure, bonding and reaction of Carbon monoxide, dinitrogen and nitric oxide complex.	—	—	—	—	—	—	—	—	—	—
Dec	4	4hrs	Isolobal relationship - $HfCl_3$ , $Mn(CO)_5$ , $S_2Cl_2$ , $Fe(CO)_4$ , $P_4$	—	—	—	—	—	—	—	—	—	—
Jan	1	4hrs	$CH_3CO CO_2$ synthesis structure bonding & reactions of metal $\pi$ complexes	—	—	—	—	—	—	—	—	—	—
			catalysis by organometallic compounds, homogeneous	—	—	—	—	—	—	—	—	—	—
Jan	2	4hrs	catalysis, Alkene hydrogenation - Wilkinson's catalyst hydroformylation	—	—	—	—	—	—	—	—	—	—

B. Vinitha  
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**CURRICULUM LECTURER WISE 2019-2020**

ANNUAL CURRICULAR					PLAN (Year)								
NAME OF THE LECTURER: <u>B. Viritha</u>					CLASS: <u>II MSc</u>	Semester: <u>II</u>	Paper: <u>Inorganic chemistry 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	3	4hrs	metal ligand equilibrium in solution - stepwise and overall formation constant and their	-	-	-	-	-	-	-	-	-	-
			interaction - trends in stepwise constant - factors affecting the stability of metal	-	-	-	-	-	-	-	-	-	-
Feb	1	4hrs	complexes - pearson's theory of hard and soft acids and bases, chelate effect and	-	-	-	-	-	-	-	-	-	-
Feb	2	4hrs	in thermodynamic origin/ determination of stability constant of complexes	-	-	-	-	-	-	-	-	-	-
			spectrophotometric method, pH-metric method - Reactivity of inert and labile complex	-	-	-	-	-	-	-	-	-	-
Feb	3	4hrs	Explanation of lability and bases of VBTE & CET Bio-Inorganic chemistry	-	-	-	-	-	-	-	-	-	-

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**CURRICULUM LECTURER WISE 2019-2020**

**PLAN (Year)**

**ANNUAL CURRICULAR**

NAME OF THE LECTURER

*B. Viritha*

CLASS : *M.Sc*

Semester : *II*

Paper : *Inorganic chemistry II*  
 CO-CURRICULAR ACTIVITY

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>Feb</i>	<i>4</i>	<i>4hrs</i>	<i>Inorganic Reaction mechanism - substitution reactions of metal complexes -</i>	-	-	-	-	-	-	-	-	-
<i>Mar</i>	<i>1</i>	<i>4hrs</i>	<i>D, Id, Ia and A mechanism - ligand replacement reactions of octahedral complexes - Acid hydrolysis factors Effecting Acid hydrolysis - Anotation and base</i>	-	-	-	-	-	-	-	-	-
<i>Mar</i>	<i>2</i>	<i>4hrs</i>	<i>hydrolysis of cobalt (III) complex, ligand displacement reactions of square planar complexes of platinum (II) factors affecting square planar</i>	-	-	-	-	-	-	-	-	-
<i>Mar</i>	<i>3</i>	<i>4hrs</i>	<i>Substitution - trans effect - Electron transfer reactions of complexes</i>	-	-	-	-	-	-	-	-	-

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 Signature of the Lecturer

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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					CLASS : <u>Dr. sc (organic chem)</u> Semester : <u>II</u>				Paper : <u>III (ORGANIC CHEMISTRY-III)</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	2w	4hrs	<u>UNIT-2</u> Reaction mechanism Aliphatic nucleophilic	-	-	-	-	-	-	-	-	-	-
			substitution and nucleophilic aromatic substitution	-	-	-	-	-	-	-	-	-	-
Nov	3w	4hrs	stereo chemistry of $S_N2$ & $S_N1$ mechanisms	-	-	-	-	-	-	-	-	-	-
			NGIP, ortho group participation Wittig reaction	-	-	-	-	-	-	-	-	-	-
Dec	1w	4hrs	B) elimination reactions type of elimination reactions, mechanisms	-	-	-	-	-	-	-	-	-	-
Dec	2w	4hrs	Saytzeff rules, syn elimination vs anti-elimination	-	-	-	-	-	-	-	-	-	-

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

PLAN (Year)

Paper : III ORGANIC CHEMISTRY-III

CLASS : I Ms (organic chem) Semester : II

ANNUAL CURRICULAR

NAME OF THE LECTURER Dr. B. Valli Purnima

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	
Dec	3	4hrs	UNIT-III ADDITION REACTIONS	—	—	—	—	—	—	—	—	—	—
Dec	4	4hrs	(A) Addition to carbon-carbon multiple bonds: chemo selectivity, & free radical reaction	—	—	—	—	—	—	—	—	—	—
			hydrogenation of double & triple bonds.	—	—	—	—	—	—	—	—	—	—
Jan	1	4hrs	(B) Addition to carbon-hetero multiple bonds:	—	—	—	—	—	—	—	—	—	—
			steric course of addition reactions to C=O, C=N, Aldol, Cannizzaro, Perkin,	—	—	—	—	—	—	—	—	—	—
Jan	2	4hrs	Knoevenagel, Claisen-Schmidt, Claisen, Mannich, & Michael reactions	—	—	—	—	—	—	—	—	—	—

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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					CLASS : <u>M.Sc (Organic Chem)</u> Semester : <u>II</u>				Paper : <u>II (ORGANIC 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	
Jan	3	4	<u>UNIT-III</u> Molecular Rearrangements	—	—	—	—	—	—	—	—	—	—
			Types of molecular rearrangements, migratory aptitude	—	—	—	—	—	—	—	—	—	—
Feb	1	4	Rearrangements of electron deficient carbon	—	—	—	—	—	—	—	—	—	—
			pinacol-pinacolone, wittig-rearrangement, Tiffeneau-Demjanov	—	—	—	—	—	—	—	—	—	—
Feb	2	4	Dienone-phenol, Arndt-Eistert synthesis.	—	—	—	—	—	—	—	—	—	—
Feb	3	4	Rearrangements of electron deficient nitrogen: Beckmann, Hoffmann, rearrangements	—	—	—	—	—	—	—	—	—	—

B. V. Purnima  
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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>D.R. B. Valli Purnima.</u>					CLASS: <u>I MSc.</u>	Semester: <u>II</u>	Paper: <u>ii Organic 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	
Feb	4	4hrs	<u>UNIT - IV</u> spectroscopy and protecting groups.	—	—	—	—	—	—	—	—	—	—
			i) u.v. visible absorption laws, electronic excitations and absorption shifts.	—	—	—	—	—	—	—	—	—	—
Mar	1	4hrs	ii) IR: fundamental modes of vibrations	—	—	—	—	—	—	—	—	—	—
Mar	2	4hrs	iii) NMR: chemical shift and its importance.	—	—	—	—	—	—	—	—	—	—
			coupling constant and its importance,	—	—	—	—	—	—	—	—	—	—
Mar	3	4hrs	iv) mass: some useful terms used in mass spectroscopy. protecting groups	—	—	—	—	—	—	—	—	—	—

B.V. Purnima  
Signature of the Lecturer

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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>Dr. G. R. Satyanarayana</u>					CLASS: <u>I Msc</u>				Semester: <u>II</u>		Paper: <u>IV physical chemistry</u>		CO-CURRICULAR ACTIVITY	
MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value Addition Provided/ Taught	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date		
Nov	1	4hrs	<u>Unit-I</u> <u>principle and theory of NMR</u>	—	—	—	—	—	—	—	—	—		
			<u>chemical shift and its origin. factors affecting chemical shift</u>	—	—	—	—	—	—	—	—	—		
Nov	2	4hrs	<u>Spin-spin interactions with examples</u>	—	—	—	—	—	—	—	—	—		
			<u>NMR spectra of ethanol, styrene</u>	—	—	—	—	—	—	—	—	—		
Dec	1	4hrs	<u>NMR spectra of dimethyl formamide &amp; acetophenone.</u>	—	—	—	—	—	—	—	—	—		
Dec	2	4hrs	<u>ESR - principle and theory</u>	—	—	—	—	—	—	—	—	—		

G. R. Satyanarayana  
Signature of the Lecturer

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**SIR C.R.REDDY COLLEGE FOR WOMEN, ELURU**  
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ANNUAL CURRICULAR					PLAN (Year)							
NAME OF THE LECTURER					CLASS :	Semester :	Paper : <i>IV physical chemistry</i>					
NAME OF THE LECTURER					CURRICULAR ACTIVITY				CO-CURRICULAR ACTIVITY			
MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value Addition Provided/ Taught	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date
Dec	3	4hrs	Experimental technique - line shapes	-	-	-	-	-	-	-	-	-
			line width and g-factor	-	-	-	-	-	-	-	-	-
Dec	4	4hrs	Hyperfine interactions with different examples.	-	-	-	-	-	-	-	-	-
Jan	1	4hrs	Applications of ESR studies.	-	-	-	-	-	-	-	-	-
			<u>Unit - II</u> Introduction to thermodynamics	-	-	-	-	-	-	-	-	-
			entropy & its significance entropy changes in different process	-	-	-	-	-	-	-	-	-

*G.R. Satya*  
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*B.V. Praveen*  
Signature of the HOD

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ANNUAL CURRICULAR					PLAN (Year)				CO-CURRICULAR ACTIVITY			
NAME OF THE LECTURER					CLASS :	Semester :	Paper : IV physical chemistry					
MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value Addition Provided/ Taught	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date
Jan	2	4hrs	Next Heat theorem and III law of Thermodynamics	-	-	-	-	-	-	-	-	-
			Determination of Absolute entropies of solids, liquids	-	-	-	-	-	-	-	-	-
Jan	3	4hrs	gases (s) determination -n. Exceptions to III law of T.D.	-	-	-	-	-	-	-	-	-
			Objectives of statistical thermodynamics. Types of ensembles	-	-	-	-	-	-	-	-	-
Feb	1	4hrs	concept of distributions and different laws of distribution	-	-	-	-	-	-	-	-	-
Feb	2	4hrs	partition functions, def, molar & molecular P.F's.	-	-	-	-	-	-	-	-	-

*G.R. Satyanarayana*  
Signature of the Lecturer

*B.V. Prasad*  
Signature of the HOD

*[Signature]*  
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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 <i>Dr. G.R. Satyanarayana</i>					CLASS : <i>DMSc.</i>	Semester : <i>I</i>	Paper : <i>IV physical chemistry</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	
			Derivation of Rot, vibr, translational P.F's	—	—	—	—	—	—	—	—	—	—
Feb	3	4hrs.	Relation b/w G, H, S and G with partition function.	—	—	—	—	—	—	—	—	—	—
			<u>Unit - III</u> Electrochemistry Introduction & basics	—	—	—	—	—	—	—	—	—	—
Feb	4	4hrs.	Concentration cell with and without transference.	—	—	—	—	—	—	—	—	—	—
			Effect of complexation Redox potential and application (egs)	—	—	—	—	—	—	—	—	—	—
Mar	1	4hrs	Determination of Solubility product, $K_{sp}$ constant and $E^{\circ}$ .	—	—	—	—	—	—	—	—	—	—

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

**ANNUAL CURRICULAR**

PLAN (Year)  
 CLASS : I MSc Semester : II Paper : IV physical chemistry  
 CO-CURRICULAR ACTIVITY

NAME OF THE LECTURER			CURRICULAR ACTIVITY				CO-CURRICULAR ACTIVITY					
MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value Addition Provided/ Taught	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date
			Activity coeff. determination from EMF data.	—	—	—	—	—	—	—	—	—
			concept of activity, $\gamma$ , $\gamma_{\pm}$ and Bjerrum theory of ions	—	—	—	—	—	—	—	—	—
Mar	2	4hrs	Debye-Huckel theory limiting law, limitations	—	—	—	—	—	—	—	—	—
			Effect of dilution on different types of conductances ( $k$ , $\lambda$ , $\mu$ )	—	—	—	—	—	—	—	—	—
			Debye-Huckel onseager eqn, verification fuel cells.	—	—	—	—	—	—	—	—	—
			<u>Unit-IV</u> electrode-electrolyte interface-double layer	—	—	—	—	—	—	—	—	—

G. R. Saty  
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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					CLASS :				Semester :		Paper :			
Dr. G.R. Satyanarayana					Msc.				II		IV Physical Chemistry			
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		
			Helmholtz-perrin, Gouy-chapman diffuse charge models.	-	-	-	-	-	-	-	-	-	-	
			stern model and charge transfer reactions.	-	-	-	-	-	-	-	-	-	-	
Mar	3	4hrs	current density and overpotential voltametry.	-	-	-	-	-	-	-	-	-	-	
			Derivation of Butler-volmer equation, Tafel equation.	-	-	-	-	-	-	-	-	-	-	
			concentration polarisation and exponential technique.	-	-	-	-	-	-	-	-	-	-	
				-	-	-	-	-	-	-	-	-	-	

*G. R. Satyanarayana*  
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2019-2020

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

ANNUAL CURRICULAR					PLAN (Year)								
NAME OF THE LECTURER: <u>Ch. Bhuvaneshwari</u>					CLASS: <u>II M.Sc (organic chem)</u> Semester: <u>IV</u>				Paper: <u>I (ORM-II &amp; organic photochemistry)</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	
			<u>UNIT-I</u> <u>(A) Free radical reactions neighboring group</u>										
<u>Nov</u>	<u>I</u>	<u>4 hrs</u>	<u>assistance in free radical reactions reactivity for a aliphatic</u>										
			<u>Substrates : Reactivity in a aromatic substances, reactivity at bridge head</u>										
<u>Nov</u>	<u>II</u>	<u>4 hrs</u>	<u>oxidation of aldehydes to carboxylic acids</u>										
			<u>coupling of alkynes (eglington reaction &amp; Glaser reaction)</u>										
			<u>Mechanism of sandmeyer reaction, Hunsdiecker reaction, Reed reaction</u>										

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

ANNUAL CURRICULAR					PLAN (Year)				CO-CURRICULAR ACTIVITY			
NAME OF THE LECTURER: <i>Ch. Bhuvanagiri</i>					CLASS: <i>M.Sc (Organic chem)</i> Semester: <i>IV</i>				Paper: <i>I-ORM-II &amp; Organic photochemistry</i>			
MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value Addition Provided/ Taught	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date
<i>Dec</i>	<i>I</i>	<i>4hrs</i>	<i>(B) Rearrangements: wagner-meerwein rearrangement.</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>
			<i>Demjanov rearrangement witting rearrangement &amp;</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>
<i>Dec</i>	<i>II</i>	<i>4hrs</i>	<i>Stevens Rearrangement.</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>
			<i>UNIT-II methodologies in asymmetric synthesis</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>
<i>Dec</i>	<i>III</i>	<i>4hrs</i>	<i>Strategies in Asymmetric Synthesis: ① chiral substrate controlled</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>
			<i>② chiral reagent controlled ③ chiral catalyst controlled</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>

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

ANNUAL CURRICULAR					PLAN (Year)				CO-CURRICULAR ACTIVITY			
NAME OF THE LECTURER: <i>Ch. Bhuvaneshwari</i>					CLASS: <i>II MSc (Organic Chem)</i> Semester: <i>IV</i>				Paper: <i>T, ORN II &amp; (Organic Photochemistry)</i>			
MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value Addition Provided/ Taught	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date
			① chiral substrate controlled asymmetric synthesis :-	-	-	-	-	-	-	-	-	-
Dec	<i>IV</i>	<i>4hrs</i>	nucleophilic additions to chiral carbonyl compound 1,2 asymmetric induction, Cram's rule & Felkin Anh model ② chiral reagent	-	-	-	-	-	-	-	-	-
Jan	<i>I</i>	<i>4hrs</i>	Controlled asymmetric synthesis :- Asymmetric reductions	-	-	-	-	-	-	-	-	-
			using BINOL-IT Asymmetric hydroxylation using $IPC_2BH$ and $IPC_2BH_2$	-	-	-	-	-	-	-	-	-
Jan	<i>II</i>	<i>4hrs</i>	③ chiral catalyst controlled asymmetric synthesis :-	-	-	-	-	-	-	-	-	-

*Ch. Bhuvaneshwari*  
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SIR C.R.REDDY COLLEGE FOR WOMEN, ELURU  
CURRICULUM LECTURER WISE 20<sup>19</sup>-202<sup>0</sup>

PLAN (Year)

Paper : I ORN-I & [organic photochemistry]

CLASS : B.Sc (organic chem) Semester : IV

ANNUAL CURRICULAR

NAME OF THE LECTURER Ch. Bhuvaneshwari

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
			Sharpless and Jacobsen asymmetric hydroxylation	-	-	-	-	-	-	-	-	-
			epoxidations, sharpless asymmetric dihydroxylation. A Symmetric	-	-	-	-	-	-	-	-	-
Jan	3 <sup>rd</sup>	4hrs	hydro generations using chiral wilkinson biphosphine and	-	-	-	-	-	-	-	-	-
			Noyori catalys enzyme mediated enantio selective synthesis	-	-	-	-	-	-	-	-	-
Jan Feb	4 <sup>th</sup>	4hrs	UNIT - III Photochemistry - I	-	-	-	-	-	-	-	-	-
			photochemical energy Frank condon principle;	-	-	-	-	-	-	-	-	-

Ch. Bhuvaneshwari  
Signature of the Lecturer

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

ANNUAL CURRICULAR					PLAN (Year)				CO-CURRICULAR ACTIVITY			
NAME OF THE LECTURER: <u>Ch. Bhuvanekesari</u>					CLASS: <u>M.Sc [organic chem]</u> Semester: <u>IV</u>				Paper: <u>I-ORM-II &amp; Organic photo chemy</u>			
MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value Addition Provided/ Taught	Activity Conducted	Hours Allotted	Whether Conducted	if not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	if not Alternate Date
			Types of electronic excitation and molecular orbital view of	—	—	—	—	—	—	—	—	—
Feb	2 <sup>nd</sup>	4hrs	excitation, Jablonski diagram, quantum efficiency	—	—	—	—	—	—	—	—	—
			and quantum yield (photo chemistry of carbonyl compounds :-	—	—	—	—	—	—	—	—	—
Feb	3 <sup>rd</sup>	4hrs	Norrish Type-II reaction Paterno Buchi reaction, photo	—	—	—	—	—	—	—	—	—
			reduction and photo enolisation, oxidation of alkenes	—	—	—	—	—	—	—	—	—
Feb	4 <sup>th</sup>	4hrs.	with singlet oxygen.	—	—	—	—	—	—	—	—	—

Ch. Bhuvanekesari  
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Signature of the HOD

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

ANNUAL CURRICULAR					PLAN (Year)				CO-CURRICULAR ACTIVITY			
NAME OF THE LECTURER					CLASS : MSc [organic chem]				Semester : IV Paper : 7.0RM II & [organic photochemistry]			
MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value Addition Provided/ Taught	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date
March	1st	4hrs	UNIT - IV Photo chemistry - I	-	-	-	-	-	-	-	-	-
			Di-pi methane rearrangement, oxadi-pi methane rearrangement	-	-	-	-	-	-	-	-	-
March	2nd	4hrs	Photo chemistry of unsaturated systems,	-	-	-	-	-	-	-	-	-
			cis Trans Isomerisation of alkenes,	-	-	-	-	-	-	-	-	-
March	3rd	4hrs	Photo chemistry of Butadiene, dimerisation of alkenes,	-	-	-	-	-	-	-	-	-
			Intra molecular dimerisation, Barton Reaction.	-	-	-	-	-	-	-	-	-

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

ANNUAL CURRICULAR					PLAN (Year)				CO-CURRICULAR ACTIVITY				
NAME OF THE LECTURER: <u>Dr. B Valli Pusnima</u>					CLASS: <u>II (Msc Org Chem)</u> Semester: <u>IV</u>				Paper: <u>II (Organic Spectroscopy)</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>	4 hrs	<u>unit-I</u> A, optical Rotatory Dispersion: optical Rotation, Empirical and Semi Empirical rules	—	—	—	—	—	—	—	—	—	—
			CO Spectroscopy.	—	—	—	—	—	—	—	—	—	—
Nov	3 <sup>rd</sup>	4 hrs	Axial haloketone rule, octant rule Helicity rule	—	—	—	—	—	—	—	—	—	—
			Application of the rule to study of absolute configuration	—	—	—	—	—	—	—	—	—	—
Dec	1 <sup>st</sup>	4 hrs	and confirmations of organic molecules	—	—	—	—	—	—	—	—	—	—
Dec	2 <sup>nd</sup>	4 hrs	<u>unit-II</u> A, Improving the PMR Spectrum	—	—	—	—	—	—	—	—	—	—

B. V. Pusnima  
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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 <i>Dr. B. Valli puqrina.</i>					CLASS : <i>M.A.Sc (Org Chem)</i> Semester : <i>IV</i>				Paper : <i>I Organic Spectroscopy</i>					
MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value Addition Provided/ Taught	CURRICULAR ACTIVITY				Activity Conducted	Hours Allotted	Whether Conducted	if not Alternate Date	Whether Conducted	if not Alternate Date
					Activity Conducted	Hours Allotted	Whether Conducted	if not Alternate Date						
<i>Dec</i>	<i>3</i>	<i>4hrs</i>	<i>chemical and magnetic equivalence</i>	—	—	—	—	—	—	—	—	—	—	—
			<i>Chemical Exchange,</i>	—	—	—	—	—	—	—	—	—	—	—
<i>Dec</i>	<i>4th</i>	<i>4hrs</i>	<i>Spectra and analysis of AB, AMX and A2B2</i>	—	—	—	—	—	—	—	—	—	—	—
			<i>Systems. B, simplification of complex spectra</i>	—	—	—	—	—	—	—	—	—	—	—
<i>Jan</i>	<i>1st</i>	<i>4hrs</i>	<i>nuclear magnetic double resonance, deuterium exchange</i>	—	—	—	—	—	—	—	—	—	—	—
			<i>Spectra at higher-fields, hindered Rotations and Rate</i>	—	—	—	—	—	—	—	—	—	—	—
<i>Jan</i>	<i>2nd</i>	<i>4hrs</i>	<i>Process Resonance of other nuclei - 19F and 31P</i>	—	—	—	—	—	—	—	—	—	—	—

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

ANNUAL CURRICULAR					PLAN (Year)				CO-CURRICULAR ACTIVITY			
NAME OF THE LECTURER: <u>Dr. B Valli prasanna.</u>					CLASS: <u>Ph.D. Sc (Org Chem)</u> Semester: <u>IV</u>				Paper: <u>II - Organic Spectroscopy - I</u>			
MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value Addition Provided/ Taught	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date
Jan	3 <sup>rd</sup>	4hrs	C, 2D NMR Spectroscopy: Definition and importance of	-	-	-	-	-	-	-	-	-
			COZY, DEPT, HMQC, HETCOR, INDEQATE, TNDURTN EPT, NUESY	-	-	-	-	-	-	-	-	-
Feb	1 <sup>st</sup>	4hrs	unit-III Solution of structural Problems by	-	-	-	-	-	-	-	-	-
			Joint application of UV, IR, NMR (1H & 13C) and mass Spectroscopy	-	-	-	-	-	-	-	-	-
Feb	2 <sup>nd</sup>	4hrs	unit-IV A, Separation Tech- niques:-	-	-	-	-	-	-	-	-	-
Feb	3 <sup>rd</sup>	4hrs	Solvent extraction chromatography- Paper-thin layer	-	-	-	-	-	-	-	-	-

B. V. Prasanna  
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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: <i>Dr. B. Valli prasanna</i>					CLASS: <i>II Msc (organic)</i>	Semester: <i>II</i>	Paper: <i>II Organic spectroscopy-I</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>Feb</i>	<i>4th</i>	<i>4hrs</i>	<i>Partition-column chromatography</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>
			<i>B, Instrumentation Gas chromatogr-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>
<i>Mar</i>	<i>1st</i>	<i>4hrs</i>	<i>-ophy, high perfor-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>
			<i>-mance, liquid chromatography,</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>
			<i>x-Ray diffraction.</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>
<i>Mar</i>	<i>2nd</i>	<i>4hrs</i>		<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>
<i>Mar</i>	<i>3rd</i>	<i>4hrs</i>		<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>

*B.V. prasanna*  
Signature of the Lecturer

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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>Dr. BSN Muthi</u>					CLASS: <u>II msc organic chemistry</u> Semester: <u>IV</u>				Paper: <u>III modern organic synthesis - 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	
Nov	1st	4hrs	Unit-I: organo silanes Synthetic applications of trimethyl silyl chloride	-	-	-	-	-	-	-	-	-	-
			dimethyl-t-butyl silyl chloride, trimethyl silyl cyanide, synthetic applications of silyl enol ethers, preparation and synthetic applications of alkyl silanes, aryl silanes and vinyl silanes,	-	-	-	-	-	-	-	-	-	-
Nov	2nd	4hrs	NaBorov cyclisation,	-	-	-	-	-	-	-	-	-	-
Dec	1st	4hrs	Book rearrangement and Rubottom oxidation.	-	-	-	-	-	-	-	-	-	-
Dec	2nd	4hrs		-	-	-	-	-	-	-	-	-	-

B.S.N. Muthi  
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B.V. Purima  
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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>Dr. B.S.N. Musthi</u>					CLASS: <u>III M.Sc (Org Chem)</u> Semester: <u>IV</u>				Paper: <u>III modern organic synthesis-I</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	
Dec	3 <sup>rd</sup>	4hrs	Unit-IV: oxidation Synthetic applications of the following reagent in the oxidation of functional groups like alkenes, alcohols.	-	-	-	-	-	-	-	-	-	-
			① Pb(OAc) <sub>4</sub> ② SeO <sub>2</sub> ③ Jones reagent	-	-	-	-	-	-	-	-	-	-
Dec	4 <sup>th</sup>	4hrs	④ Babel's oxidation ⑤ MnO <sub>2</sub>	-	-	-	-	-	-	-	-	-	-
			⑥ Swern oxidation ⑦ oxidation by using DDO	-	-	-	-	-	-	-	-	-	-
Jan	1 <sup>st</sup>	4hrs	⑧ oxidation by Thalium nitrate	-	-	-	-	-	-	-	-	-	-
Jan	2 <sup>nd</sup>	4hrs		-	-	-	-	-	-	-	-	-	-

B.S.N. Musthi  
Signature of the Lecturer

B.V. Prasad  
Signature of the HOD

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Signature of the Principal

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

ANNUAL CURRICULAR					PLAN (Year)								
NAME OF THE LECTURER					CLASS : M.Sc. (Org Chem) Semester :				Paper : II Model organic chemistry - 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	
Jan	3 <sup>rd</sup>	4hrs	Unit-III: Reduction Catalytic reductions Homogenous (willie-	-	-	-	-	-	-	-	-	-	-
			son's Catalytic red- -uction) and hetro- -genous catalytic reductions and their synthetic applications.	-	-	-	-	-	-	-	-	-	-
Feb	1 <sup>st</sup>	4hrs	Reductions by using electrophillic metal hydrides BH <sub>3</sub> , DIBAL	-	-	-	-	-	-	-	-	-	-
Feb	2 <sup>nd</sup>	4hrs	Reductions by using Drimide and wolf- -kishaer Reduction.	-	-	-	-	-	-	-	-	-	-
Feb	3 <sup>rd</sup>	4hrs	Reductions by using tri-n-butyl tin hydride	-	-	-	-	-	-	-	-	-	-

*B.S.N. Moothi*  
Signature of the Lecturer

*B.V. Prerna*  
Signature of the HOD

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Signature of the Principal



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

**PLAN (Year)**

CLASS : II M.Sc (Org Chem) Semester : IV

Paper : III Modern Organic Chemistry - I  
 CO-CURRICULAR ACTIVITY

**ANNUAL CURRICULAR**

NAME OF THE LECTURER <u>Dr. B.S.N. Murthy</u>					CURRICULAR ACTIVITY							
MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value Addition Provided/ Taught	Activity Conducted	Hours Allotted	Whether Conducted	if not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	if not Alternate Date
Feb	4th	4hrs	<u>Unit-IV:-</u> Retro synthetic Analysis	-	-	-	-	-	-	-	-	-
			1. Basic definitions of a) Retro synthetic analysis b) Disconnection.	-	-	-	-	-	-	-	-	-
Mar	1st	4hrs	c) Target molecule d) Synthon	-	-	-	-	-	-	-	-	-
			2. Guidelines for the order of events : one group C-X disconnect	-	-	-	-	-	-	-	-	-
Mar	2nd	4hrs	-ons, one group C-C disconnections (Alcohols and Carbon-	-	-	-	-	-	-	-	-	-
Mar	3rd	4hrs	-yl compounds. Linear and Convergent Synthesis.	-	-	-	-	-	-	-	-	-

B.S.N. Murthy  
Signature of the Lecturer

B.V. Prasad  
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[Signature]  
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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>Ch. Bhuvaneshwari</u>					CLASS: <u>II Msc Inorganic chemistry</u> Semester: <u>IV</u>				Paper: <u>IV (Bio-organic 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	1st	4hrs	Unit-I: Biopolymers and Enzymes Peptides: $\alpha$ -Amino acids their general properties and synthesis	-	-	-	-	-	-	-	-	-	-
				-	-	-	-	-	-	-	-	-	-
Nov	2nd	4hrs	Enzymes- oxidoreductases, hydrolases.	-	-	-	-	-	-	-	-	-	-
Dec	1st	4hrs	Baker's yeast Enzyme models	-	-	-	-	-	-	-	-	-	-
			Unit-II: Antimalarials and Antibiotics	-	-	-	-	-	-	-	-	-	-
Dec	2nd	4hrs	i) Chemotherapy, synthesis and	-	-	-	-	-	-	-	-	-	-

Ch. Bhuvaneshwari  
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B.V. Prasad  
Signature of the HOD

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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: <i>Ch. Bhuvaneshwari</i>					CLASS: <i>Msc (org.chem)</i>				Semester: <i>IV</i>				Paper: <i>IV (Bio-organic chemistry)</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>3<sup>rd</sup></i>	<i>4hrs</i>	<i>activity of antimalarial drug -</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>			
			<i>quinoline group - quinine, acridine</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>			
<i>Dec</i>	<i>4<sup>th</sup></i>	<i>4hrs</i>	<i>group and guanidine group palladine</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>			
			<i>(i) General characteristics, structure -</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>1<sup>st</sup></i>	<i>4hrs</i>	<i>activity relationships, synthesis and</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>2<sup>nd</sup></i>	<i>4hrs</i>	<i>activity of antibiotics.</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>			

*Ch. Bhuvaneshwari*  
Signature of the Lecturer

*B. V. Prasad*  
Signature of the HOD

*[Signature]*  
Signature of the Principal

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

ANNUAL CURRICULAR					PLAN (Year)											
NAME OF THE LECTURER					CLASS : II Msc (org chem)				Semester : IV				Paper (IV Bio-organic chemistry)			
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	3rd	4hrs	Unit III vitamins	-	-	-	-	-	-	-	-	-	-	-		
			Definition, occurrence, structural formulae,	-	-	-	-	-	-	-	-	-	-	-		
Feb	1st	4hrs	Physiological functions and synthesis	-	-	-	-	-	-	-	-	-	-	-		
			of vitamins structure determination & synthesis	-	-	-	-	-	-	-	-	-	-	-		
Feb	2nd	4hrs	of Retinol (A), Thiamine (B <sub>1</sub> ), Riboflavin (B <sub>2</sub> ).	-	-	-	-	-	-	-	-	-	-	-		
Feb	3rd	4hrs	Pyridoxime (B <sub>6</sub> ) and Biotins (H).	-	-	-	-	-	-	-	-	-	-	-		

*Ch. Bhuvaneshwari*  
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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>Ch. Bhuvanraj</u>					CLASS : <u>II MSc (org. chem)</u>			Semester : <u>IV</u>		Paper : <u>IV (Bio-organic 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	
Feb	4th	4hrs	<u>Unit IV</u> Nucleic acids	-	-	-	-	-	-	-	-	-	-
			Basic concepts of the structure of RNA and DNA	-	-	-	-	-	-	-	-	-	-
March	1st	4hrs	Nucleosides and heterocyclic bases.	-	-	-	-	-	-	-	-	-	-
Mar	2nd	4hrs	Genetic code, finger print test	-	-	-	-	-	-	-	-	-	-
			diagnosis of diseases insect control	-	-	-	-	-	-	-	-	-	-
Mar	3rd	4hrs	Improved biological detergents, gene therapy	-	-	-	-	-	-	-	-	-	-

Ch. Bhuvanraj  
Signature of the Lecturer

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