

ANNUAL CURRICULAR					PLAN (Year)								
NAMR OF THE LECTURER <u>B. Tulani Kotswaribai</u>					CLASS : <u>IBSc MPC3</u> Semester : <u>I</u>				Inorganic and organic Paper : <u>I</u> 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	
June	3 <sup>rd</sup>	5	Syllabus Dictation, organo metallic compounds- Introduction	—	—	—	—	—	—	—	—	—	—
			classification of organo metallic compounds, Nomenclature, preparation	—	—	—	—	—	—	—	—	—	—
			properties and applications of alkyls of Li	Uses of organo metallic compounds	—	—	—	—	—	—	—	—	—
	4 <sup>th</sup>	5	applications of alkyls of Mg, Alkenes - preparation	—	—	—	—	—	—	—	—	—	—
			Heat of hydrogenation and stability of alkenes	—	—	—	—	—	—	—	—	—	—
			Addition of HX,	—	—	—	—	—	—	—	—	—	—
			Markovnikoff's rule, Addition of H <sub>2</sub> O, HOX, H <sub>2</sub> SO <sub>4</sub> with mechanism	—	—	—	—	—	—	—	—	—	—
	5 <sup>th</sup>	5	Anti-Markovnikoff's addition, Dienes- Types of dienes	—	—	—	—	—	—	—	—	—	—
			reactions of conjugated dienes - 1,2 and 1,4 addition of HBr to	—	—	—	—	—	—	—	—	—	—
			1,3-Butadiene and Diels-Alder reaction Alkynes- Preparation Acidity of Acetylenic	—	—	—	—	—	—	—	—	—	—

B. Tulani Kotswaribai  
Signature of the Lecturer

B. Tulani  
Signature of the HOD

[Signature]  
Signature of the Principal

ANNUAL CURRICULAR					PLAN (Year)								
NAMR OF THE LECTURER <u>B-Tulasi Kotcharibai</u>					CLASS : <u>IBSc MPC-I</u> Semester : <u>I</u>				Paper : <u>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	
			hydrogen, Formation of metal acetylides, preparation of higher acetylenes	—	—	—	—	—	—	—	—	—	—
July	1 <sup>st</sup>	5	Metal ammonia reductions, physical properties, chemical reactivity	—	—	—	—	—	—	—	—	—	—
			electrophilic addition of X <sub>2</sub> , HX, H <sub>2</sub> O, oxidation with KMnO <sub>4</sub> , OsO <sub>4</sub> , reduction and polymerization	—	—	—	—	—	—	—	—	—	—
			reaction of acetylene, cycloalkanes - Nomenclature, preparation by Freund's method, Wislicenus method	—	—	—	—	—	—	—	—	—	—
	2 <sup>nd</sup>	5	Reactivity of cyclopropane and cyclobutane by comparing with cycloalkanes, Stability of cycloalkanes - Baeyer's strain theory, Sachse	—	—	—	—	—	—	—	—	—	—
			and mohr theory, and Pitzer's strain theory, Conformational structures of cyclobutane, cyclopentane and cyclohexane - Types of bond fission	—	—	—	—	—	—	—	—	—	—
				Neumann Projection for conformational isomers.	—	—	—	—	—	—	—	—	—

B-Tulasi Kotcharibai  
 Signature of the Lecturer

B. Pr...  
 Signature of the HOD

Signature of the Principal

Kalyani

ANNUAL CURRICULAR					PLAN (Year)								
NAMR OF THE LECTURER <i>B. Tulani Koteswari bai</i>					CLASS : <i>I BScmpex</i> Semester : <i>I</i>				Paper : <i>T</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	
July	3 <sup>rd</sup>	5	organic reagents, Bond polarization - Factors influencing the	—	—	—	—	—	—	—	—	—	—
			polarization of covalent bond, Inductive effect ① Basicity of amines	—	—	—	—	—	—	—	—	—	—
			② Acidity of carboxylic acids ③ stability of carbonium ions	—	—	—	—	—	—	—	—	—	—
	4 <sup>th</sup>	5	Resonance (or) mesomeric effect, Applications ① Acidity of phenol	—	—	—	—	—	—	—	—	—	—
			② Acidity of carboxylic acid, Hyper conjugation and its applications to	—	—	—	—	—	—	—	—	—	—
			Stability of carbonium ions, Free radicals and alkenes, carbanion	—	—	—	—	—	—	—	—	—	—
			carbenes and Nitrenes Types of organic reaction Addition - Electrophilic	—	—	—	—	—	—	—	—	—	—
			Nucleophilic and free radical Substitution - Electrophilic Nucleophilic and free radical	—	—	—	—	—	—	—	—	—	—
			Elimination reactions with examples.	—	—	—	—	—	—	—	—	—	—

*B. Tulani Koteswari bai*  
 Signature of the Lecturer

*B. P. ...*  
 Signature of the HOD

*[Signature]*  
 Signature of the Principal

ANNUAL CURRICULAR					PLAN (Year)								
NAMR OF THE LECTURER <u>B. Tulani Koteswari bai</u>					CLASS : <u>IBSc MPC</u> Semester : <u>I</u>				Paper : <u>T</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	
	5th	2	Benzene and its reactivity - Concept of resonance, resonance energy, Heat of hydrogenation, heat of combustion of benzene	—	—	—	—	—	—	—	—	—	—
August	1st	3	Mention of C-C bond lengths and orbital picture of benzene	—	—	—	—	—	—	—	—	—	—
			Concept of aromaticity Aromaticity Huckel's rule application to Benzene and non benzenoid compounds. Reactions General mechanism of electrophilic substitution	—	—	—	—	—	—	—	—	—	—
	2nd	5	Mechanism of Nitration Friedel craft's alkylation and acylation	—	—	—	—	—	—	—	—	—	—
			orientation of aromatic substitution - Definition of ortho, para and meta directing groups Ring activating and deactivating groups with examples.	—	—	—	—	—	—	—	—	—	—
				—	Revision for 2 mid. exams.	01	yes	—	—	—	—	—	—
				—	—	—	—	—	—	—	—	—	—

B. Tulani Koteswari bai  
Signature of the Lecturer

B. Tulani  
Signature of the HOD

[Signature]  
Signature of the Principal

ANNUAL CURRICULAR					PLAN (Year)								
NAMR OF THE LECTURER <u>B. Tulani Kotawari bai</u>					CLASS : <u>I BSc mcs</u> Semester : <u>I</u>				Paper : <u>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	
Aug	3 <sup>rd</sup>	01	Electronic interpretation of various groups like NO <sub>2</sub> and phenols	—	—	—	—	—	—	—	—	—	—
	4 <sup>th</sup>	04	Orientalion of (i) Amino methoxy and methyl groups	—	—	—	—	—	—	—	—	—	—
			(ii) Carboxy, nitro, nitride Carbonyl and Sulphonic acid groups	—	—	—	—	—	—	—	—	—	—
			(iii) Halogens. P-Block elements: Group-13: Synthesis and structure of diborane and higher boranes (B <sub>4</sub> H <sub>10</sub> & B <sub>5</sub> H <sub>9</sub> )	EC of Group 13	—	—	—	—	—	—	—	—	—
			Boron Nitrogen Compounds (B <sub>3</sub> NH <sub>6</sub> & BN)	—	—	—	—	—	—	—	—	—	—
	5 <sup>th</sup>	04	Group-14: preparation and applications of silanes, silicones and graphite compounds.	EC of Group 14	—	—	—	—	—	—	—	—	—
			Group-15: Preparation and reactions of hydrazine.	EC of Group 15	Remedial class	01	Yes	—	—	—	—	—	—
				—	—	—	—	—	—	—	—	—	—

B. Tulani Kotawari bai  
 Signature of the Lecturer

B. Tulani Kotawari bai  
 Signature of the HOD

[Signature]  
 Signature of the Principal

ANNUAL CURRICULAR					PLAN (Year)								
NAMR OF THE LECTURER <u>B. Tulani Koteswarabai</u>					CLASS : <u>Bsc mcs</u> Semester : <u>T</u>				Paper : <u>T</u>				
MONTH	WEEK	HOURS AVAILABLE	SYLLABUS/ TOPIC	Additional Input/Value Addition Provided/ Taught	CO-CURRICULAR ACTIVITY				EO-CURRICULAR ACTIVITY				
					Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	Activity Conducted	Hours Allotted	Whether Conducted	If not Alternate Date	
Sep	1 <sup>st</sup>	01	Preparation and reactions of hydroxyl amine and phosphozenes	—	—	—	—	—	—	—	—	—	—
	2 <sup>nd</sup>	04	Group-16: Classification of oxides based on (i) chemical behaviour and (ii) oxygen content	EC of Comp —16	Assignment Submission	01	Yes	—	—	—	—	—	—
			oxyacids of sulphur	EC of Comp —17	—	—	—	—	—	—	—	—	—
			Group-17: Inter halogen compounds, pseudo halogens and Comparison with halogens.	—	Remedial & Revisions for mid exams.	01	Yes	—	—	—	—	—	—
	4 <sup>th</sup>	01	—	—	Students Seminar	01	Yes	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—

B. Tulani Koteswarabai  
 Signature of the Lecturer

B. Tulani  
 Signature of the HOD

[Signature]  
 Signature of the Principal

2018

ANNUAL CURRICULAR					PLAN (Year)											
NAMR OF THE LECTURER P. RAMYA KRISHNA					CLASS : II BSC (MPC)				Semester : III				Paper : III			
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				
JUNE	1 <sup>st</sup>	2hrs	d-block elements: electronic configuration	uses of d-block elements	-	01	yes	-	-	-	-	-	-			
	2 <sup>nd</sup>	5hrs	oxidation states, magnetic properties	-	-	-	-	-	-	-	-	-	-			
			Catalytic properties ability to form complex formation	complex formation	-	-	-	-	-	-	-	-	-			
	3 <sup>rd</sup>	4hrs	chemistry of f-block elements electronic configuration	-	-	-	-	-	-	-	-	-	-			
			lanthanide contraction, oxidation states of lanthanides	-	-	-	-	-	-	-	-	-	-			
			lanthanide contraction, cause & consequences	-	-	-	-	-	-	-	-	-	-			
	4 <sup>th</sup>	5hrs	actinide - electronic configuration,	-	-	-	-	-	-	-	-	-	-			
			oxidation states, separation of Ln's magnetic properties	-	-	-	-	-	-	-	-	-	-			
			comparison of Ln's with AC's actinide contraction	f-block elements applications	will be shown f-block elements applications	01	yes	-	-	-	-	-	-			

P. Ramya Krishna  
Signature of the Lecturer

B. Thirumala  
Signature of the HOD

Signature of the Principal

2018-

ANNUAL CURRICULAR					PLAN (Year)								
NAMR OF THE LECTURER <u>P. RAMYA KRISHNA</u>					CLASS : <u>II BSc</u>			Semester : <u>III</u>		Paper : <u>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	
June	5th	4hrs	Halogen compounds classification, nomenclature	-	-	-	-	-	-	-	-	-	-
			Nucleophilic substitution reactions	-	-	-	-	-	-	-	-	-	-
July	1st	5hrs	SN <sup>1</sup> and SN <sup>2</sup> reactions	-	-	-	-	-	-	-	-	-	-
			Difference between SN <sup>1</sup> & SN <sup>2</sup>	-	-	-	-	-	-	-	-	-	-
	2nd	4hrs	Hydroxy compounds nomenclature & classification	-	-	-	-	-	-	-	-	-	-
			alcohols & phenols preparation methods physical properties of alcohols & phenols	physical properties of alcohols & phenols	-	-	-	-	-	-	-	-	-
			properties of alcohols & phenols	-	-	-	-	-	-	-	-	-	-
	3rd	5hrs	Identification of alcohols & phenols	-	will be demonstrate preparations of alcohols & phenols	01	yes	-	-	-	-	-	-

P. Ramya Krishna  
Signature of the Lecturer

Signature of the HOD B. Anur

Signature of the Principal [Signature]



ANNUAL CURRICULAR					PLAN (Year)											
NAMR OF THE LECTURER P. RAMYA KRISHNA					CLASS : <u>II BSc</u>				Semester : <u>III</u>				Paper : <u>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				
			chemical properties Pinacole - pinacolone Rearrangement	-	-	-	-	-	-	-	-	-	-			
			azo coupling reaction active methylene compounds.	Azo dye preparation	-	-	-	-	-	-	-	-	-			
			aceto acetic ester preparations.	-	-	-	-	-	-	-	-	-	-			
July	4th	5hrs	synthetic application of acetoacetic ester, keto-end	-	-	-	-	-	-	-	-	-	-			
			tautomerism malonic ester preparation.	-	-	-	-	-	-	-	-	-	-			
			synthetic applications of malonic ester	-	-	-	-	-	-	-	-	-	-			
August	1st	3hrs	Theories of bonding in metals - free electron theory	-	-	-	-	-	-	-	-	-	-			
	2nd	4hrs	Valence Bond theory, MO	-	-	-	-	-	-	-	-	-	-			
			theory, Semi conductors	Types of Semi conductors	-	-	-	-	-	-	-	-	-			

Signature of the Lecturer *P. Ramya Krishna*

Signature of the HOD *B. Th...*

Signature of the Principal *[Signature]*

2018

ANNUAL CURRICULAR					PLAN (Year)								
NAMR OF THE LECTURER <u>P. RAMYA KRISHNA</u>					CLASS : <u>TTBSC</u> Semester : <u>III</u>				Paper : <u>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	
August	3 <sup>rd</sup>		← Impd exams →	—	—	—	—	—	—	—	—	—	—
August	4 <sup>th</sup>	4 hrs	classification of metal carbonyles	—	seminar	01	yes	—	—	—	—	—	—
			structures of Mn, Fe, Co & Ni & EAN rule	—	—	—	—	—	—	—	—	—	—
August	5 <sup>th</sup>	4 hrs	classification of carboxylic acids	—	—	—	—	—	—	—	—	—	—
			preparation methods physical properties	Assignments.	—	—	—	—	—	—	—	—	—
			chemical properties of aldes & their o	—	—	—	—	—	—	—	—	—	—
September	1 <sup>st</sup>	1	mechanism preparation	—	—	—	—	—	—	—	—	—	—
			methods of aldehydes	—	—	—	—	—	—	—	—	—	—
	2 <sup>nd</sup>	4 hrs	preparation methods of ketones	—	—	—	—	—	—	—	—	—	—

P. Ramya  
Signature of the Lecturer

B. Anur  
Signature of the HOD

Sahy  
Signature of the Principal

9

SIR C.R.REDDY COLLEGE FOR WOMEN, ELURU  
 CURRICULUM LECTURER WISE 2019 - 2020  
 2018

ANNUAL CURRICULAR					PLAN (Year)								
NAMR OF THE LECTURER: P. RAMYA KRISHNA					CLASS: <u>IBSC</u>			Semester: <u>III</u>		Paper: <u>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	
Septem	2nd	4hrs	physical properties Nucleophilic addition reactions	-	-	-	-	-	-	-	-	-	-
Septem	3rd	4hrs	← II mid exams →	-	-	-	-	-	-	-	-	-	-
Septem	4hrs	4hrs	Baeyer-villiger Oxidation, Clemmenson reduction, MPV reduction, Wolff Kishner	-	-	-	-	-	-	-	-	-	-
			reduction, reduction with LiAlH <sub>4</sub> & NaBH <sub>4</sub>	remedial class	-	-	-	-	-	-	-	-	-
					-	-	-	-	-	-	-	-	-
					-	-	-	-	-	-	-	-	-

P. Ramya Krishna  
 Signature of the Lecturer

Signature of the HOD

B. Prasad

S. Lakshmi  
 Signature of the Principal

2019-2019

Inorganic, organic & physical chemistry  
Paper: V

ANNUAL CURRICULAR					PLAN (Year)							
NAMR OF THE LECTURER K. SUJATHA					CLASS : B.Sc Semester : V B							
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
June	2 <sup>nd</sup>	4	Deduction of syllabus preparation, Aromatic character and electrophilic substitution reactions of pyridine, furan and thiophene.	-	-	-	-	-	-	-	-	-
	3 <sup>rd</sup>	3	preparation & basicity of pyridine, Aromatic character & nucleophilic substitution reactions of pyridine.	-	-	-	-	-	-	-	-	-
		4 <sup>th</sup>	4	Carbohydrate: classification & open chain structure of glucose & Ring structure.	-	-	-	-	-	-	-	-
	5 <sup>th</sup>	4	open chain & ring structure of Fructose.	-	-	-	-	-	-	-	-	-
				chemical reactions of glucose & Fructose, Intos conversion.	-	-	-	-	-	-	-	-
	July	1	4	photo chemistry: process, laws of photo chemistry, Quantum efficiency of H <sub>2</sub> & HBr formation, Jablonski diagram	-	Remedial class	01	Yes	-	-	-	-
				-	-	-	-	-	-	-	-	-

Signature of the Lecturer K. Sujatha

Signature of the HOD B. Thirumala

Signature of the Principal

2018-2019

ANNUAL CURRICULAR					PLAN (Year)								
NAMR OF THE LECTURER <u>K. SUJATHA</u>					CLASS : <u>III B.Sc</u> Semester : <u>V</u>				Inorganic, Organic & physical chemistry Paper : <u>VB</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	
July	2	3	Fluorescence, phosphorescence, Rate of reaction	-	-	-	-	-	-	-	-	-	-
			Rate constant for 1st & 2nd order reactions.	-	-	-	-	-	-	-	-	-	-
	3	4	Rate constant for zero & 2nd order reactions. Methods of determination of order of a reaction.	-	-	-	-	-	-	-	-	-	-
	4	4	effect of temperature Arrhenius equation	-	-	-	-	-	-	-	-	-	-
			concept of activation energy.	-	-	-	-	-	-	-	-	-	-
	5	2	classification of amino acids	-	-	-	-	-	-	-	-	-	-
Aug.	1	3	preparation methods of amino acids zwitter ion & Iso electric point.	-	-	-	-	-	-	-	-	-	-
	2	3	chemical reactions of amino acids	-	-	-	-	-	-	-	-	-	-
			peptide bonds - lactam formation.	-	-	-	-	-	-	-	-	-	-
					Remedial class	-	-	-	-	-	-	-	-

Signature of the Lecturer K. SujathaSignature of the HOD B. T. ...Signature of the Principal ...

2018-2019.

Inorganic, organic & physical chemistry  
Paper: VB

ANNUAL CURRICULAR					PLAN (Year)								
NAMR OF THE LECTURER: K. SUJATHA					CLASS: III B.Sc Semester: V								
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	
Aug	3	2	Nomenclature of proteins & peptides	-	-	-	-	-	-	-	-	-	-
	4 <sup>th</sup>	4	structure of proteins & peptides	-	-	-	-	-	-	-	-	-	-
	5	3	Reactivity of metal complexes, labile & inert complexes	-	-	-	-	-	-	-	-	-	-
			Ligand substitution reactions, $s_n2$ & $s_n1$ reactions, Trans effect	-	-	-	-	-	-	-	-	-	-
sep	1	1	Biological significance of Na	-	-	-	-	-	-	-	-	-	-
	2	4	Biological significance of K, Mg, Ca	-	-	-	-	-	-	-	-	-	-
			Fe, Co, Ni, Cu, Zn, Cl, Hemoglobin, Myoglobin	-	Remedial class	01	yes	-	-	-	-	-	-
			& chlorophyll structure	-	-	-	-	-	-	-	-	-	-
	3	-	II mid exam <del>Aspirant</del>	-	-	-	-	-	-	-	-	-	-

K. Sujatha  
Signature of the Lecturer

B. T. ...  
Signature of the HOD

...  
Signature of the Principal

ANNUAL CURRICULAR					PLAN (Year)								
NAMR OF THE LECTURER <u>B. Tulani Kotewaribai</u>					CLASS : <u>IV BSc CBZ, PC</u> Semester : <u>V</u>				Inorganic, organic and physical Paper : <u>VA</u> 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	
June	2nd	4	Syllabus Dictation Co-ordination chemistry IUPAC Nomenclature	Definitions of terms involved in Co-ordination	—	—	—	—	—	—	—	—	—
			bonding theories - Review of Werner's theory and Sidgwick's concept of Co-ordination - valence bond theory - geometries of Co-ordination numbers	chemistry Double salts & Co-ordination Compounds.	—	—	—	—	—	—	—	—	—
			octahedral complexes.	—	—	—	—	—	—	—	—	—	—
	3rd	4	Geometries of C.N.O-4 tetrahedral and square planar complexes	—	—	—	—	—	—	—	—	—	—
			and its limitations - crystal field theory - Splitting of d-orbitals	—	—	—	—	—	—	—	—	—	—
			in octahedral, tetrahedral and square planar complexes - low	—	—	—	—	—	—	—	—	—	—
			Spin and high spin complexes - factors affecting CFSE <small>merits &amp; demerits</small>	—	—	—	—	—	—	—	—	—	—
	4th	4	Isomerism in coordination compounds -	—	—	—	—	—	—	—	—	—	—

B. Tulani Kotewaribai  
Signature of the Lecturer

B. Tulani  
Signature of the HOD

[Signature]  
Signature of the Principal

ANNUAL CURRICULAR					PLAN (Year)								
NAMR OF THE LECTURER <i>B. Tulani Kotewaribai</i>					CLASS : <i>III BSc CBZ, BSc</i> Semester : <i>V</i>				Paper : <i>VA</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	
			structural isomerism and stereo isomerism, Stereo chemistry of	—	—	—	—	—	—	—	—	—	—
			Complexes with 4 and 6 coordination numbers.	—	—	—	—	—	—	—	—	—	—
June	5th	4	spectral and magnetic properties of metal complexes: Types of	—	—	—	—	—	—	—	—	—	—
			magnetic behaviour, spin only formula, Calculation of magnetic	Spectra of $[Ti(H_2O)_6]^{3+}$ complex ion.	—	—	—	—	—	—	—	—	—
			moments, experimental determination of magnetic susceptibility - Gouy	—	—	—	—	—	—	—	—	—	—
			method	—	—	—	—	—	—	—	—	—	—
July	1st	4	stability of metal complexes: Thermodynamic stability and kinetic stability factors	—	—	—	—	—	—	—	—	—	—
			affecting - the stability of metal complexes, chelate effect, determination of	—	—	—	—	—	—	—	—	—	—
			composition of complexes by Job's method and mole-ratio method.	—	—	—	—	—	—	—	—	—	—

*B. Tulani Kotewaribai*  
 Signature of the Lecturer

*B. Tulani*  
 Signature of the HOD

Signature of the Principal

*K. S. S. S.*



ANNUAL CURRICULAR					PLAN (Year)								
NAMR OF THE LECTURER <u>B. Tulani Kotchwaribai</u>					CLASS : <u>III BSC CBZ, BB</u> Semester : <u>V</u>				Paper : <u>VA</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	
			Nitro hydrocarbons Nomenclature and Classification	—	—	—	—	—	—	—	—	—	—
July	2nd	4	Structure and Tautomerism of nitroalkanes leading to aci and keto form,	—	—	—	—	—	—	—	—	—	—
			Preparation of Nitroalkanes, reactivity - halogenation, reaction with $\text{HONO}$ ,	—	—	—	—	—	—	—	—	—	—
			Nef reaction and Mannich reaction leading to Michael addition and reduction.	—	—	—	—	—	—	—	—	—	—
	3rd	4	Nitrogen Compounds Amines (Aliphatic and Aromatic) Nomenclature	—	—	—	—	—	—	—	—	—	—
			Classification into $1^\circ, 2^\circ, 3^\circ$ amines and $4^\circ$ ammonium Compounds. preparative	—	—	—	—	—	—	—	—	—	—
			methods - (1) Ammonolysis of alkyl halides 2. Gabriel Synthesis 3. Hoffmann's bromamide reaction	—	—	—	—	—	—	—	—	—	—
			(mechanism) Reduction of Amides and Schmidt reaction; physical properties	—	—	—	—	—	—	—	—	—	—
			Basic character - comparative basic strength of ammonia, methyl amine,	—	—	—	—	—	—	—	—	—	—

B. Tulani Kotchwaribai  
 Signature of the Lecturer

B. Tulani  
 Signature of the HOD

[Signature]  
 Signature of the Principal

ANNUAL CURRICULAR					PLAN (Year)								
NAMR OF THE LECTURER <i>B. Tulani Koteswari Bai</i>					CLASS : <i>III BSc CBZ, POC</i> Semester : <i>V</i>				Paper : <i>VA</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>dimethyl amine, trimethyl amine and aniline - Comparative basic strength</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>
			<i>of aniline - N-methyl aniline and N,N-dimethyl aniline</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>
<i>July</i>	<i>4<sup>th</sup></i>	<i>4</i>	<i>Steric and substituent effects, chemical properties a) Alkylation</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>
			<i>b) Acylation c) carbonyl amine reactions d) Hinsberg separation e) Reaction</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>
			<i>with nitrous acid of 1°, 2°, 3° (Aliphatic and aromatic amines).</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>
			<i>Electrophilic substitution of Aromatic amines - Bromination and nitration</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>
			<i>oxidation of aryl and Tertiary amines.</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>
	<i>5<sup>th</sup></i>	<i>2</i>	<i>Diazotization Thermodynamics: The (Heat capacities) first-law of thermodynamics statement, definition of Internal energy</i>	<i>Definition of terms used in Thermodynamics</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>
				<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>

*B. Tulani Koteswari Bai*  
 Signature of the Lecturer

*B. Murugan*  
 Signature of the HOD

Signature of the Principal  
*Selva*

ANNUAL CURRICULAR					PLAN (Year)								
NAMR OF THE LECTURER <i>B-Tulan Kotewarbai</i>					CLASS : <i>III BSc CBZ, BSc</i> Semester : <i>V</i>				Paper : <i>VA</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>August</i>	<i>1st</i>	<i>02</i>	<i>Enthalpy, Heat Capacities and their relationship.</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>
			<i>Joule-Thomson effect</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>
	<i>2nd</i>	<i>04</i>	<i>Joule-Thomson coefficient calculation of w, Q for the expansion of perfect gas under isothermal conditions for reversible process</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>
			<i>calculation of w, for the expansion of perfect gas under adiabatic conditions for reversible processes.</i>	<i>Relations based on adiabatic process <math>pV^\gamma = \text{const}</math></i>	<i>Revision for Remedial class &amp; mid exams</i>	<i>01</i>	<i>Yes</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>
				<i><math>TV^{\gamma-1} = \text{constant}</math></i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>
	<i>4th</i>	<i>03</i>	<i>state function, Temperature dependence of enthalpy of formation</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>
			<i>Kirchoff's equation. Second law of thermodynamics - Different statements for the law</i>	<i>spontaneous and Reversible process</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>
				<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>

*B-Tulan Kotewarbai*  
 Signature of the Lecturer

*B. ...*  
 Signature of the HOD

Signature of the Principal  
*[Signature]*

ANNUAL CURRICULAR					PLAN (Year)								
NAMR OF THE LECTURER <i>B. Tulani Koteswaribai</i>					CLASS : <i>III BSc CBZ, BSc</i> Semester : <i>V</i> Paper : <i>VA</i>								
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	
Aug	5th	4	Carnot's cycle and its efficiency, carnot theorem - concept of entropy, entropy as state function, entropy changes in reversible and irreversible processes.	—	Assignment Submission	—	—	—	—	—	—	—	—
				—	Remedial class	01	Yes	—	—	—	—	—	—
Sep	2nd	4	Entropy changes in spontaneous and equilibrium process.	—	Remedial & Revision classes for Unit	02	Yes	—	—	—	—	—	—
	4th	1	—	—	Student seminar	01	Yes	—	—	—	—	—	—
			—	—	—	—	—	—	—	—	—	—	—
			—	—	—	—	—	—	—	—	—	—	—
			—	—	—	—	—	—	—	—	—	—	—
			—	—	—	—	—	—	—	—	—	—	—
			—	—	—	—	—	—	—	—	—	—	—

*B. Tulani Koteswaribai*  
 Signature of the Lecturer

*B. Anur*  
 Signature of the HOD

*[Signature]*  
 Signature of the Principal