

CURRICULAR PLAN

2022-23

Name of the teacher: T. Aruna Kumari

Department: chemistry

Class: mpc, B2L & combs.

Year: II

Paper: III

Sl. No.	Month	Week	Hours available	Syllabus Topic	Additional Input/Value Addition	Curricular Activity				Co-Curricular Activity				
						Activity	Hours Allotted	Whether Conducted	If not, alternate date	Activity	Hours Allotted	Whether Conducted	If not, alternate date	Remarks
		1st Week												
		2nd Week												
		3rd Week												
		4th Week	1x3	f block elements Lanthanide post transition E to carbonic structure, oxidn. states					Group discussion					
		5th Week	1x3	Ionic & atomic radii, Lanthanide contraction & its consequences										
		6th Week												

T. Aruna

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CURRICULAR PLAN

T. Aruna Kumari

Department: Chemistry Class: MPC, B2C ^(cont)

Year: V

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No.	Date	Week	Hours available	Syllabus Topic	Additional Input/Value Addition	Curricular Activity				Co-Curricular Activity				
						Activity	Hours Allotted	Whether Conducted	If not, alternate date	Activity	Hours Allotted	Whether Conducted	If not, alternate date	
	Sept 22	1st week	1X3	complex formation. magnetic properties colour spectra										
		2nd week	1X3	Lanthanide separation methods										
		3rd week	1X3	Actinides: electronic config. oxidation state actinide chemistry					extension Lecture					
		4th week	1X3	colour & complex formation, comparison with lanthanides										
		5th week												

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CURRICULAR PLAN

Name of the teacher: T. Aruna Kumari

Department: chemistry

Class: MPC, B2C

Year: II

Paper: III

Month	Week	Hours available	Syllabus Topic	Additional Input/Value Addition	Curricular Activity				Co-Curricular Activity				Remarks	
					Activity	Hours Allotted	Whether Conducted	If not, alternate date	Activity	Hours Allotted	Whether Conducted	If not, alternate date		
October	1 st - 22 nd													
	Week													
	Week	1x3	Coordination complex. Simple inorganic molecules, IUPAC nomenclature.											
	Week	1x3	Werner's Coordination theory					Assignment						
	Week	1x3	Sidgwick's Theory EAN concept.											
	Week													

Signature of the Teacher: *TK*

Signature of the Department Incharge: *W*

Signature of the Principal: *W*

CURRICULAR PLAN

Name of the Teacher: T. Arunakumari

Department: Chemistry

Class: MPC, B2C & comb

Year: IV

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S.No.	Week	Hours available	Syllabus Topic	Additional Input/Value Addition	Curricular Activity				Co-Curricular Activity				
					Activity	Hours Allotted	Whether Conducted	If not, alternate date	Activity	Hours Allotted	Whether Conducted	If not, alternate date	
	NOV -22	1st week	1X3 VBTR & its Applications										
		2nd week	1X3 Stereo Isomerism in Coordn. compounds					student seminar					
		3rd week	1X3 structural isomerism in coordn. compounds										
		4th week	1X3 metal carbonyl classification, 18e rule										
		5th week											

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CURRICULAR PLAN

Name of the Teacher: T. Aruna Kumari

Department: chemistry

Class: MPC, B2CA Comb

Year: II

Paper: III

Month	Week	Hours available	Syllabus Topic	Additional Input/Value Addition	Curricular Activity				Co-Curricular Activity					
					Activity	Hours Allotted	Whether Conducted	If not, alternate date	Activity	Hours Allotted	Whether Conducted	If not, alternate date	Remarks	
Dec-22	1st Week	1x3	structure of $Ni(CO)_4$, $Fe(CO)_5$, $Fe_2(CO)_9$, $Fe_3(CO)_{12}$											
	2nd Week	1x3	OMC, nomenclature classification											
	3rd Week	1x3	preparation, & applications of Li, Mg & Al OMC.											
	4th Week	1x3	Questions paper discussion											
	5th Week													

Signature of the Teacher: TAK

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CURRICULAR PLAN

Name: T. Aruna Kumari

Department: Chemistry

Class: MPC, MKCS, BZC & GMB

Year: 1

Page: I

Week	Hours available	Syllabus Topic	Additional Input/Value Addition	Curricular Activity				Co-Curricular Activity				
				Activity	Hours Allotted	Whether Conducted	If not, alternate date	Activity	Hours Allotted	Whether Conducted	If not, alternate date	
2 nd Week Oct-22	2x3	Organic Chemistry Bond polarization		Bridge course								
3 rd Week Oct-22	2x3	Inductive effect mesomeric effect										
4 th Week Oct-22	2x3	Hyper conjugative stability of C ⁺ , C ⁻ & F-R										
5 th Week												

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CURRICULAR PLAN

Name of the teacher: J. Aruna Kumari

Department: chemistry

Class: MPE, MCCS, BZC
comb

Year: I

Paper: I

Week	Hours available	Syllabus Topic	Additional Input/Value Addition	Curricular Activity				Co-Curricular Activity				
				Activity	Hours Allotted	Whether Conducted	If not, alternate date	Activity	Hours Allotted	Whether Conducted	If not, alternate date	Remarks
NOV-22 Week	2x3	Chemist bonding Ionic Solids, Fajan's Rule										
NOV-22 Week	2x3	VSPEr Theory Hybridization										
NOV-22 Week	2x3	MO Theory LCAO concept										
NOV-22 Week	2x3	MOED of homo nuclear, hetero nuclear molecules		Assignment								
Week												

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CURRICULAR PLAN

Name of the Teacher:

T. Aruna Kumari

Department: chemistry

MPL, MCL, B2C2

Class: combs

Year: I

Paper: 1

Sl. No.	Week	Hours available	Syllabus Topic	Additional Input/Value Addition	Curricular Activity				Co-Curricular Activity				
					Activity	Hours Allotted	Whether Conducted	If not, alternate date	Activity	Hours Allotted	Whether Conducted	If not, alternate date	
1	Dec-22	2x3	Aryldichydro carbons Alkanes		Group Discussion		yes						
2	Dec-22	2x3	Alkenes & Diens										
3	Dec-22	2x3	Alkynes										
4	Dec-22	2x3	P-block elements Diboranes B-N complex Borax Nature										
5													

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CURRICULAR PLAN

Name of the Teacher: T. Aruna Kumari

Department: chemistry Class: combs Year: I Paper: I

Month	Week	Hours available	Syllabus Topic	Additional Input/Value Addition	Curricular Activity			Co-Curricular Activity						
					Activity	Hours Allotted	Whether Conducted	If not, alternate date	Activity	Hours Allotted	Whether Conducted	If not, alternate date	Remarks	
Jan-23	1 st Week	2x3	carbides, silicones		student seminar									
Jan-23	2 nd Week	2x3	Nitrides classification Reactivity											
Jan-23	3 rd Week	2x3	Reactions of hydrazine, hydroxylamine, phosphazene											
Jan-23	4 th Week	2x3	Aromatic hydro carbons: Huckels Rule Reactions of C ₆ H ₆											
	5 th Week													

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CURRICULAR PLAN

Name of the Teacher: T. Aruna Kumari Department: chemistry Class: mpg mcs, BCG Year: I Paper: I

S.No.	Date	Week	Hours available	Syllabus Topic	Additional Input/Value Addition	Curricular Activity				Co-Curricular Activity			
						Activity	Hours Allotted	Whether Conducted	If not, alternate date	Activity	Hours Allotted	Whether Conducted	If not, alternate date
	Feb-23	1 st week	2x3	orientation of aromatic substitution									
		2 nd week											
		3 rd week											
		4 th week											
		5 th week											

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CURRICULAR PLAN

Name: T. Aruna Kumari

Department: Chemistry

Class: MPC, MLC, B2C & Comb

Year: II

Paper: IV

Week	Hours available	Syllabus Topic	Additional Input/Value Addition	Curricular Activity				Co-Curricular Activity				Remarks
				Activity	Hours Allotted	Whether Conducted	If not, alternate date	Activity	Hours Allotted	Whether Conducted	If not, alternate date	
1 st Week <u>Jan-23</u>												
2 nd Week												
3 rd Week												
4 th Week	<u>1X3</u>	<u>Crystal Field Theory</u>										
5 th Week	<u>1X3</u>	<u>splitting of d-orbitals in oh, t_{2g} CFSE, calculations, high spin, low spin complexes</u>										
6 th Week		<u>colour & magnetic properties, calculation of magnetic moments spin only formula</u>										
7 th Week												

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CURRICULAR PLAN

T. Anura Kumari

mp, B2L & Comb

Department: Chemistry

Class: _____

Year: II

Paper: IV

Feb-23

Week	Academic certificate	Syllabus Topic	Additional Input/Value Addition	Curricular Activity				Co-Curricular Activity				
				Activity	Hours Allotted	Whether Conducted	If not, alternate date	Activity	Hours Allotted	Whether Conducted	If not, alternate date	
Week	2X3	Detection of complex forms. change in chemical prop., solubility colour, pH, conductivity magnetic										
Week	2X3	HSAB, Pearson's concept.; stability of metal complexes										
Week	2X3	chelate effect, determin. of composition of complex by Job's mole ratio method.										
Week	2X3	Applications of coordn. compounds in quantitative qualitative, medicine & industry										
Week												

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CURRICULAR PLAN

Teacher: T. Aruna Kumari

Department: Chemistry

Class: MPC, B2C & comb

Year: II

Paper: IV

March
-23

Week	Hours available	Syllabus Topic	Additional Input/Value Addition	Curricular Activity				Co-Curricular Activity			
				Activity	Hours Allotted	Whether Conducted	If not, alternate date	Activity	Hours Allotted	Whether Conducted	If not, alternate date
1 st Week	2x3	Theories of bonding in metals Valence bond theory, Free e ⁻ theory									
2 nd Week	2x3	Bond theory, conductors, Insulators, semiconductors					Student seminar				
3 rd Week	2x3	colloides : Definition of colloids, preparations, properties									
4 th Week	2x3	Emulsions: preparations & properties					QUIZ				
5 th Week											

T. Aruna

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T. Aruna kumari

Department: chemistry

Class: TPAL, B2C & comb

Year: II

Page: IV

Date	Days available	Syllabus Topic	Additional Input/Value Addition	Curricular Activity				Co-Curricular Activity					
				Activity	Hours Allotted	Whether Conducted	If not, alternate date	Activity	Hours Allotted	Whether Conducted	If not, alternate date		
April-23		Adsorption: Types, preparatory Factors influencing Adsorption Isotherm											
	2X3	Carbanions - II manich reaction, michael addition, knoevenagel											
	2X3	Synthetic applications of Acetoacetic ester Acid & ketonic hydrolysis						Assignment					
	2X3	mono carboxylic acids dicarboxylic acids preparation of substituted mono, dicarboxylic acids.											

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Name: T. Aruna Kumari

Department: Chemistry

Class: MPC, B2C & Comb

Year: II

Paper: IV

May-23

Week	Hours available	Syllabus Topic	Additional Input/Value Addition	Curricular Activity			Co-Curricular Activity				
				Activity	Hours Allotted	Whether Conducted	If not, alternate date	Activity	Hours Allotted	Whether Conducted	If not, alternate date
1 st Week	2x3	Essential elements, biological significance of Na, K, Mg, Ca etc. Toxic metal ions, structure of haemoglobin									
2 nd Week	2x3	Fixation of CO ₂ in photosynthesis, structure of chlorophyll, electron transport in light reactions from water to NADP ⁺ (Z-scheme)									
3 rd Week	2x3	Question paper discussion.									
4 th Week											
5 th Week											

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CURRICULAR PLAN

2022-23

Name of Teacher: T. Arunakumari

Department: Chemistry

Class: MPC, B2C & MCC, Comb

Year: I

Paper: II

Sl. No.	Week	Hours available	Syllabus Topic	Additional Input/Value Addition	Curricular Activity			Co-Curricular Activity					
					Activity	Hours Allotted	Whether Conducted	If not, alternate date	Activity	Hours Allotted	Whether Conducted	If not, alternate date	Remarks
	March-23												
	2nd week	2x3	d-block elements						Group discussion				
	3rd week	2x3	d-block elements						GAH				
	4th week	2x3	d-block elements										

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CURRICULAR PLAN

Name: T. Aruna kumari

Department: Chemistry

mpc, mcs; B2L

Class: _____

Year: _____

Paper: _____

April
23

Week	Hours available	Syllabus Topic	Additional Input/Value Addition	Curricular Activity				Co-Curricular Activity				Remarks	
				Activity	Hours Allotted	Whether Conducted	If not, alternate date	Activity	Hours Allotted	Whether Conducted	If not, alternate date		
1st Week	2x3	2nd group						Assignment					
2nd Week	2x3	Hydroxy compds											
3rd Week	2x3	Hydroxy compds											
4th Week	2x3	P-block elements											
5th Week													
6th Week													

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Name: T. Aruna Kumari

Department: chemistry

Class: MPC B2C / mcs comb

Year: I

Paper: II

No.	Date	Week	Hours available	Syllabus Topic	Additional Input/Value Addition	Curricular Activity				Co-Curricular Activity							
						Activity	Hours Allotted	Whether Conducted	If not, alternate date	Activity	Hours Allotted	Whether Conducted	If not, alternate date	Remarks			
		May May-22															
		1st		2x3 p-block elements													
		2nd		2x3 carbonyl compds													
		3rd		2x3 carbonyl compds													
		4th															

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