

CURRICULAR PLAN - Lecturer-wise

60 hours (4th/5th)

Department: CHEMISTRY

Name of the Lecturer: D. Adinarayana

Class: CBZ-B

Paper: I

Class : CBZ-B													Paper : I	
Month & Week	Hours available	Syllabus topic (as per the University)	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		—	—	—							—			
2nd Week		—	—	—							—			
October-2022 3rd Week	4	<u>Inorganic chemistry</u> <u>Unit-I</u> Chemistry of p-block elements Group-13: prep. & structure of PCl_5 , BiCl_3 , diborane, Bzazine. Group-14: Silicones - prep, Classification & uses			4	yes								
oct 4th Week	4	Group-15: prep. & structure of phosphonitride halides $[\text{PNCl}_2]_n$ Group-16: oxides & oxoacids of Sulphur (structures) Group-17: Pseudo halogens, structures of Inter halogen Compounds.	studied in practical		3	yes		Assignment ①	1	yes				



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CURRICULAR PLAN - Lecturer-wise

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Month & Week	Hours available	Syllabus topic (as per the University)	Additional Input/ Value Addition	Curricular Activity			Co-curricular Activity			Remarks	
				Activity	Hours allotted	Whether conducted	If not alternate date	Activity	Hours allotted		Whether conducted
November - 2022 1st Week	4	<u>Unit-II</u> <u>Chemistry of d-block elements:</u> characteristics of d-block elements with electronic configuration - Variable Valence, magnetic properties, catalytic properties			4	Yes					
Nov 2nd Week	2 + 2	Ability to form complexes, stability of various oxidation states <u>Chemistry of f-block elements:</u> Chemistry of lanthanides - ele. structure, oxidation states, magnetic properties.	PGCEP B.T.		3	Yes		Assignment ②	1	Yes	
Nov 3rd Week	4	Lanthanide contraction - Consequences, chemistry of Actinides, Comparison of lanthanides and Actinides.			3	Yes		Assignment ③	1	No	Dec 2nd week
Nov 4th Week	4	③ <u>Theories of bonding in metals:</u> - Free electron Theory - VBT - Band Theory	Study material		4	No	Dec - 3rd week				Due to slip

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CURRICULAR PLAN - Lecturer-wise

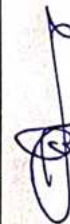
Department :

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Month & Week	Hours available	Syllabus topic (as per the University)	Additional Input/ Value Addition	Curricular Activity			Co-curricular Activity			Remarks
				Activity	Hours allotted	Whether conducted	If not alternate date	Activity	Hours allotted	
December 1st Week	4	<u>physical chemistry</u> <u>Unit-III</u> Solid state : Symmetry in crystals. Law of constancy of interfacial angle, The law of rationality of indices, Miller indices.								
Dec. 2nd Week	4	Def. of lattice point, space lattice, unit cell, Bravais lattices, crystal systems, X-ray diffraction - Bragg's law - powder method.	study material							
Dec 3rd Week	2 + 2	Defects in crystals - stoichiometric & non-stoichiometric defects, <u>Unit-IV</u> <u>Gaseous state</u> Vander Waal's eq ⁿ of state, Andrew's isotherms of CO ₂ , Continuity of state.								
Dec 4th Week	4	Relationship between critical constants and Vander Waal's constants, Law of corresponding states, Joule Thomson effect - Inversion temperature	percent							



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Month & Week	Hours available	Syllabus topic (as per the University)	Additional Input/ Value Addition	Curricular Activity			Co-curricular Activity			Remarks	
				Activity	Hours allotted	Whether conducted	If not alternate date	Activity	Hours allotted		Whether conducted
January - 2023 1st Week	4	② <u>Liquid state</u> : Liquid crystals - Diff. between hex. crystal and solid liquid. classification of L.C into Smectic & Nematic - Applications of L.C as LCD devices. <u>Unit-V</u>	study material					Assignment ⑤	1		
Jan 2nd Week	4	① <u>Solutions</u> ; <u>Azeotropes</u> ; H ₂ O-H ₂ O system, ethanol-H ₂ O system, Partial miscible liquids - phenol-H ₂ O system (CST) effect of impurity on CST - Immiscible liquids - steam distillation.						Mid-II exams	1		
Jan 3rd Week	2 + 2	Nernst distribution law - Applications; ② <u>Ionic Equilibrium</u> : Ionic product, Common ion effect, solubility and solubility product.						student seminars	1		
Jan 4th Week	4	cal. based on solubility product. ③ <u>Dilute solutions</u> colligative properties - RLVP, osmotic pressure, Elevation of b.p & depression in F.P.	pg. CET bits					Assignment ⑥	1		



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CURRICULAR PLAN - Lecturer-wise

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Name of the Lecturer :

Class :

Paper :

Class : _____ Paper : _____											
Month & Week	Hours available	Syllabus topic (as per the University)	Additional Input/ Value Addition	Curricular Activity			Co-curricular Activity			Remarks	
				Activity	Hours allotted	Whether conducted	If not alternate date	Activity	Hours allotted		Whether conducted
Feb-2023 1st Week	4	Experimental det. of molar mass of a non-volatile solute using colligative properties - Abnormal colligative properties - Van't Hoff factor.	study material					Assignment (7)	1		
2nd Week		Total hours: 60h									
3rd Week											
4th Week											

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2022-23

LABORATORY COURSE - I

practical - 30 hours
(2h/w)CURRICULAR PLAN - Lecturer-wise
SEMESTER - I

Department: CHEMISTRY

Name of the Lecturer: D. Adinarayana

Class :

Paper : I

Name of the Lecturer : D. Venkatesh Kumar	Month & Week	Hours available	Syllabus topic (as per the University)	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		—			—				—				
			Qualitative inorganic Analysis [Minimum of 6 mixtures should be analysed]											
	2nd Week		—			—								
	October -2022 3rd Week	2h/ Batch	Spot tests of carbonate, acetate, chloride, bromide, phosphate, nitrate, Sulphate.			practical	2h	yes						
	Oct 4th Week	2h/ Batch	Spot tests of Pb^{2+} , Cu^{2+} , Fe^{2+} , Al^{3+} , Mn^{2+} , Ni^{2+} , Zn^{2+}			practical	2h	yes						

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CURRICULAR PLAN - Lecturer-wise

Department :

Name of the Lecturer :

Class :

Paper :

Month & Week	Hours available	Syllabus topic (as per the University)	Additional Input/ Value Addition	Curricular Activity			Co-curricular Activity			Remarks
				Activity	Hours allotted	Whether conducted	If not alternate date	Activity	Hours allotted	
Nov-2022 1st Week	2h W/Batch	Spot tests of Ca^{2+} , Ba^{2+} , Sr^{2+} , K^{+} and NH_4^{+}		practical	2h	yes				
Nov 2nd Week	2h Batch	Mixture salt Analysis - ①		practical	2h	yes				
Nov 3rd Week	2h Batch	Mixture salt Analysis - ①		practical	2h	yes				
Nov 4th Week	2h Batch	Mixture salt Analysis - ②		practical	2h	yes				



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CURRICULAR PLAN - Lecturer-wise

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Month & Week	Hours available	Syllabus topic (as per the University)	Additional Input/ Value Addition	Curricular Activity			Co-curricular Activity			Remarks
				Activity	Hours allotted	Whether conducted	If not alternate date	Activity	Hours allotted	
Dec-2022 1st Week	2h B	Mixture Salt Analysis - (2)		practical	2h	yes				
Dec 2nd Week	2h B	Mixture Salt Analysis - (3)		practical	2h					
Dec 3rd Week	2h B	Mixture Salt Analysis - (3)		practical	2h					
Dec 4th Week	2h B	Mixture Salt Analysis - (4)		practical	2h					


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CURRICULAR PLAN - Lecturer-wise

Department :

Name of the Lecturer :

Class :

Paper :

Month & Week	Hours available	Syllabus topic (as per the University)	Additional Input/ Value Addition	Curricular Activity			Co-curricular Activity			Remarks
				Activity	Hours allotted	Whether conducted	If not alternate date	Activity	Hours allotted	
Jan-2023 1st Week	2h / B	Mixture salt Analysis - (4)		practical	2h					
Jan 2nd Week	2h / B	Mixture salt Analysis - (5)		practical	2h					
Jan 3rd Week	2h / B	Mixture salt Analysis - (5)		practical	2h					
Jan 4th Week	2h / B	Mixture salt Analysis - (6)		practical	2h					



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CURRICULAR PLAN - Lecturer-wise

Department :

Name of the Lecturer :

Class :

Paper :

Name of the Lecturer		Syllabus topic (as per the University)	Additional Input/ Value Addition	Curricular Activity			Co-curricular Activity			Remarks	
Month & Week	Hours avail- able			Activity	Hours allotted	Whether condu- cted	If not alternate date	Activity	Hours allotted		Whether condu- cted
Jan 1st Week	2h B	Mixture Salt Analysis - 6		practical	2h						
2nd Week		Total hours: 30h									
3rd Week											
4th Week											

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2022-23

SEMESTER - III

Theory - 60 hours (4h/w)

CURRICULAR PLAN - Lecturer-wise

Department : CHEMISTRY

Name of the Lecturer : D. Adinarayana

Class : MCIC-D & MCAC-J

Paper : III

Month & Week	Hours available	Syllabus topic (as per the University)	Additional Input/ Value Addition	Curricular Activity			Co-curricular Activity			Remarks
				Activity	Hours allotted	Whether conducted	If not alternate date	Activity	Hours allotted	
1st Week		—	—	—				—		
paper - III [<u>organic chemistry & spectroscopy</u>]										
2nd Week		—		—				—		
organic chemistry										
November 3rd Week	4h	Unit-1 ① <u>chemistry of Halogenated hydrocarbons</u> : prep. and prop. of alkyl halides, SN^1 & SN^2 mechanisms & stereochemistry		—	4	yes		—		
November 4th Week	4h	② <u>Alcohols & phenols</u> : prep. and prop. of alcohols, Bouvaelt plane reduction, pinacol-pinacolone rearrangement.	PGCET notes		4	yes				

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Paper :

Department : Name of the Lecturer :			Class :										
Syllabus topic (as per the University)			Additional Input/ Value Addition	Curricular Activity			Co-curricular Activity						
				Activity	Hours allotted	Whether condu- cted	If not alternate date	Activity	Hours allotted	Whether condu- cted	If not alternate date		
Month & Week	Hours avail- able												
December -2022- 1st Week	4	phenols - prep. & properties - Reimer-Tiemann, Kolbe- Schmitt reaction, Fries- and claisen rearrangement	study material		3	yes		Assignment ①	1	yes			
Dec 2nd Week	4	<u>Unit - II</u> <u>Carbonyl Compounds</u> structure, reactivity, prep. & prep. of C.C's - mech. of Aldol, Benzoin condensation, Baeyer - villiger oxidation,	identifying reagents & reactions ketones		4								
Dec 3rd Week	4	Clemmensen, Wolf-kishner reduction, Michael addition, Active methylene compounds; prep. & applications of diethyl malonate.	study material		3			Assignment ②	1				
Dec 4th Week	4	prep. & applications of ethyl acetoacetate. <u>Unit - III</u> <u>Carboxylic acids & their derivatives</u> ; Gen. methods of prep. & prep. of monocarboxylic			3			Mid-I exams	1				

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CURRICULAR PLAN - Lecturer-wise

Department :

Name of the Lecturer :

Class :

Paper :

Month & Week	Hours available	Syllabus topic (as per the University)	Additional Input/ Value Addition	Curricular Activity			Co-curricular Activity			Remarks	
				Activity	Hours allotted	Whether conducted	If not alternate date	Activity	Hours allotted		Whether conducted
January -2023 1st Week	4	Effect of substituent on acidic strength, Mech. of acidic and alkaline hydrolysis of esters.			3			Group discussion	1		
Jan 2nd Week	4	Claisen condensation, Reformatsky reaction, Curtius rearrangement, Esterification mechanism, Hunsdiecker reaction, Schmidt Reaction,	Reaction mechanism		3			Assignment (3)	1		
Jan 3rd Week	4	Arndt-Eistert synthesis & HVZ-reaction — <u>SPECTROSCOPY</u> Unit -IV Molecular spectroscopy - Definition, emr, Types of spectra			4						
Jan 4th Week	4	Rotational Spectroscopy	PGCET 16th		3			Assignment (4)			



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CURRICULAR PLAN - Lecturer-wise

Department :		Class :		Paper :	
Name of the Lecturer :		Syllabus topic (as per the University)		Additional Input/ Value Addition	
Month & Week	Hours avail- able	Curricular Activity		Co-curricular Activity	
		Activity	Hours allotted	Whether condu- cted	If not alternate date
Feb-2023					
1st Week	4	Vibrational spectroscopy	3		Mid-II Exam
Feb	4	Electronic spectroscopy	4		
Feb	4	NMR spectroscopy	3		Assignment ⑤
Feb	4	Unit-V Application of spectroscopy to simple organic molecules (Electronic spectroscopy) - Woodward rules for cal. number of conjugated dienes, α, β -unsaturated c.c.s.	4		

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Department: CHEMISTRY

CURRICULAR PLAN - Lecturer-wise

Name of the Lecturer : D. Adinarayana

Class : II MCIC-D & MCAC-J

Paper : III

Lecturer : D. Adinarayana			Class : II MCIC-D & MCAC-J			Paper : III				
Month & Week	Hours available	Syllabus topic (as per the University)	Additional Input/ Value Addition	Curricular Activity			Co-curricular Activity			Remarks
				Activity	Hours allotted	Whether conducted	If not alternate date	Activity	Hours allotted	
March-2023										
1st Week	14h	Applications of IR - Spectroscopy to simple organic molecules - Types of molecular vibrations - functional group & finger print regions.	study material		3			Assignment (6)	1	
2nd Week		Total hours: 60h								
3rd Week										
4th Week										



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2022-23

LABORATORY COURSE - III

practical - 30 hours 2h/w/Batch

CURRICULAR PLAN - Lecturer-wise SEMESTER - III

Department : CHEMISTRY

Name of the Lecturer : D. Adinarayana

Class :

Paper : III

Month & Week	Hours available	Syllabus topic (as per the University)	Additional Input/ Value Addition	Curricular Activity			Co-curricular Activity			Remarks
				Activity	Hours allotted	Whether conducted	If not alternate date	Activity	Hours allotted	
1st Week		— Organic preparations and IR-Spectral Analysis.		—				—		
2nd Week		—		—				—		
November - 2022 3rd Week	2h / B	1) Acetylation of Amines (Aniline) and phenols (Salicylic acid) (a) using Conventional Method		practical	2h					
Nov 4th Week	2h / B	2) Acetylation of Amines and phenols using Green approach		practical	2h					



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CURRICULAR PLAN - Lecturer-wise

Department :

Name of the Lecturer :

Class :

Paper :

Month & Week	Hours available	Syllabus topic (as per the University)	Additional Input/ Value Addition	Curricular Activity			Co-curricular Activity			Remarks
				Activity	Hours allotted	Whether conducted	If not alternate date	Activity	Hours allotted	
Dec-2022 1st Week	2h / B	3) Benzoylation of Aniline		practical	2h					
Dec 2nd Week	2h / B	4) Benzoylation of Aniline		practical	2h					
Dec 3rd Week	2h / B	5) Nitration of Acetanilide (or) nitrobenzene by conventional method		practical	2h					
Dec 4th Week	2h / B	6) Nitration of Acetanilide (or) nitrobenzene by conventional method		practical	2h					



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CURRICULAR PLAN - Lecturer-wise

Department :			Class :			Paper :							
Name of the Lecturer :			Syllabus topic (as per the University)	Additional Input/ Value Addition	Curricular Activity			Co-curricular Activity				Remarks	
Month & Week	Hours avail- able	Activity			Hours alloted	Whether condu- cted	If not alternate date	Activity	Hours alloted	Whether condu- cted	If not alternate date		
Jan-2023 1st Week	2h B	7) Nitration of Salicylic- acid by Green approach (using ceric ammonium- nitrate)			practical	2h							
Jan 2nd Week	2h B	Nitration of Salicylic- acid by green approach (using C A N)			practical	2h							
Jan 3rd Week	2h B	IR Spectral Analysis of Hydroxyl groups			Draw the spectrum	2h							
Jan 4th Week	2h B	IR spectral Analysis of Carbonyl groups			Spectrum Analysis	2h							


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Month & Week	Hours available	Syllabus topic (as per the University)	Additional Input/ Value Addition	Curricular Activity			Co-curricular Activity			Remarks
				Activity	Hours allotted	Whether conducted	If not alternate date	Activity	Hours allotted	
Feb-2023 1st Week	2h / B	IR - Spectral Analysis of Amino groups		Spectral Analysis	2h					
Feb 2nd Week	2h / B	IR - Spectral Analysis of Aromatic groups		Spectral Analysis	2h					
Feb 3rd Week	2h / B	IR - Spectral Analysis of -OH, -CHO, >C=O, -NH ₂ , -Ar groups		Write the IR Spectral data of some organic compounds	2h					
Feb 4th Week	2h / B	Bonification & Certification of records		Bonification & Certification of records	2h					



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CURRICULAR PLAN - Lecturer-wise

Department :

Name of the Lecturer :

Class :

Paper :

Month & Week	Hours available	Syllabus topic (as per the University)	Additional Input/ Value Addition	Curricular Activity			Co-curricular Activity			Remarks
				Activity	Hours allotted	Whether conducted	If not alternate date	Activity	Hours allotted	
March-2023										
1st Week	2h / B	Bonification & certification of Records		Bonification & certification of Records	2h					
2nd Week		Total hours: 30h								
3rd Week										
4th Week										

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2022-23

SEMESTER - II / LABORATORY COURSE - II (practical)

30 hours / Batch

CURRICULAR PLAN - Lecturer-wise

Department : **CHEMISTRY**

Name of the Lecturer : **D. Adinarayana**

Class : **I MPC - A, CBZ - B**

Paper : **II**

Month & Week	Hours available	Syllabus topic (as per the University)	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		—	<u>Volumetric Analysis</u> 30 hours / 2h/week / Batch	[practical - II]	—			—				
2nd Week		—	—	—				—				
3rd Week	2h / Batch	Acquaintance with lab equipment		Acquaintance with the equipment of Volumetric Analysis	2	Yes						
4th Week	2h / B	Molarity, Normality calculations		Calculations	2	Yes						


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CURRICULAR PLAN - Lecturer-wise

Department :

Name of the Lecturer :

Class :

Paper :

II

Month & Week	Hours available	Syllabus topic (as per the University)	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	
March-23 1st Week	2h B	Estimation of Na_2CO_3 & NaHCO_3 present in a mixture		practical	2	yes						
March-23 2nd Week	2h B	Estimation of Na_2CO_3 & NaHCO_3 present in a mixture		practical	2	yes						
March-23 3rd Week	2h B	Estimation of Na_2CO_3 & NaHCO_3 present in a mixture		practical	2							
March-23 4th Week	2h B	Determination of Fe(II) using KMnO_4 with oxalic acid as primary standard		practical	2							



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CURRICULAR PLAN - Lecturer-wise

Department : **CHEMISTRY**

Name of the Lecturer : **D. Adinarayana**

Class : **MPC - A & CBZ - B**

Paper : **II**

Month & Week	Hours available	Syllabus topic (as per the University)	Additional Input/ Value Addition	Curricular Activity			Co-curricular Activity			Remarks
				Activity	Hours allotted	Whether conducted	If not alternate date	Activity	Hours allotted	
April-23 1st Week	2h Batch	Det. of Fe(II) using KMnO_4 with oxalic acid as primary standard		practical	2					
April-23 2nd Week	2h	Det. of Fe(II) using KMnO_4 with oxalic acid as primary standard		practical	2					
April-23 3rd Week	2h	Det. of Cu(II) using $\text{Na}_2\text{S}_2\text{O}_3$ with $\text{K}_2\text{Cr}_2\text{O}_7$ as primary standard		practical	2					
April-23 4th Week	2h	Det. of Cu(II) using $\text{Na}_2\text{S}_2\text{O}_3$ with $\text{K}_2\text{Cr}_2\text{O}_7$ as primary standard		practical	2					



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CURRICULAR PLAN - Lecturer-wise

Department :

Name of the Lecturer :

Class :

MPC - A & CBZ - B

Paper :

II

Month & Week	Hours available	Syllabus topic (as per the University)	Additional Input/ Value Addition	Curricular Activity			Co-curricular Activity			Remarks
				Activity	Hours allotted	Whether conducted	If not alternate date	Activity	Hours allotted	
May-2023 1st Week	2h	Det. of Cu(II) using $\text{Na}_2\text{S}_2\text{O}_3$ with $\text{K}_2\text{Cr}_2\text{O}_7$ Batch as primary standard		practical	2					
May-23 2nd Week	2h	Estimation of Water of crystallization in Mohr's salt by titrating with KMnO_4		practical	2					
May-23 3rd Week	2h	Estimation of Water of crystallization in Mohr's salt by titrating with KMnO_4		practical	2					
May-23 4th Week	2h	Record Verification & Certification		Record practical verification & Certification	2					



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CURRICULAR PLAN - Lecturer-wise

Department : *Chemistry*

Name of the Lecturer : *D. Adinarayana*

Class : *MPC-A ; CDZ-B*

Paper : *II*

Month & Week	Hours available	Syllabus topic (as per the University)	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	
June-2023 1st Week Batch	2h	Record Verification & Certification		Record Verification & Certification	2h							
2nd Week												
3rd Week												
4th Week												

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2022-23
SEMESTER - IV
Theory - paper - IV { Inorganic, Organic & Physical Chemistry }
60 hours
4h/Week

CURRICULAR PLAN - Lecturer-wise

Department : **CHEMISTRY**
Name of the Lecturer : **D. Adinarayana**
Class : **II B, H - sections**
Paper : **IV**

Month & Week	Hours available	Syllabus topic (as per the University)	Additional Input/ Value Addition	Curricular Activity			Co-curricular Activity			Remarks
				Activity	Hours allotted	Whether conducted	If not alternate date	Activity	Hours allotted	
April-2023 1st Week		<u>Unit - I</u> <u>Organometallic compounds</u> : Definition, classification, Concept of hapticity; 18e rule - electron count method of metal carbonyls (Mono, poly, substituted)	PACET Concepts	class room teaching	4					
April-23 2nd Week		- Gen. methods of prep. of Mono & di metal carbonyls of 3d-series, π -acceptor behaviour of CO ligand, MO of CO, synergistic effect - Evidences by IR frequencies.	Study material	class room teaching	3			Assignment ①	1	
April-23 3rd Week		<u>Unit - II</u> <u>Carbohydrates</u> : occurrence, classification, Constitution & Absolute Configuration of Glucose, Fructose - Determination of ring size.	PPT	Students draw the structures of Carbohydrate	4					
April-23 4th Week		- Interconversions of aldoses & ketoses; Elementary treatment of polysaccharide - starch; Elementary treatment of disaccharides - Maltose, Sucrose, lactose.	charts		03			Assignment ②	1	


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CURRICULAR PLAN - Lecturer-wise

Department :

Name of the Lecturer :

Class :

Paper :

Month & Week		Hours available	Syllabus topic (as per the University)	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	
May-23	1st Week		Unit - III ① <u>Amino acids & proteins</u> : Definition of A.A, classification, Methods of synthesis, Physical properties - Zwitter ion, isoelectric point, chemical properties.			02			Assignment ③ Mid-term ① exams	1			
May-23	2nd Week		Structure & Nomenclature of peptides & proteins. ② <u>Heterocyclic Compounds</u> : Introduction, Definition, Aromatic character & prep. of furan, pyrrole and Thiophene → paul-knorr synthesis			03			Student Seminars	1			
May-23	3rd Week		Chemical properties - ESR - Diels-Alder reaction, Pyridine-structure, Basicity, Aromaticity - Comparison with pyrrole; one method of prep. & properties. Reactivity towards S _N reactions			3			Assignment ④	1			
May-23	4th Week		Unit - IV ① <u>Nitrohydrocarbons</u> : Nomenclature, classification, Structure, Tautomerism, Prep & reactivity of nitroalkanes - Nef reaction,			3			Assignment ⑤	1			

Signature of the Lecturer

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Signature of the Principal

CURRICULAR PLAN - Lecturer-wise

Department :		Class :		Paper :						
Name of the Lecturer :		Syllabus topic (as per the University)	Additional Input/ Value Addition	Curricular Activity			Co-curricular Activity			Remarks
Month & Week	Hours avail- able			Activity	Hours allotted	Whether condu- cted	If not alternate date	Activity	Hours allotted	
June-23 1st Week		② <u>Amines</u> Introduction, classification, Gen. methods of prep. of amine, Properties - physical, Basicity, Distinguish between 1°, 2°, 3°- amines - Hinsberg method.			3			student Seminars 1		
June-23 2nd Week		Gabriel, Hoffmann-Bromamide, Carbonylamine, Mannich Reaction, Hoffmann's exhaustive methylation, Hoffmann & Cope elimination			3			Assignment ⑥ 1		
June-23 3rd Week		- prep. and applications of diazonium salts. <u>Unit-V</u> ① <u>Photochemistry</u> : - Diff. between thermal and photochemical processes, Law of photochemistry - Grotthuss - Proper law, Stark-Einstein law, Quantum Yield - photo chemical reactions - Mechanisms - H_2 & Cl_2 ; H_2 & Br_2 - Jablonki diagram - fluorescence, phosphorescence, photosensitized reactions.			3			Group discussion 1		
June-23 4th Week					3			Assignment ⑦ 1		

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CURRICULAR PLAN - Lecturer-wise

Department :

Name of the Lecturer :

Class :

Paper :

Month & Week	Hours available	Syllabus topic (as per the University)	Additional Input/ Value Addition	Curricular Activity			Co-curricular Activity			Remarks	
				Activity	Hours allotted	Whether conducted	If not alternate date	Activity	Hours allotted		Whether conducted
July-23 1st Week		② <u>Thermodynamics</u> The First law of T.D - Internal energy, Enthalpy, Heat capacities & their relationships, Joule-Thomson effect, Coefficient, Workdone for expansion of perfect gas under isothermal, adiabatic reversible process; Kirchhoff's Equation, second law of T.D - Carnot cycle & Carnot Theorem, Concept of entropy,			3			class room Quiz	1		
July-23 2nd Week						3		Mid term-II Exams	1		
July-23 3rd Week		Entropy changes in reversible, spontaneous and equilibrium processes, 3rd law of T.D, Nernst heat Theorem; Criteria for Spontaneity - Helmholtz & Gibbs free energies.				3		Assignment ⑧	1		
4th Week		Total : 60 hours									



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Semester - IV / Paper - V Theoruf - 60 hours

CURRICULAR PLAN - Lecturer-wise

Department : CHEMISTRY
Name of the Lecturer : D. Adinarayana

Class : II HPC-A, HCIC-D, HCAC-J

Paper : V

Name of the Lecturer: D. S. Chakravarty		Month & Week	Hours available	Syllabus topic (as per the University)	Additional Input/ Value Addition	Curricular Activity			Co-curricular Activity			Remarks	
						Activity	Hours allotted	Whether conducted	If not alternate date	Activity	Hours allotted		Whether conducted
		April 2023 1st Week		<u>Inorganic chemistry</u> <u>Unit-I</u> <u>Coolination chemistry:</u> IUPAC Nomenclature, Isomerism (Structural, Stereo) of C.No. 4 & 6.			04						
		April-23 2nd Week		VB T - IO C & outer O.C, Limitations, CFT - Th & Oh complexes, CFSE; Factors affecting the magnitude of CFSE, Spectrochemical Series.			04						
		April-23 3rd Week		Comparison of CFSE in Th, Oh & Tetragonal, Distortion of Oh geometry, Jahn-Teller distortion - Square planar/ Coordination.			03			Assignment ①	1		
		April-23 4th Week		<u>Unit-II</u> <u>Inorganic Reaction Mechanism:</u> Labile & Inert complexes, Ligand Sub reactions - S_N1 , S_N2 ; Sub reactions in SP-complexes, Trans effect - its applications			03			Group discussion	1		



Signature of the Lecturer



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CURRICULAR PLAN - Lecturer-wise

Department: **CHEMISTRY**

Name of the Lecturer: **D. Adinarayana**

Class: **A, D, J - section**

Paper: **V**

Paper : V												
Class : A, B, C - Section												
Month & Week	Hours available	Syllabus topic (as per the University)	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
May-2023 1st Week		② <u>Stability of Metal Complexes</u> <u>Thermodynamic & Kinetic Stability</u> , Factors affecting stability of metal complexes, Det. of Composition of complex by Job's method & Mole-ratio method. BTC: classification of metal ions according to their action in biological systems, Toxicity of metal ions (Hg, Pb, Cd & As), use of chelating agents in medicine - cisplatin - an anticancer drug, Iron and its applications - Haemoglobin,			03				Mid-term - I Exams	1		
May-2023 2nd Week						03			Assignment ②	1		
May-2023 3rd Week		<u>Myoglobin, storage and transfer of iron.</u> <u>Unit-III</u> <u>Phase Rule</u> : Concept of phase, components, degrees of freedom, Gibbs phase Rule				04						
May-2023 4th Week		<u>Phase diagram of water system</u> , <u>Ag-Ph system</u> , <u>NaCl-water system</u> , (Congruent - Incongruent m.p) <u>Freezing mixtures</u> .				03			Assignment ③	1		

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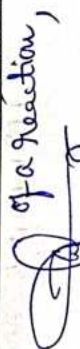
CURRICULAR PLAN - Lecturer-wise

Department : **CHEMISTRY**
 Name of the Lecturer : **D. Adinarayana**

Class :

Paper : **V**

Month & Week	Hours available	Syllabus topic (as per the University)	Additional Input/ Value Addition	Curricular Activity			Co-curricular Activity			Remarks	
				Activity	Hours allotted	Whether conducted	If not alternate date	Activity	Hours allotted		Whether conducted
June-2023 1st Week		<u>Unit-IV</u> <u>Electrochemistry</u> : specific conductance, equivalent & Molar conductance, effect of dilution, Cell constant, Kohlrausch law and its applications, Transport number - Def. & Determination			03			Group discussion	1		
June-2023 2nd Week		by Hittorf method, Debye-Hueland-Onsager equation for strong electrolytes, Conductometric titrations, Electrochemical Cells - Single Electrode potential,			03			student seminars	1		
June-2023 3rd Week		Types of electrodes: Metal-metal ion, gas electrode, inert electrode, redox, metal-metal insoluble salt-salt ion, Det. of emf of the Cell, Nernst eqn, Applications of potentiometric titrations.			03			Assignment (4)	1		
June-2023 4th Week		<u>Unit-V</u> Fuel cells - Basic concepts, examples and applications, <u>Chemical Kinetics</u> : The concept of Reaction Rates, factors affecting Reaction Rates, order & molecularity of a reaction,			03			student seminars	1		



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CURRICULAR PLAN - Lecturer-wise

Department: CHEMISTRY

Name of the Lecturer: D. Adinarayana

Class: IMPC, MCIC & MCAC

Paper: V

Month & Week	Hours available	Syllabus topic (as per the University)	Additional Input/ Value Addition	Curricular Activity			Co-curricular Activity			Remarks	
				Activity	Hours allotted	Whether conducted	If not alternate date	Activity	Hours allotted		Whether conducted
July-2023 1st Week		Derivations of rate equations of zero, 1 st , 2 nd order reactions, Half-life of a reaction, Gen. methods of det. of order of a reaction.			03			Assignment ⑤	1		
July-2023 2nd Week		Concept of activation energy- Arrhenius eq ⁿ , Theory of reaction rates - collision theory and activated complex theory of bimolecular reactions - Comparisons.			03			Mid-term-II Exams	1		
July-2023 3rd Week		Enzyme catalysis - specificity, factors, Inhibitors - lock & key model, Michaelis-Menten equation - derivation, Significance of Michaelis - Menten constant.									
4th Week		Total : 60 hours									

Signature of the Lecturer

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CURRICULAR PLAN - Lecturer-wise

Class : I semester

Paper : Biology of Non chordates

Department : Zoology

Name of the Lecturer : Ravi Babu.S

Additional Input/
Value Addition

Curricular Activity

Co-curricular Activity

Remarks

Month & Week	Hours available	Syllabus topic (as per the University)	Additional Input/ Value Addition	Curricular Activity				Activity	Hours allotted	Whether conducted	If not alternate date	Whether conducted	Hours allotted	Whether conducted	Remarks
1st Week				Activity	Hours allotted	Whether conducted	If not alternate date								
				First year - 1 sem - admissions											
2nd Week															
				Commencement of classes for 1 year (2022-23) admitted batch											
3rd Week	2	Basics of Zoology & characteristic features of life	Broaches of Zoology Collaborative Studies	2	Yes			Collected the information Zoology Subject related other subjects.							
4th Week	4	Principles of taxonomy Binominal nomenclature Rules of Nomenclature	Taxonomical principles cladogram	4	Yes			Write down the 10 animals besides your surrounding with their Scientific names							

First year - 1 sem - admissions

October 22

Commencement of classes for 1 year (2022-23) admitted batch from October 21st - 2022

Basis of Zoology
2 characteristic features of life

Brochure of Zoology
Collaborative Studies
Gather the Zoology related subjects

Collected the information
Zoology Subject related
other subjects.

principles of taxonomy
4 Binominal nomenclature
Rules of Nomenclature

Taxonomical principles
cladogram
4

while down the 10 animals
provides open surrounding
with their Scientific names

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CURRICULAR PLAN - Lecturer-wise

Department: Zoology
 Name of the Lecturer: Ravi BARN-S
 Class: I semester
 Paper: Biology of Nonchordates

Name of the Lecturer : RAVI BABU . S			Class : I semester			Co-curricular Activity				Remarks		
Month & Week	Hours available	Syllabus topic (as per the University)	Additional Input/ Value Addition	Activity	Hours allotted	Whether conducted	If not alternate date	Activity	Hours allotted		Whether conducted	If not alternate date
1st Week	4	Phylum - Protozoa : General characters & classification	univellular multicellular protozoans	Group activity in each student tell on general characters	4		4	Assigned classification of protozoa				
2nd Week	4	Locomotion } Nutrition } in protozoa Reproduction } Elphidium-type study	Comparative protozoan activities Elphidium Economic importance	Describe the visual images of locomotor organelles	4		4	write down the taxonomy showing locomotion organs, example and its function?				
3rd Week	4 2	Elphidium - metagenesis practicals Amoeba Protozoa - Paramoecium Binary fission & conjugation	Alteration of generations of conjugation	Study Amoebae read on the Microspheric & Megalospheric characters			Yes	Assigned Elphidium life history				
4th Week	4	Phylum - Porifera General characters and classification of porifera Skeleton in Sponges	Spongy spicules	Identify the different spicules and skeletal material in sponges			Yes	Collect the different sponges species & do across the world				

November - 22

Siva. R. B. S.
 Signature of the Lecturer


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Signature of the Principal

CURRICULAR PLAN - Lecturer-wise

Department : Zoology
 Name of the Lecturer : Ravi Bhatnagar
 Class : I Semester
 Paper : Biology of Non chordate

Month & Week	Hours available	Syllabus topic (as per the University)	Additional Input/ Value Addition	Curricular Activity			Co-curricular Activity			Remarks
				Activity	Hours allotted	Whether conducted	Activity	Hours allotted	Whether conducted	If not alternate date
1st Week	4	Canal System in Sponges Phylum: Coelenterata General characters & classification Metagenesis in Obelia	Comparative Canal System with current sequence like by students.	4	4	yes	Draw the Comparative Canal Systems in molluscs			
2nd Week	4	Canal System in Sponges poly morphism in Coelenterates Corals & Coral reefs Ctenophora: General characters & evolutionary relationship Practicals - Hydra, Obelia, Euspongia	Corals reefs in the world Specimens & slides	4	4	yes	Collect the information about various Ctenophores in across the world?			
3rd Week	4	Phylum: Platyhelminths General characters & classification Life cycle and pathogenesis of Fasciola Practicals - Aurelia, Physalia, Velella	class divide into groups as per pH classification Specimen & P.H classification character	4	4	yes	Identify and give a brief report about different worms caused to human disease			
4th Week	4	Parasitic adaptation in helminths General characters and classification Life cycle and pathogenesis of Ascaris Practicals - planaria, Larva forms of Fasciola	Nematode worms Specimens / slides	4	4	yes	Assigned parasitic adaptations.			

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December - 22

CURRICULAR PLAN - Lecturer-wise

Department: Zoology Class: I Semester Paper: Biology of Non chordates
 Name of the Lecturer: RAVI BABU.S

Department : Zoology		Name of the Lecturer : RAVI BABU.S		Class : I Semester		Curricular Activity			Co-curricular Activity			Remarks
Month & Week	Hours available	Syllabus topic (as per the University)	Additional Input/ Value Addition	Activity	Hours allotted	Whether conducted	If not alternate date	Activity	Hours allotted	Whether conducted	If not alternate date	
1st Week	4	Phylum: Annelida General characters & classification Vermiculture - Scope, Significance	Coelome formation and Coelome ducts read out - importance of vermicompost	4	Yes		-	Collect the visit near by vermicompost				Vermin Compost importance
2nd Week	2	Ascaris, Dracunculus, Wuchereria		Specimens / Slides								
3rd Week	2											
4th Week	4	Phylum: Arthropoda General characters & classification Vision & respiration in Arthropods Metamorphosis in insect	Infectious diseases caused by vectors	Students are morphological	4	Yes	-	Draw the diagram showing life cycle of Insects.				
	2	Practicals - Nerve, Aphrodisiac, Chaperone										

Practical

Signature of the Lecturer: Ravi Babu.S

Signature of the Dept. H.C. [Signature]

Signature of the Principal

CURRICULAR PLAN - Lecturer-wise

Department: Zoology Name of the Lecturer: Ravi Babu S Class: I Semester Paper: Biology of Non chordates

Name of the Lecturer : RAVI BABU .S			Class : I Semester			Paper : Botany				
Month & Week	Hours available	Syllabus topic (as per the University)	Additional Input/ Value Addition	Curricular Activity			Co-curricular Activity			Remarks
				Activity	Hours allotted	Whether conducted	If not alternate date	Activity	Hours allotted	
1st Week	4	Peripatus - Structure & affinities Social life in bees & termites	Team spirit, Group activity, the Apiculture cage division of labour	Demonstrate the Apiculture cage	4	yes	-	field visit to near by Apiculture unit and submit report on Apiculture including		
2nd Week	4	Phylum Mollusca: General character & classification pearl formation in pelecypoda	Pearl industry	Study groups & read the general character & classification points	4	yes	-	Collected the conch & observe the source of brooding pen and make a note?		
3rd Week	4	Sense organs in Mollusca Echinodermata: General characters and classification	Water Canal System	Student divided in to groups & Sequence of water canal system parts and their importance.			-	Assignment larval forms in Echinodermata		
4th Week	4	practicals - Chiton, Pila, Nautilus, Sepia Larval stages of Echinodermata Hemi chordeata Belonoglossus	Systematic position of hemi chordeata. Larval form.	Study of Belonoglossus with systematic position	4	yes	-	Collect the information and make a report on systematic position of hemi chordeata.		

Signature of the Lecturer: *Ravi Babu S*

Signature of the Dept. I/c: *[Signature]*

Signature of the Principal: *[Signature]*

VI Semester (2022-23) - Commencement of class-
from - 13/03/2023

CURRICULAR PLAN - Lecturer-wise

Department : Zoology

Name of the Lecturer : Ravi Babu's Class : VI Semester Paper : PHT

Name of the Lecturer : KAVI BABU S			Class : VI 2017K280			Additional Input/ Value Addition			Curricular Activity			Co-curricular Activity			Remarks
Month & Week	Hours available	Syllabus topic (as per the University)	Activity	Hours allotted	Whether conducted	If not alternate date	Activity	Hours allotted	Whether conducted	If not alternate date	Activity	Hours allotted	Whether conducted	If not alternate date	
1st Week															
2nd Week		V Sem - Long Term Internship <LTI> < 13/12/2022 - 12/03/2023 >													
3rd Week	4 3	Handling, transport and storage of fresh fish spoilage and post mortem changes													
4th Week	4 3	Principles of preservation													

Mar - 2023

Sivabalan
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Signature of the Principal

CURRICULAR PLAN - Lecturer-wise

Department: Zoology

Name of the Lecturer: RAVI BATHU.S

Class: VI

Semester

Paper: PHT

Month & Week	Hours available	Syllabus topic (as per the University)	Additional Input/ Value Addition	Curricular Activity			Co-curricular Activity			Remarks
				Activity	Hours allotted	Whether conducted	Activity	Hours allotted	Whether conducted	
1st Week	3	Traditional methods of preservation								
	3									
2nd Week	3	Advanced methods of preservation								
	3									
3rd Week	3	Fish products - fish minced meat, fish cake								
	3									
4th Week	3	Fish by-products - fish glue, Chitosan, shark fin								
	3									

Page-23

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CURRICULAR PLAN - Lecturer-wise

Department: Zoology Class: V Semester Paper: PHT

Name of the Lecturer: RAVI BABU.S

Month & Week	Hours available	Syllabus topic (as per the University)	Additional Input/ Value Addition	Curricular Activity			Co-curricular Activity			Remarks
				Activity	Hours allotted	Whether conducted	If not alternate date	Activity	Hours allotted	
1st Week	3	Sanitation in processing plant								
2nd Week	3	Quality control of Fish and fishery products.								
3rd Week										
4th Week										

May - 20

SUMMER VACATION

Sivak. Ravi Babu
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CURRICULAR PLAN - Lecturer-wise

Department : RAVI BABU'S
Name of the Lecturer : ZODIY

Class : VI semester

Paper : PHT

Name of the Lecturer : Zaid Saif			Class : VI Semester		Paper : VI					
Month & Week	Hours available	Syllabus topic (as per the University)	Additional Input/ Value Addition	Curricular Activity			Co-curricular Activity			Remarks
				Activity	Hours allotted	Whether conducted	If not alternate date	Activity	Hours allotted	
1st Week	3	Quality Assurance, Management & Certification								
2nd Week	3									
3rd Week										
4th Week										

PRACTICALS EXAMINATION

Preparation Holiday & Exam end exams

Exams

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