

**S V R K GOVERNMENT DEGREE COLLEGE :: NIDAVOLE**  
**TABLE - A - CURRICULAR PLAN - LECTURER WISE**

NAME OF THE LECTURER : G.RAHUL  
 DEPARTMENT: CHEMISTRY CLASS: IIB.SC(B7C) YEAR: 2022-2023  
 SEMESTER: IV PAPER : IV

SERIAL NUMBER	MONTH & WEEK	HOURS AVAILABLE	SYLLABUS TOPIC	ADDITIONAL INPUT /VALUE ADDITION	CURRICULAR ACTIVITY				CO-CURRICULAR ACTIVITY				REMARKS
					ACTIVITY	HOURS ALLOTTED	WHETHER CONDUCTED	IF NOT, ALTERNATIVE DATE	ACTIVITY	HOURS ALLOTTED	WHETHER CONDUCTED	IF NOT, ALTERNATIVE DATE	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	3rd week	4	OMC: Definition and classification of OMC, concept of hepticity of organic ligands, Metal carbonyls-18 e- rule, electron count of mononuclear, polynuclear and substituted metal carbonyls of 3d series.	OMC properties and synthetic applications	Lecture	4							
	4th week	4	General methods synergic effects of preparation for OMC, p-acceptor behavior of CO, -MO diagrammes.			3			Audio visual quiz	1			
	1st week	4	<u>Carbohydrates</u> : occurrence, classification, constitution of glucose, fructose.	Terminology in carbohydrates	Power point	4							
	2nd week	4	Interconversions, disaccharides.		Digital class	3			Assignment	1			

		Amino acids; Definition, classification, preparation methods, physical properties.	Importance of Amino acids in biological system	Demonstratio n	4						
4th week	4	Chemical properties of Amino acids, structure and nomenclature of peptides, structure of proteins.		Power point Mid1	3 1						
1st week	4	Heterocyclic compounds; Introduction, definition, preparation methods and aromaticity of 5 membered heterocyclic compounds, acidic character of pyrrole- electrophilic substitution at 2,5 position. Halogenation, nitration, and sulphonation under mild conditions -Diels alder reaction in furan, structure aromaticity preparation and properties of 6 membered heterocycles.		Lecture	4						
2nd week	4	Nitrogen compounds; Nomenclature, classification, tautomerism and preparation methods for nitro alkanes and reactivity of nitro alkanes.	Uses and importance of other nitrogen compounds cyanides, isocyan ides	Lecture  Power point	3 3			Stude nt semin ar	1		
4th week	4	Amines classification, preparation methods, physical and chemical properties, distinction between primary, secondary and tertiary amines.		Power point	4			Assign ment	1		
1st week	4	Diazonium salts preparation and synthetic applications		Lecture Mid2	3 1						

Week	4	<u>Photo chemistry</u> : laws of Photo chemistry, Quantum yield ,Jablonski diagram	Applications of fluorescence & phosphorescence processes	Demonstration	4									
3rd week	4	<u>Thermodynamics</u> : First Law of Thermodynamics, Heat capacities and their relationship ,Joule-thomson effect		Power point	3			Student seminar						
4th week	4	Kirchoff 's equation, carnot'S theorem ,entropy changes,second law of Thermodynamics.	Different statements for first law of thermodynamics.	Demonstration	4									
1st week	4	Concept of Entropy, Third law of Thermodynamics, Nernst heat theorem ,Helmholtz and gibb's energies for spontaneity.		Mind mapping	4									
2nd week	4	Revision		Question and answer method	2			Pre final	2					
3rd week	4	Revision		Question and answer method	4									
4th week	4	Revision		Question and answer method	4									

SIGNATURE OF THE LECTURER

SIGNATURE OF THE HEAD OF THE DEPARTMENT

SIGNATURE OF THE PRINCIPAL