

19/27

J.J COLLEGE OF ARTS AND SCIENCE (Autonomous)**DEPARTMENT OF CHEMISTRY****B.Sc. CHEMISTRY**

Proposed Course Structure based on UGC-LOCF and TANSCH

(Choice Based Credit System)

(Applicable for the candidates admitted from academic year 2023-2024 onwards)

SEMESTER-I

Part	Course Code	Courses Title	Hrs/ Week	Credit	Exam Hrs	Marks		Total Marks
						Int	Ext	
Part-I	U1R3TL1	Language Course - I	6	3	3	25	75	100
Part-II	U1R3EL1	English Language Course - I	6	3	3	25	75	100
Part-III	U1R3CHCC1	General Chemistry-I	5	5	3	25	75	100
	U1R3CHCC2P	Quantitative Inorganic Estimation (Titrimetry) and Inorganic Preparation Practical	5	5	3	40	60	100
	U1R3CHDSE1	Mathematics-I	4	3	3	25	75	100
Part-IV	U1R3CHSEC1 (NME-I)	To be opted from other Department (Office Automation)	2	2	3	25	75	100
	U1R3CHFC	Foundation Course (Bridge Chemistry)	2	2	3	25	75	100
			30	23				700

SEMESTER-II

Part	Course Code	Courses Title	Hrs/ Week	Credit	Exam Hrs	Marks		Total Marks
						Int	Ext	
Part-I	U2R3TL2	Language Course-II	6	3	3	25	75	100
Part-II	U2R3EL2	English Language Course - II	6	3	3	25	75	100
Part-III	U2R3CHCC3	General Chemistry-II	5	5	3	25	75	100
	U2R3CHCC4P	Qualitative Organic Analysis and Preparation of Organic compounds Practical	5	5	3	40	60	100
	U2R3CHDSE2	Mathematics-II	4	3	3	25	75	100
Part-IV	U2R3CHSEC2 (NME-2)	To be opted from other department (Advanced Excel)	2	2	3	25	75	100
	U2R3CHSEC3:1/3:2	Cosmetic and Personal Grooming / Entrepreneurial Skills in Chemistry	2	2	3	25	75	100
			30	23				700

E. M. S. S.
28/3/24

Ramesh
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SEMESTER-III								
Part	Course Code	Courses Title	Hrs/ Week	Credit	Exam Hrs	Marks		Total Marks
						Int	Ext	
Part-I	U3R3TL3	Language Course-III	6	3	3	25	75	100
Part-II	U3R3EL3	English Language Course-III	6	3	3	25	75	100
Part-III	U3R3CHCC5	General Chemistry-III	5	5	3	25	75	100
	U3R3CHCC6P	Qualitative Inorganic Analysis Practical	5	5	3	40	60	100
	U3R3CHDSE3	Allied Physics	4	3	3	25	75	100
Part-IV	U3R3CHSEC4:1/ 4:2	Nutrition and Food Science/Forensic Science	2	2	3	25	75	100
	U3R3VE	Value Education	2	2	3	25	75	100
			30	23				700

SEMESTER-IV								
Part	Course Code	Courses Title	Hrs/ Week	Credit	Exam Hrs	Marks		Total Marks
						Int	Ext	
Part-I	U4R3TL4	Language Course-IV	5	3	3	25	75	100
Part-II	U4R3EL4	English Language Course - IV	5	3	3	25	75	100
Part-III	U4R3CHCC7	General Chemistry-IV	5	5	3	25	75	100
	U4R3CHCC8P	Physical Chemistry Practical-1	5	5	3	40	60	100
	U4R3CHDSE4P	Allied Physics Practical - I	4	3	3	40	60	100
Part-IV	U4R3CHSEC5:1/5: 2	Pesticide Chemistry / Instrumental methods of Chemical analysis	2	2	3	25	75	100
	U4R3CHSEC 6:1/ 6:2	Industrial Chemistry / Fundamentals of Spectroscopy	2	2	3	25	75	100
	U4R3ES	Environmental Studies	2	2	3	25	75	100
			30	25				800

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SEMESTER-V

Part	Course Code	Courses Title	Hrs/ Week	Credit	Exam Hrs	Marks		Total Marks
						Int	Ext	
Part-III	U5R3CHCC9	Organic Chemistry-I	5	5	3	25	75	100
	U5R3CHCC10	Inorganic Chemistry-I	5	4	3	25	75	100
	U5R3CHCC11	Physical Chemistry	5	4	3	25	75	100
	U5R3CHCC12P	Physical Chemistry Practical -II	5	4	3	40	60	100
	U5R3CHDSE5:1/5 :2	Polymer Science / Nano Science	5	3	3	25	75	100
	U5R3CHDSE6:1/6 :2	Pharmaceutical Chemistry / Health Chemistry	5	3	3	25	75	100
Part-IV	U5R3CHINT	Internship	-	2	-	-	-	100
			30	25	-	-	-	700

SEMESTER-VI

Part	Course Code	Courses Title	Hrs/ Week	Credit	Exam Hrs	Marks		Total Marks
						Int	Ext	
Part-III	U6R3CHCC13	Organic Chemistry-II	5	4	3	25	75	100
	U6R3CHCC14	Inorganic Chemistry-II	6	4	3	25	75	100
	U6R3CHCC15PW	Project Work	8	4	-	-	-	100
	U6R3CHDSE7:1/7:2	Agricultural Chemistry / Biochemistry	4	3	3	25	75	100
	U6R3CHDSE 8:1/8:2	Chemistry of Everyday life / Soil, Dairy and Leather Chemistry	4	3	3	25	75	100
Part-IV	U6R3CHSEC 7:1/ 7:2	Green Chemistry / Material Chemistry and Nano technology	2	2	3	25	75	100
Part-V	U6R3GS	Gender Studies	1	1	3	25	75	100
		Extension Activities	-	1	-	-	-	-
			30	22				700
		Total		141				4300

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SEMESTER - I

Course Code	Course Title	Hrs./Week	Credit	Exam Hrs.	Marks		Total
					Int.	Ext.	
P1R3CHCC1	Organic Reaction Mechanism-I	7	5	3	25	75	100
P1R3CHCC2	Structure and Bonding in Inorganic Compounds	7	5	3	25	75	100
P1R3CHCC3P	Organic Chemistry Practical	6	4	6	40	60	100
P1R3CHDSE1:1/1:2	Pharmaceutical Chemistry/Nanomaterials and Nanotechnology	5	3	3	25	75	100
P1R3CHDSE2:1/2:2	Molecular Spectroscopy / Electrochemistry	5	3	3	25	75	100
Total		30	20				500

SEMESTER - II

P2R3CHCC4	Organic Reaction Mechanism-II	6	5	3	25	75	100
P2R3CHCC5	Physical Chemistry-I	6	5	3	25	75	100
P2R3CHCC6P	Inorganic Chemistry Practical	6	4	6	40	60	100
P2R3CHDSE3:1/3:2	Medicinal Chemistry/Green Chemistry	4	3	3	25	75	100
P2R3CHDSE4:1/4:2	Bioinorganic Chemistry/Material Science	4	3	3	25	75	100
P2R3CHSEC 1:1/1:2	Preparation of Consumer products / Chemistry in everyday life	4	2	3	25	75	100
Total		30	22				600

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SEMESTER - III

P3R3CHCC7	Organic Synthesis and Photochemistry	5	5	3	25	75	100
P3R3CHCC8	Coordination Chemistry-I	5	5	3	25	75	100
P3R3CHCC9	Physical Chemistry - II	5	5	3	25	75	100
P3R3CHCC10P	Physical Chemistry Practical	5	5	6	40	60	100
P3R3CHDSE 5:1/5:2	Chemistry of natural Products / Pharmacognosy and Phytochemistry	5	3	3	25	75	100
P3R3CHSEC 2:1/ 2:2	Polymer Chemistry / Biomolecules and Heterocyclic compounds	5	2	3	25	75	100
P3R3CHINT	Internship	-	3	-	-	-	100
Total		30	28	-	-	-	700

SEMESTER - IV

P4R3CHCC11	Coordination Chemistry-II	6	5	3	25	75	100
P4R3CHCC12	Analytical Chemistry	6	5	3	25	75	100
P4R3CHCC13PW	Project Work	18	10	-	-	-	100
Total		30	20				300
Grand Total			90				2100

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