

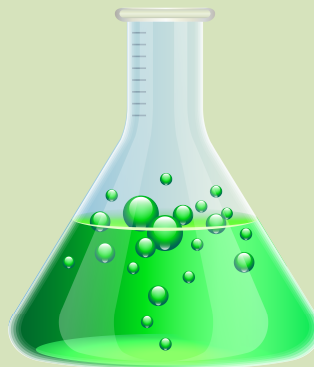
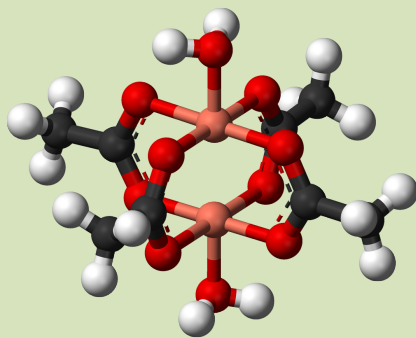
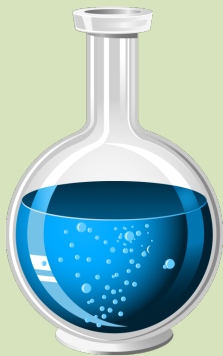


**RISHI BANKIM CHANDRA
COLLEGE FOR WOMEN**

DEPARTMENT OF CHEMISTRY

ACADEMIC CALENDAR

2024-2025



R.B.C. COLLEGE FOR WOMEN

ACADEMIC CALENDAR FOR THE YEAR 2024-2025

SUBJECT: CHEMISTRY (HONOURS)

SUBJECT CODE: CEMA

Sem	Syllabus Module/Unit		Topic	No. of Lectures (Hours)	Teachers	Remarks
1 st Semester (H)	CEMDSC101T	Credits: Theory-03, Practical-02	Unit 1: Atomic Structure and Radioactivity Bonding	15	BC	- Commencement of Semester-I classes July'24 - Puja vacation October'24–November'24 - Semester-I Exam.– December'24 - Winter Recess December'24
			Unit 2: Basics of Organic Chemistry	15	SD/SH	
			Unit 3: Kinetic Theory and Gas	15	SP	
	CEMDSC101P Chemistry LAB		Chemistry Practical	60	SD/BC/ PD	

SUBJECT: CHEMISTRY (GENERAL)

SUBJECT CODE: CEMG

Sem	Syllabus Module/Unit		Topic	No of lectures (Hours)	Teachers	Remarks
1 st Semester (G)	CEMMIN101T/ CEMCOR101T	Credits: Theory-03, Practical-02	Unit 1: Inorganic Chemistry	15	PD	- Commencement of Semester-I classes July'24 - Puja vacation October'24–November'24 - Semester-I Exam.– December'24 - Winter Recess December'24
			Unit 2: Organic Chemistry	15	SD	
			Unit 3: Physical Chemistry	15	SP	
	CEMMIN101P/ CEMCOR101P		Chemistry Practical	60	BC/PD/ SH	

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Sem	Syllabus Module/Unit		Topic	No. of Lectures (Hours)	Teachers	Remarks
2 nd Semester (H)	CEMDSC202T	Credits: Theory-03, Practical-02	Unit 1: Acid-Base Reactions	15	BC	- Commencement of Semester-II classes January'25 - Summer Recess May'25-June'25 - Semester-II Exam. – June'25
			Unit 2: Stereochemistry	15	SD/SH	
			Unit 3: Chemical Kinetics	15	SP	
	CEMDSC202P Chemistry LAB		Chemistry Practical	60	SD/BC/ PD	

SUBJECT: CHEMISTRY (GENERAL)

SUBJECT CODE: CEMG

Sem	Syllabus Module/Unit		Topic	No of lectures (Hours)	Teachers	Remarks
2 nd Semester (G)	CEMMIN202T/ CEMCOR202T	Credits: Theory-03, Practical-02	Unit 1: Inorganic Chemistry	15	PD	- Commencement of Semester-II classes January'25 - Summer Recess May'25-June'25 - Semester-II Exam. – June'25
			Unit 2: Organic Chemistry	15	SD	
			Unit 3: Physical Chemistry	15	SP	
	CEMMIN202P/ CEMCOR202P		Chemistry Practical	60	BC/PD/ SH	

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Sem	Syllabus Module/Unit		Topic	No of lectures (Hours)	Teachers	Remarks
3 rd Semester (Honours)	CEMDSC303T CHEMICAL REACTION: PROPERTIES AND ENERGETICS	Credits: Theory-03, Practical-02	Unit 1: Chemical periodicity (II) and redox reactions	20	BC/PD	Commencement of Semester-III classes July'24 Puja vacation October'24-November'24 Semester-III Exam.– December'24 Winter Recess December'24
			Unit-2: Substitution, Elimination Reactions and Reaction Kinetics	20	SD/SH	
			Unit 3: Chemical Thermodynamics I	20	LM/SP	
	CEMDSC303P Practical		Estimation of concentration of Inorganic compounds	20	BC/PD	
			Organic	20	SD/SH	
			Physical Experiment	20	SP	

SUBJECT: CHEMISTRY (GENERAL)

SUBJECT CODE: CEMG

Sem	Syllabus Module/Unit		Topic	No of lectures (Hours)	Teachers	Remarks
3 rd Semester (G)	CEMMIN303T/ CEMCOR303T	Credits: Theory-03, Practical-02	Unit-1: Inorganic Chemistry 3	20	PD/BC	Commencement of Semester-III classes July'24 Puja vacation October'24-November'24 Semester-III Exam. – December'24 Winter Recess December'24
			Unit-2: Organic Chemistry 3	20	SH/SD	
			Unit-3: Physical Chemistry 3	20	SP	
	CEMMIN303P/CE MCOR303P		Practical	60	PD/SH/SP	

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4 th Semester (Honours)	CEMDSC404T	Credits: Theory-03, Practical-02	Unit I: Radioactivity	20	PD	Commencement of Semester-IV classes January'25 Summer Recess May'25-June'25 Semester-IV Exam. – June'25
			Unit II: Chemical Bonding-I	20	BC	
			Unit III: Chemical bonding II	20	BC/PD	
	CEMDSC404P		Practical	60	PD/BC	
	CEMDSC405T ORGANIC CHEMISTRY 1	Credits: Theory-03, Practical-02	Unit-1: Stereochemistry II	15	SD/SH	
			Unit-2: Chemistry of alkanes, alkenes, alkynes	15	SH/SD	
			Unit-3: Aromatic Substitution Reactions and Phenols	15	SD/SH	
			Unit-4: Alcohols, Ethers, Carboxylic acids and their derivatives	15	SH/SD	
	CEMDSC405P Practical		Qualitative Analysis of Single Solid Organic Compounds	60	SD/SH	
	CEMDSC406T PHYSICAL CHEMISTRY 1	Credits: Theory-03, Practical-02	Unit I: Chemical Thermodynamics-II	15	SP	
			Unit II: Chemical and Ionic Equilibrium	15	SP	
			Unit III: Transport Phenomenon	15	SP	
			Unit IV: Quantum Mechanics I	15	SP	
	CEMDSC406P		Practical	60	SP	
	CEMDSC407T MOLECULAR SPECTROSCOPY	Credits: 04	Unit 1: NMR Spectroscopy	15	SD/SH	
			Unit 2: UV & IR Spectroscopy	15	SH/SD	
			Unit 3: Rotational Spectroscopy	15	SP	
			Unit 4: Vibrational & Raman Spectroscopy	15	SP	
	TUTORIAL	Credit: 01		30	SD/BC/SP	

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SUBJECT: CHEMISTRY (GENERAL)

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Sem	Syllabus Module/Unit		Topic	No of lectures (Hours)	Teachers	Remarks
4 th Semester (General)	CEMCOR404T	Credits: Theory-03, Practical-02	Unit-1: Inorganic Chemistry 4	20	PD	Commencement of Semester-IV classes January'25 Summer Recess May'25-June'25 Semester-IV Exam.- June'25
			Unit-2: Organic Chemistry 4	20	SD/SH	
			Unit-3: Physical Chemistry 4	20	SP	
	CEMCOR404P		Practical	60	PD/SH/SP	

SUBJECT: CHEMISTRY (GENERAL)

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Sem	Syllabus Module/Unit		Topic	No of lectures (Hours)	Teachers	Remarks
5 th Semester (G)	CEMGDSE01T	Credits: Theory-04, Practical-02	Polymer chemistry	60	SH/SP	- Commencement of Semester-V classes July'24 - Puja vacation October'24 – November'24 - Semester-V Exam.- December'24 - Winter Recess December'24
	CEMGDSE01P		Polymer chemistry Lab	60	SH	
	CEMSSEC002 Skill Enhancement Course	Credits: 02	Analytical Clinical Biochemistry	30	SD	

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Sem	Syllabus Module/Unit		Topic	No. of Lectures (Hours)	Teachers	Remarks
5th Semester (Honours)	CEMACOR11T Inorganic Chemistry-IV	Credits: Theory-02 04, Practical-02	Coordination chemistry-II	36	BC	• Commencement of Semester-V classes July'24 • Puja vacation October'24–November'24 • Semester-V Exam. – December'24 • Winter Recess December'24
			Chemistry of d- and f- block elements	24	PD	
	CEMACOR11P Inorganic Chemistry-IV Lab		Inorganic Chemistry-IV Lab	60	BC/PD	
	CEMACOR12T Organic Chemistry-V	Credits: Theory-04, Practical-02	Carbocycles and Heterocycles	16	SD	
			Cyclic Stereochemistry	10	SH	
			Pericyclic reactions	08	SD	
			Carbohydrates	14	SH	
			Biomolecules	12	SD	
	CEMACOR12P Organic Chemistry-V Lab		Organic Chemistry-V Lab	60	SD	
	CEMADSE01T Advanced Physical Chemistry	Credits: Theory-02 04, Practical-02	Crystal Structure	20	SP	
			Statistical Thermodynamics	20	AP	
			Special Selected topics	20	SP/AP	
	CEMADSE01P Advanced Physical Chemistry Lab		Advanced Physical Chemistry Lab	60	SP	
	CEMADSE02T Analytical methods in chemistry	Credits: Theory-04, Practical-02	Qualitative and quantitative aspects of analysis	05	SP	
			Optical methods of analysis	25	SP	
			Thermal methods of analysis	05	PD	
			Electroanalytical methods	10	PD	
			Separation techniques	15	PD	
	CEMADSE02P Analytical methods in chemistry Lab		Analytical methods in chemistry Lab	60	SD/PD/BC	

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6 th Semester (Honours)	CEMACOR13T Inorganic Chemistry-V	Credits: Theory-04, Practical-02	Bioinorganic chemistry	24	PD	• Commencement of Semester-VI classes January'25 • Summer Recess May'25-June'25 • Semester-VI Exam. – June'25	
			Organometallic Chemistry	24	BC		
			Reaction Kinetics and Mechanism	12	BC		
			CEMACOR13P Inorganic Chemistry-V Lab	Inorganic Chemistry-V Lab	60		BC/PD
	CEMACOR14T Physical Chemistry-IV				Credits: Theory-04, Practical-02		Molecular Spectroscopy
			Photochemistry	15			SP/AP
		Surface Phenomenon	20	SP/AP			
	CEMACOR14P Physical Chemistry-IV Lab	Physical Chemistry-IV Lab	60	SH			
	CEMADSE04T Green Chemistry	Credits: Theory-04, Practical-02	Introduction to Green Chemistry	04	SD		
			Principles of Green chemistry and designing A chemical synthesis	30	SD		
			Examples of Green Synthesis	16	SH		
			Future Trends in Green Chemistry	10	SD		
			CEMADSE04P Green Chemistry Lab	Green Chemistry Lab	60		SD
	CEMADSE05T Inorganic Materials of Industrial Importance	Credits: Theory-04, Practical-02	Silicate Industries	16	BC		
			Fertilizers	08	BC		
			Surface Coatings	10	PD		
			Batteries	06	PD		
			Alloys	10	BC		
			Catalysis	06	PD		
			Chemical explosives	04	BC		
	CEMADSE05P Inorganic Materials of Industrial Importance Lab		Inorganic Materials of Industrial Importance Lab	60	PD/BC		

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6 th Semester (General)	CEMGDSE04T	Credits: Theory-04, Practical-02	Section-A: Inorganic Chemistry – 4	30	BC/PD	• Commencement of Semester-VI classes January'25 • Summer Recess May'25-June'25 • Semester-VI Exam. – June'25
			Section-B: Organic Chemistry – 4	30	SD/SH	
	CEMGDSE04P		Section-A: Inorganic Chemistry – 4 Lab	30	PD/BC	
			Section-B: Organic Chemistry – 4 Lab	30	BC	

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Department of Chemistry
Rishi Bankim Chandra College for Women