SEETHALAKSHMI RAMASWAMI COLLEGE

(Autonomous)

Affiliated to Bharathidasan University

Tiruchirappalli

Accredited with A+ by NAAC (4th Cycle)

SYLLABUS

Revised CBCS - OBE – BASED Curriculum Structure

SRC CHEMISTRY

Diamond Jubilee Year

1957-2017

PG AND RESEARCH DEPARTMENT OF CHEMISTRY

PG PROGRAMME

(2021 ONWARDS)

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M.Sc. CHEMISTRY
Revised CBCS -OBE -BASED Curriculum Structure
(For Students admitted from June 2021 onwards)

SEM	COURSE	COURSE CODE	COURSE TITLE	HRS	CRD	INT/ EXT	CIA	SE	TOTAL
I	Core Course – I		Inorganic Chemistry - I	6	5	EXT	25	75	100
	Core Course – II		Organic Chemistry - I	6	5	EXT	25	75	100
	MBE – I		Chemistry of Biomolecules, Catalysis and Photokinetics	6	4	EXT	25	75	100
	Core Practical - I		Practical-I: Inorganic Mixture Analysis, Colorimetric	3	-	-	-	-	-
	Core Practical – II		Estimation and Complex Preparation Practical-II: Quantitative Estimations of Mixture of Metal Ions	3	-	-	-	-	-
	Core Practical - III		Practical-III: Organic Mixture Analysis and Single Stage	3	-	-	-	-	-
	Core Practical – IV		Preparation Practical-IV: Organic Quantitative Analysis and Double Stage Preparation	3	-	-	-	-	-
			Total	**30**	**14**	**-**	**-**	**-**	**300**

II	Core Course – III		Organic Chemistry - II	6	5	EXT	25	75	100
	Core Course – IV		Physical Chemistry - I	6	5	EXT	25	75	100
	Core Practical - I		Practical-I:	3	4	EXT	40	60	100
	Core Practical – II		Inorganic Mixture Analysis, Colorimetric Estimation and Complex Preparation Practical-II: Quantitative Estimations of Mixture of Metal Ions	3	4	EXT	40	60	100
	Core Practical - III		Practical-III:	3	4	EXT	40	60	100
	Core Practical – IV		Organic Mixture Analysis and Single Stage Preparation Practical-IV: Organic Quantitative Analysis and Double Stage Preparation	3	4	EXT	40	60	100
	NME*		Offered by other Departments	6	4	INT	25	75	100
			Total	**30**	**30**	**-**	**-**	**-**	**700**
	* Offered by the Department to the students of other disciplines.								
III	Core Course – V		Physical Chemistry - II	6	5	EXT	25	75	100
	Core Course – VI		Physical Methods in Chemistry - I	6	6	EXT	25	75	100
	Core Practical – V		Practical-V: Non Electrical Experiments in Physical Chemistry	6	4	EXT	40	60	100
	Core Practical – VI		Practical-VI: Electrical Experiments in Physical Chemistry	6	4	EXT	40	60	100
	MBE – II		Chemistry of Supramolecules and Natural Products	6	4	EXT	25	75	100
			Total	**30**	**23**	**-**	**-**	**-**	**500**

IV	Core Course – VII		Inorganic Chemistry - II	6	5	EXT	25	75	100
	Core Course – VIII		Physical Methods in Chemistry - II	6	6	EXT	25	75	100
	MBE – III		Medicinal Chemistry	6	4	EXT	25	75	100
	MBE – IV		Advanced techniques and Computers in Chemistry	6	4	EXT	25	75	100
			Project	6	4	EXT	20	80	100
			Total	**30**	**23**	**-**	**-**	**-**	**500**
	Grand Total			**120**	**90**	**-**	**-**	**-**	**2000**

TOTAL DISTRIBUTION OF HOURS, CREDITS & MARKS FOR PG PROGRAMME			
SEMESTER	**HOURS**	**CREDITS**	**TOTAL MARKS**
I	30	14	300
II	30	30	700
III	30	23	500
IV	30	23	500
TOTAL	**120**	**90**	**2000**

LIST OF MAJOR BASED ELECTIVE COURSES

SEM	GROUP	COURSE CODE	COURSE TITLE
I	I		**(A) Chemistry of Biomolecules, Catalysis and Photokinetics** **(B)** Applied Electrochemistry
III	II (Choose any one course)		**(A) Chemistry of Supramolecules and Natural products** **(B)** Green Chemistry
IV	III (Choose any two courses)		**(A) Medicinal Chemistry** **(B)** Fundamentals of Analytical Techniques, Sensors and Clinical Equipments **(C) Advanced techniques and Computers in Chemistry** **(D)** Chemistry of Nano science and Nano technology

NON MAJOR ELECTIVE COURSE OFFERED TO OTHER DEPARTMENTS

SEM	GROUP	COURSE CODE	COURSE TITLE
II	I		Agricultural and Industrial Chemistry

BEYOND CURRICULUM EXTRA COURSES OFFEREDLIST OF VALUE ADDED COURSES

SEM	COURSE	COURSE CODE	COURSE TITLE
I	I		Analytical Techniques in Chemistry
III	II		Advanced Topics in Chemistry

CERTIFICATE COURSES OFFERED TO OTHER DEPARTMENTS

Certificate course on

INDUSTRIAL CHEMISTRY

SEM	COURSE	COURSE CODE	COURSE TITLE
II	I		Agro Based Industries
IV	II		Chemistry of Materials