



SEETHALAKSHMI RAMASWAMI COLLEGE

(Autonomous)

Affiliated to Bharathidasan University

Tiruchirappalli

Accredited with A+ by NAAC (4th Cycle)



B.Sc. Biochemistry

Revised CBCS - OBE - BASED Curriculum Structure

(For students admitted from 2021 onwards)

SEM	PART	COURSE	COURSE CODE	COURSE TITLE	HRS	CRD	INT/ EXT	CIA	SE	TOT
I	I	Language-I		Course-I	6	3	EXT	25	75	100
	II	English-I		Course-I	6	3	EXT	25	75	100
	III	Core Course-I		Chemistry of Biomolecules	7	5	EXT	25	75	100
	III	Core Practical-I		Practical-I: Microscopic and Biomolecule Analysis	2	-	INT	-	-	-
	III	First Allied Course-I		General chemistry	4	3	EXT	25	75	100
	III	First Allied Practical-I		Practical-I: Biophysical chemistry	2	-	-	-	-	-
	III	Cross Disciplinary Course (CDC) (Biochemistry & Biotechnology)		Stem cell Biology	1	-	EXT	-	-	-
	IV	VBE		Value Based Education	2	2	EXT	25	75	100
	TOTAL					30	16			

SEM	PART	COURSE	COURSE CODE	COURSE TITLE	HRS	CRD	INT/ EXT	CIA	SE	TOT
II	I	Language-II		Course-II	6	3	EXT	25	75	100
	II	English-II		Course-II	6	3	EXT	25	75	100
	III	Core Course-II		Cell Biology	5	5	EXT	25	75	100
	III	Core Practical-I		Practical-I: Microscopic and Biomolecule Analysis	2	4	INT	40	60	100
	III	First Allied Course-II		Biophysical chemistry	4	3	EXT	25	75	100
	III	First Allied Practical-I		Practical-I: Biophysical chemistry	2	3	INT	40	60	100
	III	Cross Disciplinary Course (CDC) (Biochemistry & Biotechnology)		Stem cell Biology	3	4	EXT	25	75	100
	IV	EVS		Environmental Studies	2	2	EXT	25	75	100
	TOTAL					30	27			

SEM	PART	COURSE	COURSE CODE	COURSE TITLE	HRS	CRD	INT/ EXT	CIA	SE	TOT
III	I	Language-III		Course-III	6	3	EXT	25	75	100
	II	English-III		Course-III	6	3	EXT	25	75	100
	III	Core Course-III		Techniques in Biochemistry	6	5	EXT	25	75	100
	III	Core Practical-II		Practical-II: Biochemical techniques and Enzyme analysis	2	-	INT	-	-	-
	III	Second Allied Course-I		Offered by the Department of Biotechnology	4	3	EXT	25	75	100
	III	Second Allied Practical-I		Practical-I: Offered by the Department of Biotechnology	2	-	INT	-	-	-
	IV	NME-I		Offered by other Departments	2	2	EXT	25	75	100
	IV	SBE-I		Herbal Medicine	2	2	EXT	25	75	100
	TOTAL					30	18			

SEM	PART	COURSE	COURSE CODE	COURSE TITLE	HRS	CRD	INT/EXT	CIA	SE	TOT
IV	I	Language-IV		Course-IV	6	3	EXT	25	75	100
	II	English-IV		Course-IV	6	3	EXT	25	75	100
	III	Core Course-IV		Enzymology	6	5	EXT	25	75	100
	III	Core Practical-II		Practical-II: Biochemical techniques and Enzyme analysis	2	4	INT	40	60	100
	III	Second Allied Course-II		Offered by the Department of Biotechnology	4	3	EXT	25	75	100
	III	Second Allied Practical-I		Practical-I: Offered by the Department of Biotechnology	2	3	INT	40	60	100
	IV	NME-II		Offered by other Departments	2	2	EXT	25	75	100
	IV	SBE-II		Drug Biochemistry	2	2	EXT	25	75	100
TOTAL					30	25				800

SEM	PART	COURSE	COURSE CODE	COURSE TITLE	HRS	CRD	INT/EXT	CIA	SE	TOT
V	III	Core Course-V		Molecular Biology	6	5	EXT	25	75	100
	III	Core Course-VI		Metabolism	6	5	EXT	25	75	100
	III	Core Course-VII		Genetics	6	5	EXT	25	75	100
	III	Core Practical-III		Practical-III: Phytochemical analysis	3	-	INT	-	-	-
	III	MBE-I		Plant and Microbial Biochemistry	5	4	EXT	25	75	100
	IV	SBE-III		Nutritional Biochemistry	2	2	EXT	25	75	100
	IV	SSD		Soft Skill Development	2	2	INT	25	75	100
TOTAL					30	23				600

SEM	PART	COURSE	COURSE CODE	COURSE TITLE	HRS	CRD	INT/EXT	CIA	SE	TOT
VI	III	Core Course-VIII		Endocrinology	5	5	EXT	25	75	100
	III	Core Course-IX		Clinical Biochemistry	5	5	EXT	25	75	100
	III	Core Practical-III		Practical-III: Phytochemical Analysis	2	4	INT	40	60	100
	III	Core Practical-IV		Practical-IV: Blood and Urine Analysis	4	4	INT	40	60	100
	III	MBE-II		Immunology	5	4	EXT	25	75	100
	III	MBE-III		Human Physiology	5	4	EXT	25	75	100
	III	Project		Group Project	3	3	EXT	20	80	100
	V	GS		Gender Studies	1	1	INT	25	75	100
	V	Extension		Extension Activity	-	1	INT	-	-	100
				TOTAL	30	31				900
				GRAND TOTAL	180	140				4200

ALLIED COURSES

(Offered to the Students of Biochemistry)

SEM	PART	COURSES	COURSE CODE	COURSE TITLE	HRS	CREDIT	INT /EXT	CIA	SE	TOT
III	III	Allied Course-I		Course-I: Basic Biochemistry	4	3	EXT	25	75	100
IV	III	Allied Course-II		Course-II: Cell Organelles	4	3	EXT	25	75	100
		Allied Practical		Practical-I: Analysis of Biomolecules	4	3	INT	40	60	100
TOTAL					12	9				300

MAJOR BASED ELECTIVES COURSES

SEM	PART	GROUP	COURSE CODE	COURSE TITLE	HRS	CRD	INT/ EXT	CIA	SE	TOT
V	III	Group – I (Choose any one Course)		Course-I: Plant and Microbial Biochemistry/ Basic Bioinformatics	5	4	EXT	25	75	100
VI	III	Group – II (Choose any one Course)		Course-II: Immunology/ Microbiology	5	4	EXT	25	75	100
VI	III	Group – III (Choose any one Course)		Course-III: Human Physiology /Biostatistics	5	4	EXT	25	75	100
TOTAL					15	12				300

SKILL BASED ELECTIVES

SEM	PART	GROUP	COURSE CODE	COURSES	HRS	CRD	INT/ EXT	CIA	SE	TOT
III	IV	Group – I (Choose any One Course)		Course–I: Herbal Medicine/First Aid Management	2	2	EXT	25	75	100
IV	IV	Group – II (Choose any One Course)		Course–II: Drug Biochemistry/ Hospital Management	2	2	EXT	25	75	100
V	IV	Group – III (Choose any One Course)		Course–III: Nutritional Biochemistry / Industrial Biochemistry	2	2	EXT	25	75	100
TOTAL					6	6				300

NON MAJOR BASED ELECTIVES

SEM	PART	COURSE CODE	COURSE TITLE	HRS	CRD	INT/ EXT	CIA	SE	TOT
III	IV		NME–I: Biomolecules	2	2	EXT	25	75	100
IV	IV		NME–II: Diagnosis of diseases	2	2	EXT	25	75	100
TOTAL				4	4				200