

J.J College of Arts and Science(Autonomous)
Department of Biochemistry
BSc Biochemistry
Proposed Course Structure under autonomous status
Under choice based credit system
(Applicable for the candidates Admitted from the academic year 2023-2024 Onwards)

Sl. No.	Course Category	Course Code	Course	Credits	Hours /Week	Marks		
						CIA	ESE	Total
Semester I								
1	Part - I	U1R3TL1/HL1/FL1	Language - I (Tamil/Hindi/French)	3	6	25	75	100
2	Part - II	U1R3EL1	Language - II (English)	3	6	25	75	100
3	Part - III	U1R3BCCC1	Biomolecules	5	5	25	75	100
4		UIR3BCCC2P	Practical I – Covering CC1	5	5	40	60	100
5		U1R3BCDSE1	Chemistry-I	3	4	25	75	100
6	Part - IV	U1R3CSSEC1	(NME - 1) Office Automation	2	2	25	75	100
7		U1R3BCFC	Foundation Course	2	2	25	75	100
Total				23	30	-	-	700

S.No.	Course Category	Course Code	Course	Credits	Hours /Week	Marks		
						CIA	ESE	Total
Semester II								
1	Part - I	U2R3TL2/ HL2/FL2	Language - I (Tamil/Hindi/French)	3	6	25	75	100
2	Part - II	U2R3EL2	Language - II (English)	3	6	25	75	100
3	Part - III	U2R3BCCC3	Cell Biology	5	5	25	75	100
4		U2R3BCCC4P	Practical II - (Covering CC3)	5	5	40	60	100
5		U2R3BCDSE2	Chemistry-II	3	4	25	75	100
6	Part - IV	U2R3CASEC2	(NME -- 2) Computer Skill Development Course	2	2	25	75	100
7		U2R3BCSEC 3:1 / 3:2	Biomedical Instrumentation/ First Aid	2	2	25	75	100
Total				23	30	-	-	700

Dr. V. Ravi Kumar
by 10/1/24

Dr. S. Sivasankari Ranga

Dr. J. Chinmayi
4/3/24

Dr. M. Singaram
4/3/24

Sl.No.	Course Category	Course Code	Course	Credits	Hours /Week	Marks		
						CIA	ESE	Total
Semester III								
1	Part - I	U3R3TL3/ HL3/FL3	Tamil	3	6	25	75	100
2	Part - II	U3R3EL3	English	3	6	25	75	100
3	Part - III	U3R3BCCC5	Biochemical Techniques	5	5	25	75	100
4		U3R3BCCC6P	Practical - III (Covering CC5)	5	5	40	60	100
5		U3R3BCDSE3:1/ U3R3BCDSE3:2	Fundamentals of Biology/ Genetics	3	4	25	75	100
6	Part - IV	U3R3VE	Value Education	2	2	25	75	100
7		U3R3BCSEC4:1/ U3R3BCSEC4:2	Medical Laboratory technology/ Microbiology	2	2	25	75	100
Total				23	30	-	-	700

Sl.No.	Course Category	Course Code	Course	Credits	Hours /Week	Marks		
						CIA	ESE	Total
Semester IV								
1	Part - I	U4R3TL4/HL4/FL4	Tamil	3	5	25	75	100
2	Part - II	U4R3EL4	English	3	5	25	75	100
3	Part - III	U4R3BCCCC7	Clinical Biochemistry	5	5	25	75	100
4		U4R3BCCCC8P	Practical – IV (Covering CC7)	5	5	40	60	100
5		U4R3BCDSE4: 1 / 4:2	Immunology/ Life Style Disorders	3	4	25	75	100
6	Part - IV	U4R3BCSEC5:1 / 5:2	Biostatistics/Nutrition	2	2	25	75	100
7		U4R3BCSEC6:1 / 6:2	Medical Coding/Biophysical Chemistry	2	2	25	75	100
8		U4R3ES	Environmental Studies	2	2	25	75	100
Total				25	30			800

Dr. V. Ravi Kumar

Dr. S. Sivasangari Raniya

Dr. J. Chinnappa

Dr. M. Sivasankar

Sl.No.	Course Category	Course Code	Course	Credits	Hours /Week	Marks		
						CIA	ESE	Total
Semester V								
1	Part - III	U5R3BCCC9	Enzymology	5	5	25	75	100
2		U5R3BCCC10	Intermediary Metabolism	4	5	25	75	100
3		U5R3BCCC11	Human Physiology	4	5	25	75	100
4		U5R3BCCC12P	Practical – V (Covering CC9)	4	5	40	60	100
5		U5R3BCDSE5:1 / 5:2	Biochemical Pharmacology/ Bioethics and patenting	3	5	25	75	100
6		U5R3BCDSE6:1 / 6:2	Bio-entrepreneurship/ Pain relief formulation and cosmetics	3	5	25	75	100
7	Part - IV	U5R3BCINT	Internship	2	-	-	-	100
Total				25	30			700

Sl.No.	Course Category	Course Code	Course	Credits	Hrs/ Week	Marks		
						CIA	ESE	Total
Semester VI								
1	Part - III	U6R3BCCC13	Molecular Biology	4	6	25	75	100
2		U6R3BCCC14	Plant Biochemistry and Plant Therapeutics	4	5	25	75	100
3		U6R3BCCC15PW	Project Work	4	6	-	-	100
4		U6R3BCDSE7:1/ 7:2	Bioinformatics/ Tissue culture	3	5	25	75	100
5		U6R3BCDSE8:1 / 8:2	Biotechnology/Research Methodology	3	5	25	75	100
6	Part - IV	U6R3BCSEC7:1 / 7:2	Basics of forensic science/ Microbial Techniques	2	2	25	75	100
7	Part - V	U6R3GS	Gender Studies	1	1	25	75	100
		-	Extension Activity	1	-	-	-	-
Total				22	30	-	-	700
Grand Total				141	-	-	-	4300

Dr. V. Ravi Kumar

Dr. S. Sivasangari Ramya

Dr. J. Chinnai

Dr. M. Sivasama

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M.Sc. Biochemistry
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Sl.No.	Course Code	Course	Credits	Hours /Week	Marks		
					CIA	ESE	Total
Semester I							
1	P1R3BCCC1	Basics of Biochemistry	5	7	25	75	100
2	P1R3BCCC2	Biochemical and Molecular Biology Techniques	5	7	25	75	100
3	P1R3BCCC3P	Practical-I(Covering CC1)	4	6	40	60	100
4	P1R3BCDSE1	Microbiology	3	5	25	75	100
5	P1R3BCDSE2	Scientific Writing and Communication	3	5	25	75	100
Total			20	30			500

Sl.No.	Course Code	Course	Credits	Hours/ Week	Marks		
					CIA	ESE	Total
Semester II							
1	P2R3BCCC4	Enzymology	5	6	25	75	100
2	P2R3BCCC5	Cellular Metabolism	5	6	25	75	100
3	P2R3BCCC6P	Practical II - (Covering CC4, CC5)	4	6	40	60	100
4	P2R3BCDSE3	Biostatistics and Data Science	3	4	25	75	100
5	P2R3BCDSE4	Biosafety, Lab Safety and IPR	3	4	25	75	100
6	P2R3BCSEC1	Bioinformatics	2	4	25	75	100
Total			22	30			600

Dr. N. K. Kulkarni
4/13/24

Dr. S. Sivasangari
4/13/24

Dr. J. Chinnai
4/13/24

Dr. M. Sankar
4/13/24

Sl.No.	Course Code	Course	Credits	Hours /Week	Marks		
					CIA	ESE	Total
Semester III							
1	P3R3BCCC7	Clinical Biochemistry	5	6	25	75	100
2	P3R3BCCC8	Molecular Biology	5	6	25	75	100
3	P3R3BCCC9	Immunology	5	6	25	75	100
4	P3R3BCCC10P	Practical III (Covering CC7 & CC8)	5	6	40	60	100
5	P3R3BCDSE5:1/5:2	Nutritional Biochemistry/ Biochemical Toxicology	3	3	25	75	100
6	P3R3BCSEC2:1/2:2	Molecular basis of diseases & therapeutic Strategies/ Developmental Biology	2	3	25	75	100
7	P3R3BCINT	Internship	3	-	-	-	100
Total			28	30			700

Sl.No.	Course Code	Course	Overall Credits	Total Contact Hours/Week	Marks		
					CIA	ESE	Total
Semester IV							
1	P4R3BCCC11	Industrial Microbiology	5	6	25	75	100
2	P4R3BCCC12	Pharmaceutical Biochemistry	5	6	25	75	100
3	P4R3BCCC13PW	Project Work	10	18	-	-	100
Total			20	30			300
Grand Total			90	120			2100

Dr. V. Navin Kumar
4/13/24

Dr. S. Simangari Ranya
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