

J.J. College of Arts and Science (Autonomous)

Department of Microbiology

Proposed Course Structure based on TANSCH and UGC - LOCF

(Choice Based Credit System)

(Applicable for the Candidates admitted from academic year 2023-2024 Onwards)

B.Sc. Microbiology

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	U1R3MBCC1	Fundamentals of Microbiology and Microbial Diversity	5	5	25	75	100
4		UIR3MBCC2P	Practical I – Covering CC1	5	4	40	60	100
5		U1R3MBDSE1	Basic and Clinical Biochemistry	3	5	25	75	100
6	Part - IV	U1R3CSSEC1	(NME - 1) Office Automation	2	2	25	75	100
7		U1R3MBFC	Bridge Microbiology	2	2	25	75	100
Total				23	30	-	-	700
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	U2R3MBCC3	Microbial Physiology and Metabolism	5	5	25	75	100
4		U2R3MBCC4P	Practical II - (Covering CC3)	5	5	40	60	100
5		U2R3MBDSE2	Bioinstrumentation	3	4	25	75	100
6	Part - IV	U2R3CASEC2	(NME - 2) Computer Skill Development Course	2	2	25	75	100
7		U2R3MBSEC 3:1 / 3:2	Sericulture / Veterinary Microbiology	2	2	25	75	100
Total				23	30	-	-	700
Semester III								
1	Part - I	U3R3TL3/HL3/F L3	Language – I (Tamil/Hindi/French)	3	6	25	75	100
2	Part - II	U3R3EL3	Language - II (English)	3	6	25	75	100
3	Part - III	U3R3MBCC5	Immunology	5	5	25	75	100
4		U3R3MBCC6P	Practical - III (Covering CC5)	5	5	40	60	100
5		U3R3MBDSE3	Biostatistics	3	4	25	75	100
6	Part - IV	U3R3MBSEC4:1 / 4:2	Microbial Inoculants / Aquaculture	2	2	25	75	100
7		U3R3VE	Value Education	2	2	25	75	100
Total				23	30	-	-	700

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Semester IV								
1	Part - I	U4R3TL4/HL4/F L4	Language - I (Tamil/Hindi/French)	3	5	25	75	100
2	Part - II	U4R3EL4	Language - II (English)	3	5	25	75	100
3	Part - III	U4R3MBCC7	Medical Microbiology	5	5	25	75	100
4		U4R3MBCC8P	Practical – IV (Covering CC7)	5	5	40	60	100
5		U4R3MBDSE4P	Biostatistics - Practical	3	4	40	60	100
6	Part - IV	U4R3MBSEC5:1 / 5:2	Vermitechnology / Apiculture	2	2	25	75	100
7		U4R3MBSEC6:1 / 6:2	Medical Lab Technology / Vaccinology	2	2	25	75	100
8		U4R3ES	Environmental Studies	2	2	25	75	100
Total				25	30	-	-	800
Semester V								
1	Part - III	U5R3MBCC9	Food and Dairy Microbiology	5	5	25	75	100
2		U5R3MBCC10	Environmental and Agriculture Microbiology	4	5	25	75	100
3		U5R3MBCC11	Molecular Biology & Microbial Genetics	4	5	25	75	100
4		U5R3MBCC12P	Practical - V (Covering CC9 & CC10)	4	5	40	60	100
5		U5R3MBDSE5:1 / 5:2	Bioinformatics / Biosafety and Bioethics	3	5	25	75	100
6		U5R3MBDSE6:1 / 6:2	Microbial Biotechnology / Microbial Marketable Products	3	5	25	75	100
7	Part - IV	U5R3MBINT	Internship*	2	-	-	-	100
Total				25	30	-	-	700
Semester VI								
1	Part - III	U6R3MBCC13	Industrial Microbiology	4	6	25	75	100
2		U6R3MBCC14P	Practical – VI (Covering CC11 & CC13)	4	5	40	60	100
3		U6R3MBCC15P W	Project Work	4	6	-	-	100
4		U6R3MBDSE7:1 / 7:2	rDNA Technology / Microbial Ecology	3	5	25	75	100
5		U6R3MBDSE8:1 / 8:2	Virology / Pharmaceutical Microbiology	3	5	25	75	100
6	Part - IV	U6R3MBSEC7:1 / 7:2	Mushroom Technology / Good Laboratory Practices	2	2	25	75	100
7	Part - V	U6R3GS	Gender Studies	1	1	25	75	100
		-	Extension Activity	1	-	-	-	-
			Extra Credit Online Course - MOOCs	(4)				
Total				22	30	-	-	700
Grand Total				141				4300

* Internship during Semester - IV Summer Vacation. The Credits shall be awarded in Semester - V

Statement of Marks.

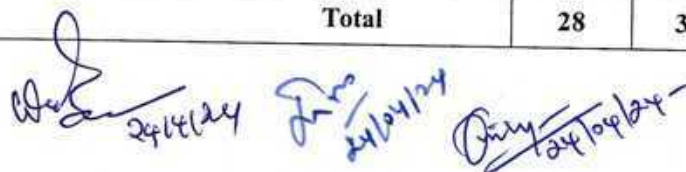
P. S. Jeyaraj
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M.Sc. Microbiology

Sl.No.	Course Code	Course	Credits	Hours/ Week	Marks		
					CIA	ESE	Total
Semester I							
1	P1R3MBCC1	General Microbiology & Microbial Diversity	5	7	25	75	100
2	P1R3MBCC2	Immunology, Immunomics & Microbial Genetics	5	7	25	75	100
3	P1R3MBCC3P	Practical - I (Covering CC1 & CC2)	4	6	40	60	100
4	P1R3MBDSE 1:1 / 1:2 / 1:3	General Biochemistry / Health & Hygiene / Microalgal Technology	3	5	25	75	100
5	P1R3MBDSE 2:1 / 2:2 / 2:3	Bioinstrumentation / Herbal Technology & Cosmetic Microbiology / Essentials of Laboratory Management and Biosafety	3	5	25	75	100
Total			20	30			500
Semester II							
1	P2R3MBCC4	Medical Bacteriology and Mycology	5	6	25	75	100
2	P2R3MBCC5	Medical Virology and Parasitology	5	6	25	75	100
3	P2R3MBCC6P	Practical II - (Covering CC4, CC5)	4	6	40	60	100
4	P2R3MBDSE 3:1 / 3:2 / 3:3	Epidemiology / Microbial Biotechnology / Bioremediation	3	4	25	75	100
5	P2R3MBDSE 4:1 / 4:2 / 4:3	Bioinformatics / Nanobiotechnology/ Clinical Research and Clinical Trails	3	4	25	75	100
6	P2R3MBSEC 1:1 / 1:2	Vermitechnology / Mushroom Technology	2	4	25	75	100
Total			22	30			600
Semester III							
1	P3R3MBCC7	Microbial Physiology	5	6	25	75	100
2	P3R3MBCC8	Food and Industrial Microbiology	5	6	25	75	100
3	P3R3MBCC9	Environmental & Agriculture Microbiology	5	6	25	75	100
4	P3R3MBCC10P	Practical III (Covering CC7, CC8 & CC9)	5	6	40	60	100
5	P3R3MBDSE 5:1/5:2/5:3	Biosafety, Bioethics and IPR/ Molecular Taxonomy and Phylogeny/ Water Conservation and Water Treatment	3	3	25	75	100
6	P3R3MBSEC 2:1/2:2	Organic Farming and Biofertiliser Technology / Clinical Biochemistry	2	3	25	75	100
7	P3R3MBINT	Internship*	3	-	-	-	100
Total			28	30			700



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Semester IV							
1	P4R3MBCC11	Recombinant DNA Technology	5	6	25	75	100
2	P4R3MBCC12	Research Methodology	5	6	25	75	100
3	P4R3MBCC13PW	Project Work	10	18	-	-	100
4	-	Extension Activity	1	-			
		Extra Credit Online Course - MOOCs	(4)				
Total			21	30			300
Grand Total			91				2100

* Internship during Semester – II Summer Vacation. The Credits shall be awarded in Semester - III

Statement of Marks.

 24/04/24
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