

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

Proposed Course Structure based on TANSCH and UGC - LOCF (Choice Based Credit System)

(Applicable for the Candidates admitted from the academic year 2026-2027 Onwards)

B.Sc. Microbiology

Sl. No.	Course Category	Course Code	Course	Credits	Hours/ Week	Marks		
						CIA	ESE	Total
Semester I								
1	Part - I	U1R4TL1/HL1/FL1	Language Course - I	3	6	30	70	100
2	Part - II	U1R4EL1	English Language Course - I	3	6	30	70	100
3	Part - III	U1R4MBCC1	Fundamentals of Microbiology	5	5	30	70	100
4		U1R4MBCC2P	Major Practical – I (Covering CC1)	4	5	40	60	100
5		U1R4MBAC1	Allied - Biochemistry	3	3	30	70	100
6		U1R4MBAC2P	Allied Practical – I (Covering AC1)	3	3	40	60	100
7	Part - IV	U1R4_GEC1	To be opted from other Department	2	2	30	70	100
Total				23	30	-	-	700
Semester II								
1	Part - I	U2R4TL2/HL2/FL2	Language Course - II	3	6	30	70	100
2	Part - II	U2R4EL2	English Language Course - II	3	6	30	70	100
3	Part - III	U2R4MBCC3	Microbial Physiology and Metabolism	5	5	30	70	100
4		U2R4MBCC4P	Major Practical – II (Covering CC3)	4	5	40	60	100
5		U2R4MBAC3	Allied - Biostatistics	3	3	30	70	100
6		U2R4MBAC4P	Allied Practical – II (Covering AC3)	3	3	40	60	100
7	Part - IV	U2R4_GEC2	To be opted from other Department	2	2	30	70	100
Total				23	30	-	-	700
Semester III								
1	Part - I	U3R4TL3/HL3/FL3	Language Course - III	3	5	30	70	100
2	Part - II	U3R4EL3	English Language Course - III	3	5	30	70	100
3	Part - III	U3R4MBCC5	Immunology	5	5	30	70	100
4		U3R4MBCC6P	Major Practical – III (Covering CC5)	4	5	40	60	100
5		U3R4MBAC5	Allied - Biotechnology	3	4	30	70	100
6	Part - IV	U3R4MBSEC1:1 /1:2	Vermitechnology / Microbial Inoculants	2	2	30	70	100
7		U3R4VE	Value Education	2	2	30	70	100
8	Part - V	U3R4HW	Health and Wellness	1	2	-	-	100
Total				23	30	-	-	800

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(Dr. P. Jeevan)

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(Dr. K. Suresh Kumar)

C. G.
(C. Ganapathy)

Semester IV								
1	Part - I	U4R4TL4/HL4/FL4	Language Course - IV	3	5	30	70	100
2	Part - II	U4R4EL4	English Language Course - IV	3	5	30	70	100
3	Part - III	U4R4MBCC7	Medical Microbiology	5	6	30	70	100
4		U4R4MBCC8P	Major Practical – IV (Covering – CC7)	4	5	40	60	100
5		U4R4MBAC6	Allied - Bioinformatics	3	5	30	70	100
6	Part - IV	U4R4MBSEC2:1 / 2:2	Medical Lab Technology / Vaccinology	2	2	30	70	100
7		U4R4MBSLC1	Online Course (SWAYAM-MOOC's / SWAYAM Plus/ NPTEL/ COURSERA)	2	-	-	-	100
8		U4R4ES	Environmental Studies	2	2	30	70	100
Total				24	30	-	-	800
Semester V								
1	Part - III	U5R4MBCC9	Food and Dairy Microbiology	5	5	30	70	100
2		U5R4MBCC10	Environmental and Agriculture Microbiology	5	5	30	70	100
3		U5R4MBCC11	Microbial Genetics and Molecular Biology	5	5	30	70	100
4		U5R4MBCC12P	Major Practical – V (Covering – CC9 & CC10)	4	5	40	60	100
5		U5R4MBDSE1:1 / 1:2	Bioinstrumentation / Virology	3	5	30	70	100
6	Part - IV	U5R4MBINT	Internship	2	-	-	-	100
7		U5R4MBSEC3:1 / 3:2	Mushroom Technology / Good Laboratory Practices	2	3	30	70	100
8		U5R4MBSLC2:1 / 2:2	Emerging and Re-emerging Diseases / Antimicrobials and Resistance	2	-	50	50	100
9		U5R4IDM	Introduction to Disaster Management	2	2	30	70	100
Total				30	30	-	-	900
Semester VI								
1	Part - III	U6R4MBCC13	Industrial Microbiology	5	5	30	70	100
2		U6R4MBCC14P	Major Practical – VI (Covering CC11 & CC13)	4	5	40	60	100
3		U6R4MBCC15PW	Project Work	5	6	-	-	100
4		U6R4MBDSE2:1 / 2:2	Microbial Biotechnology / Pharmaceutical Microbiology	3	5	30	70	100
5		U6R4MBDSE3:1 / 3:2	Genetic Engineering / Biosafety and Bioethics	3	5	30	70	100
6	Part - IV	U6R4MBVAC	Spirulina Cultivation	2	2	-	-	100
7		U6R4GS	Gender Studies	2	2	30	70	100
	Part - V		Extension Activity	1	-	-	-	-
Total				25	30	-	-	700
Grand Total				148				4600

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

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M. D.
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