

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

J.J. Nagar, Sivapuram Post, Pudukkottai – 622 422

(Re-Accredited by NAAC – 4th Cycle)

Affiliated to Bharathidasan University, Tiruchirappalli

PG and Research Department of Microbiology

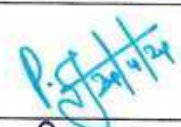
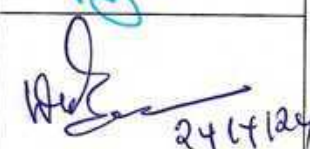
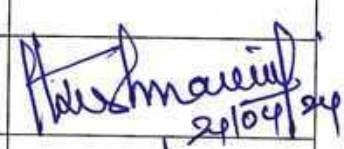
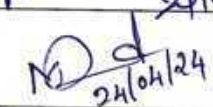
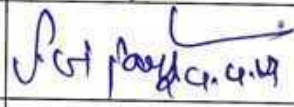
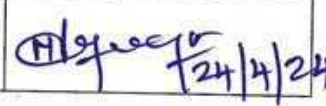
Minutes of the Board of Studies Meeting

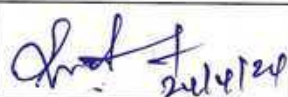
Meeting No: 08

Date : 24.04.2024

Time : 10.00 a.m.

The Meeting of the Board of Studies in Microbiology (U.G. and P.G.) for the seventh revision of the curricula for **III to VI Semester – UG and III & IV Semester – PG** for the Students admitted in 2023-2024 onwards, was conducted at 10.00 a.m. on Wednesday, **24.04.2024**, at PG and Research Department of Microbiology, J.J. College of Arts and Science (Autonomous), Pudukkottai. The following Members are present in the meeting.

Sl. No.	Name	Designation	Signature
1.	Dr.P.Jeevan Assistant Professor and Head Department of Microbiology	Chairman	
2.	Dr.D.Dhanasekaran Professor, Department of Microbiology, Bharathidasan University, Tiruchirappalli	University Nominee	
3.	Dr.N.Sivakumar Assistant Professor, Department of Molecular Microbiology, Madurai Kamaraj University, Madurai.	Subject Expert	
4.	Dr.C.Karthikeyan Assistant Professor Department of Microbiology & Biotechnology, Thiyagarajar College Madurai	Subject Expert	
5.	Ms.R.Krishnaveni Assistant Professor	Faculty Member	
6.	Dr.M.Poornima Assistant Professor	Faculty Member	
7.	Ms.S.VijayaSamoondeeswari Assistant Professor	Faculty Member	
8.	Dr.M.Anjugam Assistant Professor	Faculty Member	

9.	Dr.K.Surendirakumar Assistant Professor	Faculty Member	
10.	Dr.K.Srinivasan Adjunct Faculty, National Institute of Food Technology, Entrepreneurship and Management (NIFTEM), Pudukkottai Road, Thanjavur.	Representative from Industry	ABSENT
11.	Ms.K.Parvatham Ph.D. Research Scholar, Department of Microbiology, Bharathidasan University, Tiruchirappalli	Alumni	ABSENT

The Chairman, Dr.P.Jeevan chaired the meeting and welcomed all the members to the eighth BoS Meeting. After the brief introduction, the following resolutions were discussed and passed.

RESOLUTIONS

1. In his notification No: 1616, dated 10.08.2021, the Chief Secretary, Department of Higher Education, Government of Tamil Nadu, has given the Autonomous Colleges, the freedom to retain / reframe their syllabi, Course Structure etc., in keeping with their perceptions on Institutional / local needs.
2. The College Council at its meeting held on 13.03.2024 resolved that our Institution will gratefully accept the academic freedom and empower the Boards of Studies either to retain or to reframe their Curriculum for various Programmes under CBCS and UGC- LOCF.
3. However, the Course Structure for the U.G. & P.G. Programmes at Institutional level will have to follow a uniform pattern with minor variations depending on the discipline specific needs.
4. It is Resolved to modify and follow a total of 43 courses, 4300 marks and 141 credits for the U.G. Programmes and 21 courses, 2100 marks and 90 credits for the P.G. Programmes.
5. The Revised Syllabus has been implemented from the Academic Year 2023 – 2024 onwards. In the previous Boards of Studies meeting, the Syllabus for first two Semesters have been passed. Now in the light of the Government Communication, cited in Point No. 1, the Chairman of the Boards of Studies have introduced some changes in the Syllabus for Semester I and Semester II. Such modifications are approved and passed by this Board.

6. The Course Structure mentioned in Point No: 4 for U.G.& P.G. Programmes have already been approved and passed by the Board of studies in 03.05.2023.

Distribution of Courses - U.G.

Sl.No.	Part	Courses	No. of Courses	No. of Credits	Marks
1.	I	Language Courses	4	12	400
2.	II	English Courses	4	12	400
3.	III	Core Courses	8	37	800
4.		Core Practical	6	28	600
5.		Project Work	1	04	100
6.		Discipline Specific Elective Courses	8	24	800
7.	IV	Internship	1	02	100
8.		Skill Enhancement Courses	7	14	700
9.		Value Education	1	02	100
10.		Environmental Studies	1	02	100
11.		Foundation Course	1	02	100
12.	V	Gender Studies	1	01	100
13.		Extension Activity	-	01	-
Total			43	141	4300

Distribution of Courses - P.G.

Sl.No.	Types of the Courses	No. of Courses	No. of Credits	Marks
1.	Core Courses	12	58	1200
2.	Project Work	01	10	100
3.	Discipline Specific Elective Courses	05	15	500
4.	Internship	01	03	100
5.	Skill Enhancement Courses	02	04	200
Total		21	90	2100

7. In the present revision and modification, the General instructions on Curriculum Design, Course Structure, Uniformity of standards etc., given by the UGC - LOCF, AICTE, NAAC, TANSCHÉ and the Parent University have been scrupulously followed.

8. Following the suggestion given by the Honorable members of the Academic Council in its last meeting, a course on Gender Studies has been included.
9. Resolved to include various online courses like SWAYAM - MOOCs with extra credits. The credits thus earned will be reflected in the Cumulative Mark Statement.
10. Resolved to have the following **15 Core Courses (listed) in the 6 semesters** of UG

Sl. No.	Course Code	Course Name	Remarks
Semester I			
1.	U1R3MBCC1	Fundamentals of Microbiology and Microbial Diversity	Contents changed
2.	U1R3MBCC2P	Practical I – Covering CC1	Retained
Semester II			
3.	U2R3MBCC3	Microbial Physiology and Metabolism	Retained
4.	U2R3MBCC4P	Practical II - (Covering CC3)	Retained
Semester III			
5.	U3R3MBCC5	Immunology	Retained
6.	U3R3MBCC6P	Practical - III (Covering CC5)	Retained
Semester IV			
7.	U4R3MBCC7	Medical Microbiology	Retained
8.	U4R3MBCC8P	Practical – IV (Covering CC7)	Retained
Semester V			
9.	U5R3MBCC9	Food and Dairy Microbiology	Contents changed
10.	U5R3MBCC10	Environmental and Agriculture Microbiology	Contents changed
11.	U5R3MBCC11	Molecular Biology & Microbial Genetics	Contents changed
12.	U5R3MBCC12P	Practical - V (Covering CC9 & CC10)	Retained
Semester VI			
13.	U6R3MBCC13	Industrial Microbiology	Retained
14.	U6R3MBCC14P	Practical – VI (Covering CC11 & CC13)	Retained
15.	U6R3MBCC15PW	Project Work	Newly Introduced

11. Resolved to have the following **08 Discipline Specific Electives (listed) in the 6 semesters** for UG

Sl. No.	Course Code	Course Name	Remarks
Semester I			
1.	U1R3MBDSE1	Basic and Clinical Biochemistry	Newly Introduced
Semester II			
2.	U2R3MBDSE2	Bioinstrumentation	Retained

Semester III			
3.	U3R3MBDSE3	Biostatistics	Retained
Semester IV			
4.	U4R3MBDSE4P	Biostatistics – Practical	Retained
Semester V			
5.	U5R3MBDSE5:1	Bioinformatics	Retained
6.	U5R3MBDSE5:2	Biosafety and Bioethics	Newly Introduced
7.	U5R3MBDSE6:1	Microbial Biotechnology	All the 5 Contents changed
8.	U5R3MBDSE6:2	Microbial Marketable Products	Newly Introduced
Semester VI			
9.	U6R3MBDSE7:1	rDNA Technology	Newly Introduced
10.	U6R3MBDSE7:2	Microbial Ecology	Retained
11.	U6R3MBDSE8:1	Virology	Newly Introduced
12.	U6R3MBDSE8:2	Pharmaceutical Microbiology	Retained

12. Resolved to have the following **07 Skill Enhancement Courses (listed)** in the **6 semesters** for UG

Sl. No.	Course Code	Course Name	Remarks
Semester I			
1.	U1R3MBSEC1	(NME - 1) Social and Preventive Medicine(Offered to other Department)	Newly Introduced
Semester II			
2.	U2R3MBSEC2	(NME - 2) Nutrition & Health Hygiene (Offered to other Department)	Newly Introduced
3.	U2R3MBSEC 3:1	Sericulture	Newly Introduced
4.	U2R3MBSEC 3:1	Veterinary Microbiology	Retained
Semester III			
5.	U3R3MBSEC4:1	Microbial Inoculants	Retained
6.	U3R3MBSEC4:2	Aquaculture	Newly Introduced
Semester IV			
7.	U4R3MBSEC5:1	Vermitechnology	Retained
8.	U4R3MBSEC5:2	Apiculture	Newly Introduced
9.	U4R3MBSEC6:1	Medical Lab Technology	Retained
10.	U4R3MBSEC6:2	Vaccinology	Newly Introduced
Semester VI			
11.	U6R3MBSEC7:1	Mushroom Technology	Retained
12.	U6R3MBSEC7:2	Good Laboratory Practices	Retained

13. Resolved to have the following **13Core Courses (listed) in the 4 semesters** of PG

Sl. No.	Course Code	Course Name	Remarks
Semester I			
1.	P1R3MBCC1	General Microbiology & Microbial Diversity	Retained
2.	P1R3MBCC2	Immunology, Immunomics & Microbial Genetics	Newly Introduced
3.	P1R3MBCC3P	Practical - I (Covering CC1 & CC2)	Retained
Semester II			
4.	P2R3MBCC4	Medical Bacteriology and Mycology	Newly Introduced
5.	P2R3MBCC5	Medical Virology and Parasitology	Newly Introduced
6.	P2R3MBCC6P	Practical II - (Covering CC4, CC5)	Newly Introduced
Semester III			
7.	P3R3MBCC7	Microbial Physiology	Retained
8.	P3R3MBCC8	Food & Industrial Microbiology	Newly Introduced
9.	P3R3MBCC9	Environmental & Agriculture Microbiology	Retained
10.	P3R3MBCC10P	Practical III (Covering CC7, CC8 & CC9)	Retained
Semester IV			
11.	P4R3MBCC11	Recombinant DNA Technology	Retained
12.	P4R3MBCC12	Research Methodology	Retained
13.	P4R3MBCC13PW	Project Work	Retained

14. Resolved to have the following **05Discipline Specific Elective (listed) in the 4 semesters**for PG

Sl. No.	Course Code	Course Name	Remarks
Semester I			
1.	P1R3MBDSE 1:1	General Biochemistry	Retained
2.	P1R3MBDSE 1:2	Health & Hygiene	Newly Introduced
3.	P1R3MBDSE 1:3	Microalgal Technology	Newly Introduced
4.	P1R3MBDSE 2:1	Bioinstrumentation	Newly Introduced
5.	P1R3MBDSE 2:2	Herbal Technology & Cosmetic Microbiology	Newly Introduced
6.	P1R3MBDSE 2:3	Essentials of Laboratory Management and Biosafety	Newly Introduced
Semester II			
7.	P2R3MBDSE 3:1	Epidemiology	Newly Introduced
8.	P2R3MBDSE 3:2	Microbial Biotechnology	Retained
9.	P2R3MBDSE 3:3	Bioremediation	Newly Introduced

10.	P2R3MBDSE 4:1	Bioinformatics	Retained
11.	P2R3MBDSE 4:2	Nanobiotechnology	Retained
12.	P2R3MBDSE 4:3	Clinical Research and Clinical Trails	Newly Introduced
Semester III			
13.	P3R3MBDSE 5:1	Biosafety, Bioethics and IPR	Retained
14.	P3R3MBDSE5:2	Molecular Taxonomy and Phylogeny	Retained
15.	P3R3MBDSE5:3	Water Conservation and Water Treatment	Newly Introduced

15. Resolved to have the following **02Skill Enhancement Courses(listed)** in the 4 semestersfor PG

Sl. No.	Course Code	Course Name	Remarks
Semester I			
1.	P2R3MBSEC 1:1	Vermitechnology	Newly Introduced
2.	P2R3MBSEC 1:2	Mushroom Technology	Newly Introduced
Semester II			
3.	P3R3MBSEC2:1	Organic Farming and Biofertiliser Technology	Newly Introduced
4.	P3R3MBSEC2:2	Clinical Biochemistry	Newly Introduced

16. Microbial Ecology – U6R3MBDSE7:2 – Contents changed in Unit I, Unit II and Unit III.
17. Discipline Specific Elective - Diagnostic Microbiology – U6R3MBDSE8:1 – is replaced with Virology.
18. Skill Enhancement Course - Clinical Biochemistry – U4R3MBSEC6:1 - is replaced with Vaccinology.
19. Internship for B.Sc. Microbiology will be during the summer vacation of Semester IV. The Credits shall be awarded in the statement of Marks for Semester V.
20. Food and Dairy Microbiology and Fermentation Technology were combined into Food and Industrial Microbiology – P3R3MBCC8.
21. Research Methodology – P4R3MBCC12 is included as New Course.
22. Organic Farming and Biofertilizer Technology – P3R3MBSEC2:1 – contents were changed for all the five units.
23. Internship for M.Sc. Microbiology will be during the summer vacation of Semester II. The Credits shall be awarded in the statement of Marks for Semester III.
24. The Course Structure and Distribution of Marks (UG and PG) is also passed.

25. The Course structure and syllabi for the following have been passed in the respective Boards of Studies.

- i. Part I- Tamil/Hindi/French/Sanskrit.
- ii. Part 2- English.
- iii. Value Education syllabus passed in BoS- Tamil' for Tamil Medium and BoS- English for English Medium.
- iv. Environmental Science syllabus passed in the BoS - Biotechnology.
- v. Gender Studies syllabus passed from the BoS - Tamil.
- vi. Biostatistics syllabus passed in the BoS - Mathematics.

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.

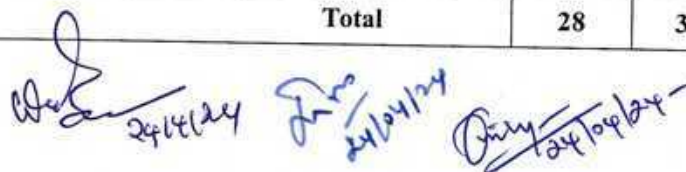
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J.J. College of Arts and Science (Autonomous)
Department of Microbiology

Proposed Course Structure based on TANSCH and UGC - LOCF
(Choice Based Credit System)
(Applicable for the Candidates admitted from academic year 2023-2024 Onwards)

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
 24/04/24
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