



**THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN (AUTONOMOUS),
Sivakasi**

(Affiliated to Madurai Kamaraj University, Reaccredited with "A" Grade by NAAC,
College with Potential for Excellence by UGC & Mentor Institution under UGC PARAMARSH)

NAAC SSR Cycle IV (2015-2020)

1.1. CURRICULUM DESIGN AND DEVELOPMENT

1.1.2. REVISION OF SYLLABUS

**PERCENTAGE OF SYLLABUS REVISION
2020 AND LATER**



**THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN (AUTONOMOUS),
SIVAKASI – 626 123.**

(Affiliated to Madurai Kamaraj University, Re-accredited with A Grade by NAAC,
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DEPARTMENT OF MICROBIOLOGY
PERCENTAGE OF SYLLABUS REVISION
M.SC MICROBIOLOGY
2020 AND LATER

THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN (AUTONOMOUS),
SIVAKASI.
SIVAKASI.
DEPARTMENT OF MICROBIOLOGY
B.SC MICROBIOLOGY – MDMB
(For those who have joined in June 2020 and later)

Total Number of Courses having changes :22

Total Number of Courses : 23

Percentage of Revision : 95.6%

Signature of the HOD

Signature of the Principal

Dr. T. Palaneeswari
PRINCIPAL
The Standard Fireworks
Rajaratnam College
for Women,
SIVAKASI.



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DEPARTMENT OF MICROBIOLOGY
PERCENTAGE OF SYLLABUS REVISION
M.SC MICROBIOLOGY
2020 AND LATER

THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN, (AUTONOMOUS)
SIVAKASI
M.Sc Microbiology- Allotment of Hours and Credits
(for those who joined in 2020 and later)

Subjects	I Semester	II Semester	III Semester	IV Semester	Total Credits
Core courses:					
Paper I	5 (4)	5 (4)	5 (4)	6 (5)	70
Paper II	5(4)	5(4)	5(4)	6 (5)	
Paper III	5(4)	5(4)	5(4)	-	
Lab I	6(3)	6(3)	6(3)	6 (4)	
Lab II	3 (2)	3 (2)	3(2)	-	
Project and Viva Voce	-	-	-	6 (5)	
Total	24(17)	24(17)	24(17)	24 (19)	
Electives:	6(5)	6(5)	6(5)	6(5)	20
Total	30 (22)	30 (22)	30 (22)	30 (24)	90

Signature of HOD

Signature of Principal

Dr. T. Palanivesari
PRINCIPAL

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DEPARTMENT OF MICROBIOLOGY
PERCENTAGE OF SYLLABUS REVISION
M.SC MICROBIOLOGY
2020 AND LATER

**THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN (AUTONOMOUS),
SIVAKASI**
(For those who have joined in 2020 and later)
M.Sc. Microbiology Programme Scheme

Semester	Course Code	Course Title	Teaching Hours Per Week	Credits	Duration of Exam (Hours)	Marks Allotted		
						Internal	External	Total
I	MDMB11	Core Courses Bacteriology	5	4	3	40	60	100
	MDMB12	Chemistry of Biomolecules	5	4	3	40	60	100
	MDMB13	Essentials of Biotechnology	5	4	3	40	60	100
	MDMB1L1	Practical I	6	3	3	50	50	100
	MDMB1L2	Practical II	3	2	3	50	50	100
	MDMB1E1/ MDMB1E2	Elective Course I Developmental Biology/ Bioinstrumentation	6	5	3	40	60	100
Total			30	22				600
II	MDMB21	Core Courses Clinical Immunology	5	4	3	40	60	100
	MDMB22	Intermediary Metabolism	5	4	3	40	60	100
	MDMB23	Fermentation Technology	5	4	3	40	60	100
	MDMB2L1	Practical III	6	3	3	50	50	100
	MDMB2L2	Practical IV	3	2	3	50	50	100
	MDMB2E	Elective Course II (Offered by other Departments) Bio fertilizer	6	5	3	40	60	100
Total			30	22				600
Field visit mandatory for the course- MDMB2L2								
III	MDMB31	Core Courses Aquatic Microbiology	5	4	3	40	60	100
	MDMB32	Microbial Genetics & Molecular Biology	5	4	3	40	60	100
	MDMB33	Agro-technology	5	4	3	40	60	100
	MDMB3L1	Practical V	6	3	3	50	50	100
	MDMB3L2	Practical VI	3	2	3	50	50	100
	MDMB3E1/ MDMB3E2	Elective Course III Ecology & Bioremediation / Food Process Technology	6	5	3	40	60	100
Total			30	22				600
IV	MDMB41	Diagnostic Microbiology	6	5	3	40	60	100
	MDMB42	Computational Biology	6	5	3	40	60	100
	MDMB4L	Practical VII	6	4	5	50	50	100




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DEPARTMENT OF MICROBIOLOGY
PERCENTAGE OF SYLLABUS REVISION
M.SC MICROBIOLOGY
2020 AND LATER

MDMB4E1/ MDMB4E2	Elective Course IV Research Methodology & Biostatistics/ Genomics & Proteomics	6	5	3	40	60	100
MDMB4P	Project and viva voce	6	5				100
	Total	30	24				500


Signature of HOD


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NAAC SSR Cycle IV (2015-2020)

1.1. CURRICULUM DESIGN AND DEVELOPMENT

1.1.2. REVISION OF SYLLABUS

**PERCENTAGE OF SYLLABUS REVISION
2017 AND LATER**



**THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN (AUTONOMOUS),
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DEPARTMENT OF MICROBIOLOGY
PERCENTAGE OF SYLLABUS REVISION
M.SC MICROBIOLOGY
2017 AND LATER

**THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN (AUTONOMOUS),
SIVAKASI.**

DEPARTMENT OF MICROBIOLOGY:
M.SC MICROBIOLOGY – HLMB
(For those who have joined in June 2017 and later)

Total Number of Courses having changes :10

Total Number of Courses : 20

Percentage of Revision : 50%

Signature of the HOD

T. Palaneswari
Signature of the Principal
Dr. T. Palaneswari
PRINCIPAL
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DEPARTMENT OF MICROBIOLOGY
PERCENTAGE OF SYLLABUS REVISION
M.SC MICROBIOLOGY
2017 AND LATER

THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN, (AUTONOMOUS)

SIVAKASI

M.Sc Microbiology- Allotment of Hours and Credits
(for those who joined in 2017 and later)

Subjects	I Semester	II Semester	III Semester	IV Semester	Total Credits
Core courses:					
Paper I	6 (5)	6 (5)	6 (5)	6 (5)	
Paper II	6 (4)	6 (4)	6 (4)	6 (5)	
Paper III	6 (4)	6 (4)	6 (4)	--	
Lab	6 (4)	6 (4)	6 (4)	6 (4)	
Project and Viva Voce	-	-	-	6 (5)	
Total	24(17)	24(17)	24(17)	24 (19)	70
Electives:	6(5)	6(5)	6(5)	6(5)	20
Total	30 (22)	30 (22)	30 (22)	30 (24)	90


Signature of HOD


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DEPARTMENT OF MICROBIOLOGY
PERCENTAGE OF SYLLABUS REVISION
M.SC MICROBIOLOGY
2017 AND LATER

**THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN (AUTONOMOUS),
SIVAKASI**
(For those who have joined in 2017 and later)
M.Sc. Microbiology Programme Scheme

Semester	Course Code	Course Title of the Paper	Teaching Hours Per Week	Credits	Duration of Exam (Hours)	Marks Allotted		
						Internal	External	Total
I	HLMB11	Core Course General Microbiology	6	5	3	25	75	100
	HLMB12	Biochemistry	6	4	3	25	75	100
	HLMB13	Fundamentals of Biotechnology	6	4	3	25	75	100
	HLMB1L	Major Practical I	6	4	6	40	60	100
	HLMB1E1/ HLMB1E2	Core Elective course Biostatistics/ Bioinstrumentation	6	5	3	25	75	100
		Total	30	22				500
II	HLMB21	Core Courses Immunology and Immunotechniques	6	5	3	25	75	100
	HLMB22	Fermentation Technology	6	4	3	25	75	100
	HLMB23	Food & Dairy Microbiology	6	4	3	25	75	100
	HLMB2L	Major Practical II	6	4	6	40	60	100
	HLMB2E	Elective Course II (Offered by other Departments) Bio fertilizer	6	5	3	25	75	100
		Total	30	22				500
III	HLMB31	Core Course Agri & Environmental Microbiology	6	5	3	25	75	100
	HLMB32	Microbial Genetics & Molecular Biology	6	4	3	25	75	100
	HLMB33	Microbial Physiology	6	4	3	25	75	100



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DEPARTMENT OF MICROBIOLOGY
PERCENTAGE OF SYLLABUS REVISION
M.SC MICROBIOLOGY
2017 AND LATER

	HLMB3L	Major Practical III	6	4	6	40	60	100
	HLMB3E1/ HLMB3E2	Core Elective course CSIR-UGC NET Preparatory course- Life Sciences/ Food Process Technology	6	5	3	25	75	100
		Total	30	22				500
IV	HLMB41	Core Course Clinical Microbiology	6	5	3	25	75	100
	HLMB42	Bioinformatics	6	5	3	25	75	100
	HLMB4L	Major Practical IV	6	4	6	40	60	100
	HLMB4E1/ HLMB4E2	Core Elective course Research Methodology / Genomics and Proteomics	6	5	3	25	75	100
	HLMB4P	Project and viva voce	6	5	-	-	100	100
			Total	30	24			

S. S. P.
Signature of HOD

T. Palaneeswar
Signature of Principal
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NAAC SSR Cycle IV (2015-2020)

1.1. CURRICULUM DESIGN AND DEVELOPMENT

1.1.2. REVISION OF SYLLABUS

**PERCENTAGE OF SYLLABUS REVISION
2014 AND LATER**



**THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN (AUTONOMOUS),
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DEPARTMENT OF MICROBIOLOGY
PERCENTAGE OF SYLLABUS REVISION
M.SC MICROBIOLOGY
2014 AND LATER

**THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN(AUTONOMOUS),
SIVAKASI.**

DEPARTMENT OF MICROBIOLOGY
M.SC BIOTECHNOLOGY – PROGRAMME CODE:
(For those who have joined in June 2014 and later)

PROGRAMME OF BIOTECHNOLOGY CHANGE TO MICROBIOLOGY

Total Number of Courses having changes : 23

Total Number of Courses : 23

Percentage of Revision : 100%

Signature of the HOD

Signature of the Principal

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DEPARTMENT OF MICROBIOLOGY
PERCENTAGE OF SYLLABUS REVISION
M.SC MICROBIOLOGY
2014 AND LATER

THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN, (AUTONOMOUS)
SIVAKASI
M.Sc Microbiology- Allotment of Hours and Credits
(for those who joined in 2014 and later)

Subject	Semester				Total Credits
	I	II	III	IV	
Paper I	4(4)	4(4)	4(4)	-	55
Paper II	4(4)	4(4)	4(4)	-	
Paper III	4(4)	4(4)	3(3)	-	
Paper IV	4(4)	4(4)	-	-	
Practical I	4(2)	4(2)	4(2)	-	
Practical II	4(2)	4(2)	4(2)	-	
Project	-	-	-	30(15)	15
Total					70
Elective:					
Core Electives	6(5)	-	5(5)	-	20
Non Major Electives	-	6(5)	6(5)		
Total Credits					90

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DEPARTMENT OF MICROBIOLOGY
PERCENTAGE OF SYLLABUS REVISION
M.SC MICROBIOLOGY
2014 AND LATER

The Standard Fireworks Rajaratnam College for Women, Sivakasi (Autonomous)
(Affiliated to Madurai Kamaraj University, Reaccredited with 'A' Grade by NAAC and
College with Potential for Excellence by UGC)
DEPARTMENT OF MICROBIOLOGY
PG PROGRAMME (for those who joined 2014 and later)

Semester	Course Code	Title of the Paper	Teaching hours	Credits	Duration of Exam (hrs)	Marks allotted		
						Internal	External	Total
Core Courses								
I	14PMB11	General Microbiology	4	4	3	25	75	100
	14PMB12	Biochemistry	4	4	3	25	75	100
	14PMB13	Microbial Physiology	4	4	3	25	75	100
	14PMB14	Fundamentals of Immunology	4	4	3	25	75	100
	14PMB1EA	Elective I	6	5	3	25	75	100
	14PMB1L1	Practical I	4	2	3	40	60	100
	14PMB1L2	Practical II	4	2	3	40	60	100
II	14PMB21	Fermentation Technology	4	4	3	25	75	100
	14PMB22	Food and Dairy Microbiology	4	4	3	25	75	100
	14PMB23	Agri & Environmental Microbiology	4	4	3	25	75	100
	14PMB24	Fundamentals of Biotechnology	4	4	3	25	75	100
	14PMB2E	Elective II (Bio-waste Management)	6	5	3	25	75	100
	14PMB2L1	Practical III	4	2	3	40	60	100
	14PMB2L2	Practical IV	4	2	3	40	60	100
III	14PMB31	Clinical Microbiology	4	4	3	25	75	100
	14PMB32	Bioinformatics	4	4	3	25	75	100
	14PMB33	Microbial Genetics & Molecular Biology	3	3	3	25	75	100
	14PMB3E	Elective III- (Food Process Technology)	6	5	3	25	75	100
	14PMB3EB	Elective IV	5	5	3	25	75	100
	14PMB3L1	Practical V	4	2	3	40	60	100
	14PMB3L2	Practical VI	4	2	3	40	60	100
IV	14PMB4P	Major Project Work & Viva Voce	-	15	-	-	100	100
Core Electives (Any One)								
I	14PMB1E1	Biostatistics and Research Methodology	6	5	3	25	75	100
	14PMB1E2	Bioinstrumentation	6	5	3	25	75	100
III	14PMB3E1	CSIR-UGC National Eligibility Test (NET) LIFE SCIENCES	5	5	3	25	75	100
	14PMB3E2	Genomics & Proteomics	5	5	3	25	75	100
		Total		90				