



BRAINWARE UNIVERSITY
SCHOOL OF BIOTECHNOLOGY & BIOSCIENCES
DEPARTMENT OF BIOTECHNOLOGY
MASTERS OF SCIENCE IN MICROBIOLOGY - 2024

Semester-I

Sl. No.	Course Code	Course Name	L	T	P	Evaluation Scheme		Total Marks	Credits
						CIA	TEE		
1	MMB10101	Advances in Microbiology	4	0	0	40	60	100	4
2	MMB19102	Advances in Microbiology Lab	0	0	4	40	60	100	2
3	MMB10103	Microbial Biochemistry	3	0	0	40	60	100	3
4	MMB19104	Microbial Biochemistry Lab	0	0	4	40	60	100	2
5	MMB10105	Biology for Macromolecules	3	0	0	40	60	100	3
6	MMB19106	Biology for Macromolecules Lab	0	0	4	40	60	100	2
Elective course (Select any one)									
7	MMB10201	Food Microbiology	3	1	0	40	60	100	4
8	MMB10202	MOOCs	4	0	0	40	60	100	4
9	MMB10203	Infectious Disease and Public Health	3	1	0	40	60	100	4
TOTAL			13/14	0/1	12	280	420	700	20

Semester-II

Sl. No.	Course Code	Course Name	L	T	P	Evaluation Scheme		Total Marks	Credits
						CIA	TEE		
1	MMB20107	Microbial Fermentation	4	0	0	40	60	100	4
2	MMB29108	Microbial Fermentation Lab	0	0	4	40	60	100	2
3	MMB20109	Immunology	4	0	0	40	60	100	4
4	MMB29110	Immunology Lab	0	0	4	40	60	100	2
Elective course (Select any two)									
5	MMB20204	Pharmaceutical Microbiology	3	1	0	40	60	100	4
6	MMB20205	Bioinformatics and Metagenomics	3	1	0	40	60	100	4
7	MMB20206	Microbial Genetics and Biostatistics	3	1	0	40	60	100	4
TOTAL			14	2	8	240	360	600	20



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Semester-III

Sl. No.	Course Code	Course Name	L	T	P	Evaluation Scheme		Total Marks	Credits
						CIA	TEE		
1	MMB30111	Medical Bacteriology	3	0	0	40	60	100	3
2	MMB39112	Medical Bacteriology Lab	0	0	4	40	60	100	2
3	MMB30113	Recombinant DNA Technology	3	0	0	40	60	100	3
4	MMB39114	Recombinant DNA Technology Lab	0	0	4	40	60	100	2
Elective course (Select any three)									
5	MMB30207	Microbial Biotechnology	3	1	0	40	60	100	4
6	MMB30208	Environmental Microbiology	3	1	0	40	60	100	4
7	MMB30209	IPR and Biosafety	3	1	0	40	60	100	4
8	MMB30210	Parasitology and Virology	3	1	0	40	60	100	4
TOTAL			15	3	8	280	420	700	22

Semester-IV

Sl. No.	Course Code	Course Name	L	T	P	Evaluation Scheme		Total Marks	Credits
						CIA	TEE		
1	MMB40115	Microbial Ecology and Agricultural Microbiology	4	0	0	40	60	100	4
2	MMB49116	Microbial Ecology and Agricultural Microbiology Lab	0	0	4	40	60	100	2
3	MMB48101	Major Project	-	-	-	40	60	100	12
Elective course (Select any one)									
4	MMB40211	Entrepreneurship in Microbiology	3	1	0	40	60	100	4
5	MMB40212	Research Methodology	3	1	0	40	60	100	4
TOTAL			7	1	4	160	240	400	22