

## M. Sc. Semester I

Course	Course code	Paper title	Exam duration (Hours)	External marks	Internal marks	Total marks	Teaching hours per week	Credit points
Paper-I	MBCC-101	Cell Biology	2.30	70	30	100	4	4
Paper-II	MBCC-102	Molecular Biology and Genetics	2.30	70	30	100	4	4
Paper-III	MBCC-103	Biodiversity and Ecology	2.30	70	30	100	4	4
Paper-IV	MBCC-104	Microbial Taxonomy	2.30	70	30	100	4	4
Practical Paper-I	MBPR-101	Cell Biology, Molecular Biology and Genetics	More than 4 hours	75		75	6	3
Practical Paper-II	MBPR-102	Biodiversity, Ecology and Microbial Taxonomy	More than 4 hours	75		75	6	3
Elective Course	MBEC-101 <b>OR</b> MBEC-102 <b>OR</b> MBEC-103	Bioinformatics - 1  Agriculture Microbiology -1  Soil and Water Microbiology-1	2.00	35	15	50	2	2
Total				465	135	600	30	24



  
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## M. Sc. Semester II

Course	Course code	Paper title	Exam duration (Hours)	External marks	Internal marks	Total marks	Teaching hours per week	Credit points
Paper-I	MBCC -201	Biochemistry	2.30	70	30	100	4	4
Paper-II	MBCC-202	Instrumentation and Analytical Techniques	2.30	70	30	100	4	4
Paper-III	MBCC-203	Biostatistics and Research Methodology	2.30	70	30	100	4	4
Paper-IV	MBCC-204	Bioprocess and Biochemical Engineering	2.30	70	30	100	4	4
Practical Paper-I	MBPR-201	Biochemistry, Instrumentation and Analytical Techniques	More than 4 hours	75		75	6	3
Practical Paper-II	MBPR -202	Biostatistics, Research Methodology and Bioprocess and Biochemical Engineering	More than 4 hours	75		75	6	3
Elective Course	MBEC-201 <b>OR</b> MBEC -202 <b>OR</b> MBEC -203	Bioinformatics - 2  Bio-Fertilizer Technology-2  Soil and Water Microbiology-2	2.00	35	15	50	2	2
Total				465	135	600	30	24



  
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### M. Sc. Semester III

Course	Paper code	Paper title	Exam duration (Hours)	External marks	Internal marks	Total marks	Teaching hours per week	Credit points
Paper-I	MBCC-301	Bacteriology and Virology	2.30	70	30	100	4	4
Paper-II	MBCC-302	Genetics of Bacteria and Bacteriophages	2.30	70	30	100	4	4
Paper-III	MBCC-303	Microbial Physiology and Development	2.30	70	30	100	4	4
Paper-IV	MBCC-304	Fundamental of Infection and Immunity	2.30	70	30	100	4	4
Practical Paper-I	MB-PR-301	Bacteriology and Virology & Genetics of Bacteria and Bacteriophages	3/4	75		75	6	3
Practical Paper-II	MB-PR-302	Microbial Physiology and Development & Fundamental of Infection and Immunity	3/4	75		75	6	3
Elective Course	MBEC-301 OR MSEC-302 OR MSEC-303	Microbial Diversity and Extremophiles Microbial Genomics and Proteomics Enzyme Technology	2.00	35	15	50	2	2
Total				480	135	600	30	24



  
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## M. Sc. Semester IV

Course	Paper code	Paper title	Exam duration (Hours)	External marks	Internal marks	Total marks	Teaching hours per week	Credit points
Paper-I	MBCC-401	Recombinant DNA Technology	2.30	70	30	100	4	4
Paper-II	MBCC-402	Medical Microbiology	2.30	70	30	100	4	4
Paper-III	MBCC-403	Food Microbiology	2.30	70	30	100	4	4
Paper-IV	MBCC-404	Environmental Microbiology	2.30	70	30	100	4	4
Practical Paper-I	MBPR-401	Recombinant DNA Technology & Medical Microbiology	3/4	75		75	6	3
Practical Paper-II	MBPR-402	Food Microbiology & Environmental Microbiology	3/4	75		75	6	3
Elective Course	MBEC-401	Drug Discovery and Clinical Research	2.00	35	15	50	2	2
	<b>OR</b> MSEC-402	Dairy Microbiology						
	<b>OR</b> MSEC-403	Microbial Ecology						
Total				480	135	600	30	24

**OR**

Course	code	Internal evaluation (200 marks)			External evaluation (400 marks)				Total
		Mid-term presentation	Mid-term progress report	Attendance	Thesis	presentation	Viva-voce	Soft skill paper	
Dissertation	MSMB-DI-401	50	100	50	200	50	100	50	600

**\*Mid- term progress report:** mid-term progress report should contain introduction, review of literature, methodology of dissertation work and obtained results till date.



  
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