

**APPENDIX 6**

**First Year - Semester I**

Course Category	Course Code	Course Title	Nature of Course	No. of Credits	Teaching (Contact hrs/week)		Evaluation Scheme (Marks)			Minimum Passing (Marks)		
					L	P	Internal	External	Total	Internal	External	Total
MM	MMV42MML501	Molecular Cell Biology	L	3	3	-	60	40	100		16	40
MM	MMV42MML502	Microbial Physiology and Metabolism	L	3	3	-	60	40	100		16	40
MM	MMV42MML503	Microbial Diversity and Taxonomy	L	3	3	-	60	40	100		16	40
MM	MMV42MML504	Biochemistry and enzymology	L	2	2	-	60	40	100		16	40
MM	MMV42MMJ501	Mini Project	J	2	-	4	30	20	50		8	20
ME	MMV42MEP501 MMV42MEP502	1. Biotechniques Lab 2. Microbial Genetics Lab	P	2	-	4	30	20	50		8	20
ME	MMV42MEP503 MMV42MEP504	1. Micro Lab 2. Microbial diversity Lab	P	2	-	4	30	20	50		8	20
RM	MMV42RML501	Research Methodology	L	4	-	8	60	40	100		16	40
		<b>Total</b>		<b>21</b>	<b>11</b>	<b>20</b>	<b>390</b>	<b>260</b>	<b>650</b>		<b>104</b>	<b>260</b>

First Year- Semester II												
Course Category	Course Code	Course Title	Nature of Course	No. of Credits	Teaching (Contact hrs/ week)		Evaluation Scheme (Marks)			Minimum Passing (Marks)		
					L	P	Internal	External	Total	Internal	External	Total
MM	MMV42MML505	Cyanobacterial and Algal Biotechnology	L	3	3	-	60	40	100		16	40
MM	MMV42MML506	Gene Technologies	L	3	3	-	60	40	100		16	40
MM	MMV42MML507	Genomics and Bioinformatics	L	3	3	-	60	40	100		16	40
MM	MMV42MML508	Clinical and Diagnostic Microbiology	L	3	3	-	60	40	100		16	40
ME	MMV42MEP505	1. Microbial Lab (Practical)	P				30	20	50		08	20
	MMV42MEP506	2. Industrial Microbiology Lab		2	-	4						
ME	MMV42MEP507	1. Genomics and Diagnosis Lab	P				30	20	50		08	20
	MMV42MEP508	2. Bioinformatics Lab		2	-	4						
MM	MMV42MMJ502	Micro Project	J	2	-	4	30	20	50		08	20
FP	MMV42FPJ501	Field Project	J	4	-	8	100		100	40		40
		<b>Total</b>		<b>22</b>	<b>12</b>	<b>20</b>	430	220	<b>650</b>	40	88	<b>260</b>

**Second Year - Semester III**

Course Category	Course Code	Course Title	Nature of Course	No. of Credits	Teaching (Contact hrs/ week)		Evaluation Scheme (Marks)			Minimum Passing (Marks)		
					L	P	Internal	External	Total	Internal	External	Total
MM	MMV42MML601	Medical Bacteriology, Mycology and Parasitology	Lecture	3	3	-	60	40	100		16	40
MM	MMV42MML602	Environmental and Agricultural Microbiology	Lecture	3	3	-	60	40	100		16	40
MM	MMV42MML603	Applied fermentation Technology	Lecture	3	3	-	60	40	100		16	40
MM	MMV42MMP601	Medical Bacteriology, Lab	Practical	3		6	60	40	100		16	40
MM	MMV42MMP602	Environmental Microbiology Lab	Practical	2		4	60	40	100		16	40
ME		Major Elective course (Basket)	Lecture	4	4		60	40	100		16	40
RP	MMV42RPJ601	Research Project	Project	4	-	8	60	40	100		16	40
		Total		<b>22</b>	<b>13</b>	<b>18</b>	<b>420</b>	<b>280</b>	<b>700</b>		<b>112</b>	<b>280</b>

Second Year- Semester IV												
Course Category	Course Code	Course Title	Nature of Course	No. of Credits	Teaching (Contact hrs/ week)		Evaluation Scheme (Marks)			Minimum Passing (Marks)		
					L	P	Internal	External	Total	Internal	External	Total
MM	MMV42MML604	Mycology and Virology	Lecture	3	3	-	60	40	100		16	40
MM	MMV42MML605	Laboratories Accreditations and Auditing	Lecture	3	3	-	60	40	100		16	40
MM	MMV42MML606	Ethics/ Biosafety/ IPR	Lecture	3	3		60	40	100		16	40
MM	MMV42MMP603	Mycology and Virology Lab	Practical	3	-	6	60	40	100		16	40
ME		Major Elective course (Basket)	Lecture	4	4		60	40	100		16	40
RP	MMV42RPJ602	Research Project	Project	6	-	12	120	80	200		32	80
		Total		22	13	18	420	280	700		112	280

#### Major Elective course (III Semester)

Sr. No	Course Code	Course Name
1	MMV42MEL601	Zoonotic Diseases: Interaction with Human, Plant, and Animals
2	MMV42MEL602	Engineering of Gene and Genomics
3	MMV42MEL603	Industrial Technology (Microbiology and Biotechnology)
4	MMV42MEL604	Nanotechnology in Life Sciences

Major Elective course (IV Semester)

<b>Sr. No</b>	<b>Course Code</b>	<b>Course Name</b>
1	MMV42MEL605	Evolutionary analysis and metagenomics
2	MMV42MEL606	Biostatistics and Big Data Analysis
3	MMV42MEL607	Basics of Breeding Technology
4	MMV42MEL608	Pharmaceutical microbiology and biotechnology