

**Programme Name: Master of Science (Microbiology)**  
**Semester – I** **For the Batch : AY 23-24 onwards**

Sr. No.	Core	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
				L	T	P	C	Formative Assessment CIA		Summative Assessment ESE		
								Course	Lab	Course	Lab	
1	PC	NPMI101	Microbial Diversity and Taxonomy	4	0	0	4	50	-	50	-	100
2	PC	NPMI102	Instrumentation	4	0	0	4	50	-	50	-	100
3	PC	NPMI111	Microbial Diversity and Taxonomy Laboratory	0	0	4	2	-	50	-	50	100
4	PC	NPMI112	Instrumentation Laboratory	0	0	4	2	-	50	-	50	100
5	PE	NPMIE02	Food and Dairy Microbiology	4	0	0	4	50	-	50	-	100
6	UC	NRDP101	Research Methodology	4	0	0	4	50	-	50	-	100
TOTAL				16	0	8	20	200	100	200	100	600

Course Code	Course Name
<b>NPMIE01</b>	<b>Environmental Microbiology</b>
<b>NPMIE02</b>	<b>Food and Dairy Microbiology</b>
<b>NPMIE03</b>	<b>Parasitology</b>

		Formative Assessment		
<b>CIA:</b> Continuous Internal Assessment <b>L:</b> Theory Lecture <b>T:</b> Tutorial <b>P:</b> Practical <b>ESE:</b> End Semester Exam	#: Internship for 15 days. *: Oral Examination <b>UC:</b> University Core <b>PC:</b> Programme Core <b>PE:</b> Programme Elective <b>OE:</b> Open Elective <b>VAC:</b> Value Added Courses	<b>CIA</b>	<b>Weightage</b>	<b>Description</b>
		CIA 1	10%	Home Assignment
		CIA 2	20%	Written Exam
		CIA 3	10%	Seminar Presentation
		CIA 4	10%	Activity/Project & Research Based Activity
		<b>TOTAL</b>	<b>50%</b>	

**Programme Name: Master of Science (Microbiology)**  
**Semester – II** **For the Batch : AY 23-24 onwards**

Sr. No.	Core	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
				L	T	P	C	Formative Assessment CIA		Summative Assessment ESE		
								Course	Lab	Course	Lab	
1	PC	NPMI201	Medical Microbiology	4	0	0	4	50	-	50	-	100
2	PC	NPMI202	Biochemistry	4	0	0	4	50	-	50	-	100
3	PC	NPMI203	Ecology	4	0	0	4	50	-	50	-	100
4	PC	NPMI211	Medical Microbiology Laboratory	0	0	4	2	-	50	-	50	100
5	PC	NPMI212	Biochemistry Laboratory	0	0	4	2	-	50	-	50	100
6	PC	NPMI203	Ecology Laboratory	0	0	4	2	-	50	-	50	100
7	PE	NPMIE06	Microbial Genetics	4	0	0	4	50	-	50	-	100
TOTAL				16	0	12	22	200	150	200	150	700

Course Code	Course Name
NPMIE01	Environmental Microbiology
NPMIE02	Food and Dairy Microbiology
NPMIE03	Parasitology

		Formative Assessment		
<b>CIA:</b> Continuous Internal Assessment <b>L:</b> Theory Lecture <b>T:</b> Tutorial <b>P:</b> Practical <b>ESE:</b> End Semester Exam	#: Internship for 15 days. *: Oral Examination <b>UC:</b> University Core <b>PC:</b> Programme Core <b>PE:</b> Programme Elective <b>OE:</b> Open Elective <b>VAC:</b> Value Added Courses	<b>CIA</b>	<b>Weightage</b>	<b>Description</b>
		CIA 1	10%	Home Assignment
		CIA 2	20%	Written Exam
		CIA 3	10%	Seminar Presentation
		CIA 4	10%	Activity/Project & Research Based Activity
		<b>TOTAL</b>	<b>50%</b>	

**Programme Name: Master of Science (Microbiology)**  
**Semester – III** **For the Batch : AY 23-24 onwards**

Sr. No.	Core	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
				L	T	P	C	Formative Assessment CIA		Summative Assessment ESE		
								Course	Lab	Course	Lab	
1	PC	NPMI301	Industrial and Environmental Microbiology	4	0	0	4	50	-	50	-	100
2	PC	NPMI302	Microbial Physiology and Metabolim	4	0	0	4	50	-	50	-	100
3	PC	NPMI303	Large Scale Manufacturing Process	4	0	0	4	50	-	50	-	100
4	PE	NPMIE---	Programme Elective III	4	0	0	4	50	-	50	-	100
5	PE	NPMIE---	Programme Elective IV	4	0	0	4	50	-	50	-	100
6	PC	NPMI311	Environmental Microbiology Laboratory	0	0	4	4	-	50	-	50	100
7	PC	NPMI312	Microbial Physiology and Metabolim Laboratory	0	0	4	2	-	50	-	50	100
TOTAL				20	0	8	26	250	100	250	100	700

Course Code	Course Name
NPMIE07	Pharmaceutical Microbiology
NPMIE08	Industrial Microbiology
NPMIE09	Intellectual Property Rights

Course Code	Course Name
NPMIE10	Nutraceuticals
NPMIE11	Intellectual Property Rights
NPMIE12	Biostatistics and Bioinformatics

		Formative Assessment		
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		CIA 1	10%	Home Assignment
		CIA 2	20%	Written Exam
		CIA 3	10%	Seminar Presentation
		CIA 4	10%	Activity/Project & Research Based Activity
		<b>TOTAL</b>	<b>50%</b>	

**Programme Name: Master of Science (Microbiology)**  
**Semester – IV** **For the Batch : AY 23-24 onwards**

Sr. No.	Core	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
				L	T	P	C	Formative Assessment CIA		Summative Assessment ESE		
								Course	Lab	Course	Lab	
1	PC	NPMI411	Research Project	0	0	36	20	-	300	-	300	600
TOTAL				0	0	36	20	-	300	-	300	600

		Formative Assessment		
<b>CIA:</b> Continuous Internal Assessment <b>L:</b> Theory Lecture <b>T:</b> Tutorial <b>P:</b> Practical <b>ESE:</b> End Semester Exam	#: Internship for 15 days. *: Oral Examination <b>UC:</b> University Core <b>PC:</b> Programme Core <b>PE:</b> Programme Elective <b>OE:</b> Open Elective <b>VAC:</b> Value Added Courses	CIA	Weightage	Description
		CIA 1	10%	Home Assignment
		CIA 2	20%	Written Exam
		CIA 3	10%	Seminar Presentation
		CIA 4	10%	Activity/Project & Research Based Activity
		<b>TOTAL</b>	<b>50%</b>	