

## **B. Sc. in Microbiology (Honours) Part-1 (First year)**

**Theory – 700**

**Practical- 400**

**Total- 1100**

<b>Course No.</b>	<b>Course Title</b>	<b>Credit</b>	<b>Marks</b>
<b>Theory course</b>			
Microb. 101	General Microbiology	4	100
Microb. 102	Microbial Ecology	4	100
Microb. 103	Molecular Biology-I	4	100
Microb. 104	Basic Biochemistry	4	100
Microb. 105	Fundamentals of Chemistry	3	75
Microb. 106	Pharmaceutical Microbiology	3	75
Microb. 107	Organic and Inorganic Chemistry	3	75
Microb. 108	Functional English	3	75
	<b>Total</b>	<b>28</b>	<b>700</b>
<b>Practical</b>			
Microb. 109	General Microbiology	2	50
Microb. 110	Techniques in Microbiology	2	50
Microb. 111	Molecular Biology-1	2	50
Microb. 112	Basic Biochemistry	2	50
Microb. 113	Fundamentals of Chemistry	2	50
Microb. 114	Pharmaceutical Microbiology	2	50
Microb. 115	Organic and Inorganic Chemistry	2	50
Microb. 116	Viva voce	2	50
	<b>Total</b>	<b>16</b>	<b>400</b>
<b>Grand Total</b>		<b>44</b>	<b>1100</b>

**B. Sc. in Microbiology (Honours) Part-2 (Second year)**

**Theory – 800**

**Practical- 400**

**Total- 1200**

<b>Course No.</b>	<b>Course Title</b>	<b>Credit</b>	<b>Marks</b>
<b>Theory courses</b>			
Microb. 201	Environmental Microbiology	4	100
Microb. 202	Microbial Genetics	4	100
Microb. 203	Medical Microbiology	4	100
Microb. 204	Human Physiology	3	75
Microb. 205	Metabolism: Catabolic Pathways	3	75
Microb. 206	Cell Biology	4	100
Microb. 207	Mycology	3	75
Microb. 208	Biostatistics	3	75
Microb. 209	Computer Applications	2	50
Microb. 210	Microbial Chemistry	2	50
	<b>Total</b>	<b>32</b>	<b>800</b>
<b>Practical</b>			
Microb. 211	Environmental Microbiology	2	50
Microb. 212	Microbial Genetics	2	50
Microb. 213	Medical Microbiology	2	50
Microb. 214	Human Physiology	2	50
Microb. 215	Metabolism: Catabolic Pathways	2	50
Microb. 216	Mycology	2	50
Microb. 217	Computer Application and Biometry	2	50
Microb. 218	Viva voce	2	50
	<b>Total</b>	<b>16</b>	<b>400</b>
<b>Grand Total</b>		<b>48</b>	<b>1200</b>

## **B. Sc. in Microbiology (Honours) Part-3 (Third year)**

**Theory – 675**

**Practical- 450**

**Total- 1075**

<b>Course No.</b>	<b>Course Title</b>	<b>Credit</b>	<b>Marks</b>
<b>Theory courses</b>			
Microb. 301	Food Microbiology	4	100
Microb. 302	Molecular Biology-II	4	100
Microb. 303	Industrial Microbiology	3	75
Microb. 304	Virology	3	75
Microb. 305	Immunology	3	75
Microb. 306	Enzymology	2	50
Microb. 307	Metabolism: Anabolic Pathways	2	50
Microb. 308	Agricultural Microbiology	3	75
Microb. 309	Fermentation Technology	3	75
	<b>Total</b>	<b>27</b>	<b>675</b>
<b>Practical</b>			
Microb. 311	Food Microbiology	2	50
Microb. 312	Molecular Biology-II	2	50
Microb. 313	Industrial Microbiology	2	50
Microb. 314	Virology	2	50
Microb. 315	Immunology and Enzymology	2	50
Microb. 316	Agricultural Microbiology	2	50
Microb. 317	Techniques in Fermentation	2	50
Microb. 318	MPE (Microbiology Practice Experience)	2	50
Microb. 319	Viva voce	2	50
	<b>Total</b>	<b>18</b>	<b>450</b>
<b>Grand Total</b>		<b>45</b>	<b>1075</b>

## **B. Sc. in Microbiology (Honours) Part-4 (Fourth year)**

**Theory – 950**

**Practical- 300**

**Total- 1250**

<b>Course No.</b>	<b>Course Title</b>	<b>Credit</b>	<b>Marks</b>
<b>Theory courses</b>			
Microb. 401	Genetic Engineering	4	100
Microb. 402	Environmental Pollution and Bioremediation	4	100
Microb. 403	Clinical and Diagnostic Microbiology	3	75
Microb. 404	Analytical Microbiology	3	75
Microb. 405	Microbial Biotechnology	3	75
Microb. 406	Advanced Virology	2	50
Microb. 407	Advanced Immunology	2	50
Microb. 408	Pharmaceutical Biotechnology	2	50
Microb. 409	Research Methodology	3	75
Microb. 410	Antibiotics: Mechanism of Action and Bacterial Resistance	2	50
Microb. 411	Quality Control of Food	2	50
	<b>Total</b>	<b>30</b>	<b>750</b>
<b>Practical</b>			
Microb. 412	Genetic Engineering	2	50
Microb. 413	Environmental Pollution and Bioremediation	2	50
Microb. 414	Clinical and Diagnostic Microbiology	2	50
Microb. 415	Analytical Microbiology	2	50
Microb. 416	Advanced Virology and Immunology	2	50
Microb. 417	Internship	2	50
Microb. 418	Techniques in Quality Control of Food	2	50
Microb. 419	Job Oriented Course (JOC) Thesis	4	100
Microb. 420	Viva voce	2	50
	<b>Total</b>	<b>20</b>	<b>500</b>
<b>Grand Total</b>		<b>50</b>	<b>1250</b>