

## SEMESTER WISE COURSE STRUCTURE

### SEMESTER I

<u>S.No</u>	Course Code	Course Name	Category	L	T	P	Credits
1		Microbiology	Blended	3	0	1	4
2		Cell Biology	Theory	3	0	0	3
3		Biochemistry	Blended	3	0	1	4
4		From Bucket-1	Theory	2	0	0	2
5		Foreign Language-I	Theory	2	0	0	2
6		Computer Fundamentals	Blended	2	0	1	3
7		Scientific Writing	Theory	2	0	0	2
<b>Total</b>				17	0	3	20

### SEMESTER II

<u>S.No</u>	Course Code	Course Name	Category	L	T	P	Credits
1		Microbial Metabolism	Blended	3	0	1	4
2		Immunology	Blended	3	0	1	4
3		Genetics	Theory	4	0	0	4
4		From Bucket-2	Theory	2	0	0	2
5		Foreign Language-II	Theory	2	0	0	2
6		Introduction to Python & R	Blended	2	0	1	3
7		Research Methodology	Theory	2	0	0	2
<b>Total</b>				18	0	3	21

### SEMESTER III

<u>S.No</u>	Course Code	Course Name	Category	L	T	P	Credits
1		Medical Bacteriology	Blended	3	0	2	5
2		Medical Mycology	Blended	4	0	1	5
3		Molecular Biology	Blended	3	0	2	5
4		From Bucket-3	Theory	2	0	0	2
5		Communicative English	Theory	2	0	0	2
6		Bioinformatics	Blended	2	0	1	3
<b>Total</b>				16	0	6	22

**SEMESTER IV**

<u>S.No</u>	Course Code	Course Name	Category	L	T	P	Credits
1		Clinical Microbiology	Theory	3	0	0	3
2		Recombinant DNA Technology	Blended	3	0	1	4
3		Bioinstrumentation	Theory	4	0	0	4
4		From Bucket-4	Theory	2	0	0	2
5		Intellectual Property Rights	Theory	2	0	0	2
6		Introduction to Clinical Research	Theory	2	0	0	2
7		Bioethics and Biosafety	Theory	2	0	0	2
<b>Total</b>				18	0	1	19

**SEMESTER V**

<u>S.No</u>	Course Code	Course Name	Category	L	T	P	Credits
1		Medical Virology	Theory	3	0	0	3
2		Biostatistics	Theory	3	0	0	3
3		Public Health Microbiology	Theory	3	0	0	3
4		DSE from Group-1	Theory	3	0	0	3
5		From Bucket-5	Theory	2	0	0	2
6		Internship (Hospital/Diagnostic Lab)	Industrial/Academic Internship	0	0	6	6
<b>Total</b>				14		6	20

**SEMESTER VI**

<u>S.No</u>	Course Code	Course Name	Category	L	T	P	Credits
1		Molecular Diagnostics in Microbiology	Blended	3	0	1	4
2		Infection Control & Hospital Waste Management	Blended	3	0	1	4
3		DSE from Group-2	Theory	4	0	0	4
4		DSE from Group-3	Theory	4	0	0	4
5		Professional Communication	Theory	2	0	0	2
6		From Bucket-6	Theory	2	0	0	2
<b>Total</b>				18	0	2	20

**SEMESTER VII**

<u>S.N</u> <u>o</u>	Course Code	Course Name	Category	L	T	P	Credits
1		Advanced Microbiology	Clinical Theory	4	0	0	4
2		DSE from Group-4	Theory	4	0	0	4
3		DSE from Group-5	Theory	4	0	0	4
4		From Bucket-7	Theory	3	0	0	3
5		From Bucket-8	Theory	3	0	0	3
<b>Total</b>				18	0	0	18

**SEMESTER VIII**

<u>S.N</u> <u>o</u>	Course Code	Course Name	Category	L	T	P	Credits
1		Dissertation / Research Project (Clinical or Molecular Microbiology)	Dissertation/Project				20

**Discipline Specific Electives (DSE) - Medical Microbiology**

Semester	Course Code	Course Name	L	T	P	Credits	Group
Sem V		Environmental Microbiology	3	0	0	3	Gr-1
Sem V		Food and Dairy Microbiology	3	0	0	3	Gr-1
Sem V		Industrial Microbiology	3	0	0	3	Gr-1
Sem VI		Advanced Medical Mycology	4	0	0	4	Gr-2
Sem VI		Advanced Parasitology	4	0	0	4	Gr-2
Sem VI		Microbial Genetics and Genomics	4	0	0	4	Gr-3
Sem VI		Microbial Pathogenesis	4	0	0	4	Gr-3
Sem VII		Advance Virology	4	0	0	4	Gr-4
Sem VII		Emerging Infectious Diseases	4	0	0	4	Gr-4
Sem VII		Clinical Epidemiology	4	0	0	4	Gr-5
Sem VII		Vaccinology	4	0	0	4	Gr-5
Sem VII		Zoonotic Parasitic Infections	4	0	0	4	Gr-6
Sem VII		Biomedical nanotechnology	4	0	0	4	Gr-6
<b>Total</b>			45			45	

**General Electives (GE) - Medical Microbiology**

Semester	Course Code	Course Name	L	T	P	Credits	Bucket
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Sem I		Indian Knowledge System	2	0	0	2	Bucket-1
Sem I		Food, Nutrition and Hygiene	2	0	0	2	Bucket-1
Sem II		Health Information Management	2	0	0	2	Bucket-2
Sem II		Nutraceutical and Functional Food	2	0	0	2	Bucket-2
Sem III		Hospital and Healthcare Administration	2	0	0	2	Bucket-3
Sem III		Nutritional Care in Disease Conditions	2	0	0	2	Bucket-3
Sem IV		Renewable Energy and Green Technology	2	0	0	2	Bucket-4
Sem IV		Ecology and Environment	2	0	0	2	Bucket-4
Sem V		Introduction to Entrepreneurship	2	0	0	2	Bucket-5
Sem V		Biodiversity and Taxonomy	2	0	0	2	Bucket-5
Sem VI		Project Management	2	0	0	2	Bucket-6
Sem VI		Food Quality Testing and Evaluation	2	0	0	2	Bucket-6
Sem VII		Art of happiness	2	0	0	2	Bucket-7
Sem VII		Disaster Management	2	0	0	2	Bucket-7
Sem VII		Regulatory Affairs in Clinical Research	2	0	0	2	Bucket-8
Sem VII		Clinical Psychology	2	0	0	2	Bucket-8
<b>Total</b>			32			32	