

Curriculum Structure of 2-year M. Sc. Programme
Microbiology
(w. e. f. Academic Session 2023-24)

First Semester

S.No	Course Code	Course Title	Contact Hours				Credit
			L	T	P	Total	
1	19M21BT111	Microbial Physiology and Diversity	3	1	-	4	4
2	15B1NBT832	Biostatistics and Applications	3	1	-	4	4
3	19M21BT115	Microbial Genetics and Molecular Biology	3	1	-	4	4
4	19M21BT113	Biomolecules	3	1	-	4	4
5	19M25BT111	Microbiology Lab-I	-	-	8	8	4
6	19M21HS111	Presentation and Communication Skills	2	-	-	2	Audit
		Total	14	4	8	26	20

Second Semester

S.No.	Course Code	Course Title	Contact Hours				Credit
			L	T	P	Total	
1	19M21BT117	Enzymes and Bioprocess Technology	3	1	-	4	4
2	19M21BT114	Environmental Microbiology	3	1	-	4	4
3	19M21BT118	Medical Microbiology	3	1	-	4	4
4	19M21BT116	Immunology and Immunotechnology	3	1	-	4	4
5	xxxxxxxx	DE-I	3	-	-	3	3
6	19M25BT112	Microbiology Lab-II	-	-	8	8	4
		Total	15	4	8	27	23

Third Semester

S.No.	Course Code	Course Title	Contact Hours				Credit
			L	T	P	Total	
1	19M21BT211	Food & Dairy Microbiology	3	1	-	4	4
2	19M21BT212	Recombinant DNA Technology	3	1	-	4	4
3	19M21BT213	Bioinformatics and Omics	3	-	-	3	3
4	xxxxxxxx	DE-II	3	-	-	3	3
5	xxxxxxxx	DE-III	3	-	-	3	3
6	xxxxxxxx	DE-IV	3	-	-	3	3
7	19M25BT211	Microbiology Lab -III	-	-	8	8	4
		Total	18	2	8	28	24

Fourth Semester

S.No.	Course Code	Course Title	Contact Hours				Credit
			L	T	P	Total	
1	xxxxxxxx	DE-V	3	-	-	3	3
2	20M37BT211	Project Work/Dissertation	-	-	20	20	10
		Total	3	-	20	23	13

Total Credits: 80

Electives: Proposed and subject to change from time to time

Semester II

DE-I

19M22BT213	Microbiomics
17M1NBT116	IPR in Biotechnology
22M12BT111	Agriculture Biotechnology

Semester III

DE-II

17M12BT111	Biosensors
17M12BT118	Product development in Biotechnology
19M22BT214	Public Health

DE-III

17M12BT116	Regulatory affairs
19M22BT211	Diagnostic Microbiology
17M12BT125	Nanobiotechnology

DE-IV

17M12BT128	Structural Biology (VGU)
21M22BT211	Prebiotic and probiotic (SMG/SC)
22M22BT211	Market Research and Data Analysis (AM)

Semester IV

DE-V

17M12BT123	Bio separation Technology
17M12BT124	System Biology and Neural Network
20M22BT212	Bioenergetics in Human Health and disease