

Curriculum Structure of 2-year M. Sc. Programme in Microbiology

(w. e. f. Academic Session 2019-20)

First Semester

S. No.	Course Title	Core/ Elective	Contact Hours				Credits
			L	T	P	Total	
19M21BT111	Microbial Physiology and Diversity	Core	3	1	-	4	4
19M21BT113	Biomolecules	Core	3	1	-	4	4
19M21BT115	Microbial Genetics and Molecular Biology	Core	3	1	-	4	4
15B1NBT832	Biostatistics and Applications	Core	3	1	-	4	4
19M21HS111	Presentation and Communication Skills	Core	2	-	-	2	Audit
19M25BT111	Microbiology Lab-I	Core	-	-	12	12	4
	Total		14	4	12	30	20

Second Semester

S. No.	Course Title	Core/ Elective	Contact Hours				Credits
			L	T	P	Total	
19M21BT114	Environmental Microbiology	Core	3	1	-	4	4
19M21BT116	Immunology and Immunotechnology	Core	3	1	-	4	4
19M21BT117	Enzymes and Bioprocess Technology	Core	3	1	-	4	4
19M21BT118	Medical Microbiology	Core	3	1	-	4	4
19M25BT112	Microbiology Lab-II	Core	-	-	12	12	4
	Total		12	4	12	28	20

Third Semester

S. No.	Course Title	Core/ Elective	Contact Hours				Credits
			L	T	P	Total	
19M21BT211	Food & Dairy Microbiology	Core	3	1	-	4	4
19M21BT212	Recombinant DNA Technology	Core	3	1	-	4	4
19M21BT213	Bioinformatics and Omics	Core	3	-	-	3	3
	DE-1	Elective	3		-	3	3
	DE-II	Elective	3		-	3	3
19M25BT211	Microbiology Lab -III	Core	-	-	12	12	4
	Total		15	2	12	29	21

Fourth Semester

S. No.	Course Title	Core/ Elective	Contact Hours				Credits
			L	T	P	Total	
	DE-III	Elective	3	-	-	3	3
	DE-IV	Elective	3	-	-	3	3
	DE-V	Elective	3	-	-	3	3
19M27BT211	Dissertation	Core	-		20	20	10
	Total		9	-	20	29	19

Total Credits: 80

Electives: Proposed and subject to change from time to time

DE-I

17M12BT116	Regulatory affairs (SHD)
17M12BT111	Biosensors (SS)
17M12BT118	Product development in Biotechnology

DE-II

17M12BT133	Experimental models in Research
19M22BT211	Diagnostic Microbiology
18M12BT116	IPR in Biotechnology

Semester IV

DE-III

19M22BT212	Vaccine Biology
17M12BT128	Structural Biology
18M12BT115	Microbial Technology

DE-IV

17M12BT123	Bio separation Technology
17M12BT124	System Biology and Neural Network
17M12BT129	Metagenomics

DE-V

17M12BT125	Nanobiotechnology
19M22BT213	Microbiomics
19M22BT214	Public Health
19M22BT215	Probiotics & Prebiotics