

MSc Biotechnology

**PROGRAM STRUCTURE AND SYLLABUS
2019-20 ADMISSIONS ONWARDS**

(UNDER MAHATMA GANDHI UNIVERSITY PGCSS REGULATIONS 2019)



**EXPERT COMMITTEE IN BIOTECHNOLOGY (PG)
MAHATMA GANDHI UNIVERSITY**

2019

1. THE PROGRAMME STRUCTURE

Course Code	Title of the Course	Type of the Course	Hours per week	Credits (80)	Total credits
FIRST SEMESTER					
BT020101	General Biochemistry	Theory	4	4	19
BT020102	Cell Biology and genetics	Theory	4	4	
BT020103	Instrumentation and Biostatistics	Theory	4	4	
BT020104	Biophysics and Bioinformatics	Theory	3	3	
BT020105	Lab course I	Practical	10	4	
SECOND SEMESTER					
BT020201	Microbiology	Theory	4	4	19
BT020202	Immunology	Theory	4	4	
BT020203	Molecular Biology	Theory	4	4	
BT020204	Enzymology and metabolism	Theory	3	3	
BT020205	Lab course II	Practical	10	4	
THIRD SEMESTER					
BT020301	Bioprocess Technology	Theory	4	4	19
BT020302	Recombinant DNA Technology	Theory	4	4	
BT020303	Environmental biotechnology	Theory	4	4	
BT020304	Plant and Animal biotechnology	Theory	3	3	
BT020305	Lab Course III	Practical	10	4	
FOURTH SEMESTER					
BT8304	Elective I	Theory	5	4	23
BT8404	Elective II	Theory	5	4	
BT8504	Elective III	Theory	5	4	
BT020401	Lab Course	Practical	10	4	
BT020402	Project and Dissertation			4	
BT020403	Comprehensive viva voce				
Total					80



THE PROGRAMME STRUCTURE: ELECTIVES:

Course Code	Elective Groups	Elective courses	Credit
BT830401		Environment and Biotechnology	4
BT830402	Elective Group I	Food Biotechnology	4
BT830403		Advanced Molecular Techniques	4
BT840401		Physiology and Biotechnology	4
BT840402	Elective Group II	Microbial Food Technology	4
BT840403		IPR and Biotechnology	4
BT850401		Molecular biology of Development	4
BT850402	Elective Group III	Cancer Biology	4
BT850403		Genomics: Techniques and Applications	4

