

B.Tech-Biotechnology Programme
FIRST SEMESTER

Sr.No.	Course		Contact Hours				Credits
	No.	Title	L	T	P	Total	
1.	15B11HS111	Life Skills	1	1	-	2	2
2.	15B11MA112	Basic Mathematics-1	3	1	-	4	4
3.	15B11PH112	Physics for Biotechnology	3	1	-	4	4
4.	15B11EC111	Electrical Science-1	3	1	-	4	4
5.	15B11CI111	Software Development Fundamentals-1	3	1	-	4	4
6.	15B11HS112	English	2	1	-	3	3
7.	15B17PH171	Physics Lab-1	-	-	2	2	1
8.	15B17EC171	Electrical Science Lab -1	-	-	2	2	1
9.	15B17CI171	Software Development Lab-1	-	-	4	4	2
		TOTAL				29	25

SECOND SEMESTER

Sr.No.	Course		Contact Hours				Credits
	No.	Title	L	T	P	Total	
1.	15B11HS211	Economics	2	1	-	3	3
2.	15B11MA212	Basic Mathematics-2	3	1	-	4	4
3.	15B11BT212	Biophysical Techniques	3	1	-	4	4
4.	15B11EC213	Basic Electronics	3	1	-	4	4
5.	15B11CI211	Software Development Fundamentals-2	3	1	-	4	4
6.	15B11BT211	Biochemistry	3	1	-	4	4
7.	15B17BT271	Biochemical Techniques Lab	-	-	2	2	1
8.	15B17EC273	Basic Electronics Lab	-	-	2	2	1
9.	15B17CI271	Software Development Lab-2	-	-	2	2	1
		TOTAL				29	26

THIRD SEMESTER

Sr.No.	Course No.	Title	Contact Hours				Credits
			L	T	P	Total	
1.	Xxxxx	HSS Elective - 1	2	1	-	3	3
2.	15B11MA302	Probability and Statistics	3	1	-	4	4
3.	15B11BT311	Thermodynamics & Chemical Processes	3	1	-	4	4
4.	15B11BT312	Microbiology	3	1	-	4	4
5.	15B11BT313	Genetics and Developmental Biology	3	1	-	4	4
6.	15B11GE301	Environmental Science	3	-	-	3	3
7.	15B17BT371	Thermodynamics and Chemical Processes Lab	-	-	2	2	1
8.	15B17BT372	Microbiology Lab	-	-	3	3	1
9.	15B17BT373	Genetics and Developmental Biology Lab	-	-	3	3	1
		TOTAL				30	25

For students admitted in 2017-18 following changes are applicable

- Electrical science-I, Electrical Science Lab-I, SDF-I and SD lab-I are being shifted from first to second semester
- SDF-2, SD Lab-II, Basic Electronics and Basic Electronic lab are being shifted from Second to third semester
- Biochemistry, biochemical techniques lab, are being shifted from Second to first semester
- Thermodynamics and Chemical process and thermodynamics and Chemical process lab are being shifted from Third to first semester
- Microbiology and Microbiology Lab are being shifted from Third to Second semester
- Rest of the curriculum remains same from IV semester onwards

FOURTH SEMESTER

Sr.N	Course		Contact Hours				Credits
	o.	No.	Title	L	T	P	
1.	Xxxxx	HSS Elective – 2	2	1	-	3	3
2.	15B11BT411	Introduction to Bioinformatics	3	1	-	4	4
3.	15B11BT412	Molecular Biology and Genetic Engineering	3	1	-	4	4
4.	15B11BT413	Bioprocess Engineering	3	1	-	4	4
5.	15B11BT414	Immunology	3	1	-	4	4
6.	15B17BT471	Bioinformatics Lab	-	-	2	2	1
7.	15B17BT472	Genetic Engineering Lab	-	-	3	3	1
8.	15B17BT473	Bioprocess Engineering Lab	-	-	2	2	1
9.	15B17BT474	Immunology Lab	-	-	2	2	1
		TOTAL				28	23

FIFTH SEMESTER

Sr.N	Course		Contact Hours				Credits
	o.	No.	Title	L	T	P	
1.	Xxxxx	HSS Elective-3	2	1	-	3	3
2.	15B11BT511	Cell Culture Technology	3	1	-	4	4
3.	15B11BT512	Fermentation and Downstream Processing	3	1	-	4	4
	Xxxx	Selected Foreign Language	2 / 3			2/3	Audit
4.	Xxxxx	Science Elective – 1	3	1	-	4	4
5.	15B19BT591	Minor Project – 1					5
6.	15B17BT572	Fermentation and Downstream Processing Lab	-	-	2	2	1
7.	15B17BT571	Cell culture Lab	-	-	2	2	1
8.	15B17BT573	Plant Tissue Culture Lab		-	2	2	1
9.	15B17CI577	IT Practice Lab (CS/BT)	-	-	2	2	1
		TOTAL				23+	24

SIXTH SEMESTER

Sr.No.	Course		Contact Hours				Credits
	No.	Title	L	T	P	Total	
1.	Xxxxx	HSS Elective -4	2	1	-	3	3
2.	15B11BT611	Comparative and Functional Genomics	3	1	-	4	4
3.	Xxxxx	BT Elective - 1	3	1	-	4	4
4.	Xxxxx	BT Elective - 2	3	1	-	4	4
5.	Xxxxx	Science Elective - 2	3	1	-	4	4
		Selected Value Added Course	2 / 3			2/3	Audit
6.	15B17BT671	Comparative and Functional Genomics Lab	-	-	3	3	1
7.	15B19BT691	Minor Project-2	-	-			5
		TOTAL				25+	25

Students will undergo 6 weeks Industrial Training during Summer Vacation

SEVENTH SEMESTER

Sr.No.	Course		Contact Hours				Credits
	No.	Title	L	T	P	Total	
1.	Xxxxx	BT Elective -3	3	1	-	4	4
2.	Xxxxx	BT Elective -4	3	1	-	4	4
3.	Xxxxx	BT Elective – 5	3	1	-	4	4
4.	Xxxxx	Open Elective – 1	3		-	3	3
5.	15B19BT791	Major Project Part-1	-	-			4
6.	15B19BT792	Term Paper	-	-	-	-	3
7.	15B19BT793	Summer Training Viva	-	-	-	-	2
		TOTAL				15+	24

EIGHTH SEMESTER

Sr.No.	Course		Contact Hours				Credits
	No.	Title	L	T	P	Total	
1.	Xxxxx	BT Elective -6	3	1	-	4	4
2.	Xxxxx	BT Elective -7	3	1	-	4	4
3.	Xxxxx	Open Elective – 2	3		-	3	3
4.	15B19BT891	Major Project Part-2	-	-			12
		TOTAL				11 +	23