

**S.Y. B.Sc.and T.Y. B.Sc. Biotechnology**  
**Equivalence of previous syllabus along with proposed syllabus:**

					<b>2019 Pattern</b>
82	S.Y.B.Sc.BSC(BIOTECH)(Rev.2013)	I	84011	GENETICS & IMMUNOLOGY	BBt-303 Genetics BBt-403 Immunology
83	S.Y.B.Sc.BSC(BIOTECH)(Rev.2013)		84021	CELL BIOLOGY	BBt-301 Cell Biology I BBt-401 Cell Biology II
84	S.Y.B.Sc.BSC(BIOTECH)(Rev.2013)		84041	ENVIRONMENTAL BIOLOGY & BIOTECHNOLOGY	BBt-305 Environmental Biotechnology
85	S.Y.B.Sc.BSC(BIOTECH)(Rev.2013)	II	84042	SCIENTIFIC WRITING & COMMUNICATION	LA-231 AECC-II Language theory paper 1 LA-241 AECC- IV Language theory paper 2
86	S.Y.B.Sc.BSC(BIOTECH)(Rev.2013)		84052	METABOLIC PATHWAYS (INT:10 EXT:40 TOT:50)	BBt-304 Metabolism
87	S.Y.B.Sc.BSC(BIOTECH)(Rev.2013)		84022	ANIMAL & PLANT DEVELOPMENT	BBt-404 Animal Development BBt-405 Plant Developmen
88	S.Y.B.Sc.BSC(BIOTECH)(Rev.2013)		84012	MOLECULAR BIOLOGY	BBt-302 Molecular Biology I BBt-402 Molecular Biology II
89	T.Y.B.Sc. (BIOTECH)(Rev.2013)	III	94013	MICROBIAL BIOTECHNOLOGY	BBt-406 Microbial Biotechnology
90	T.Y.B.Sc. (BIOTECH)(Rev.2013)		94023	PLANT & ANIMAL TISSUE CULTURE	BBt-503 Plant Tissue Culture BBt-504 Animal Tissue Culture
91	T.Y.B.Sc. (BIOTECH)(Rev.2013)		94043	BIODIVERSITY AND SYSTEMATICS	BBt-506 Biodiversity and Systematics
92	T.Y.B.Sc. (BIOTECH)(Rev.2013)	IV	94024	BIOCHEMICAL & BIOPHYSICAL TECHNIQUES	BBt-306 Bio analytical Techniques
93	T.Y.B.Sc. (BIOTECH)(Rev.2013)		94034	RECOMBINANT DNA TECHNOLOGY	BBt-502 R- DNA technology
94	T.Y.B.Sc. (BIOTECH)(Rev.2013)		94014	LARGE SCALE MANUFACTURING PROCESS	BBt-501 Industrial Microbiology

**M.Sc. I and M.Sc. II Biotechnology**  
**Equivalence of previous syllabus along with proposed syllabus:**

				<b>2019 Pattern</b>
297	M.Sc. Biotechnology 2008 Pattern	I	BT11 ADVANCED BIOLOGICAL CHEMISTRY	MBT- 101 Advanced Biological Chemistry
298	M.Sc. Biotechnology 2008 Pattern		BT12 MOLECULAR & CELL BIOLOGY	MBT- 102 Cell & Molecular Biology
299	M.Sc. Biotechnology 2008 Pattern		BT13 ENVIRONMENTAL BIOTECHNOLOGY	MBT 105 Environmental Biotechnology (CBOP)
300	M.Sc. Biotechnology 2008 Pattern	II	BT21 GENETIC ENGINEERING	MBT- 201 Genetic Engineering
301	M.Sc. Biotechnology 2008 Pattern		BT22 BIOINFORMATICS	MBT- 303 Bioinformatics & Biostatistics
302	M.Sc. Biotechnology 2008 Pattern		BT23 PLANT BIOTECHNOLOGY	MBT- 203 Plant Biotechnology
303	M.Sc. Biotechnology 2008 Pattern	III	BT31 ANIMAL BIOTECHNOLOGY	MBT- 301 Animal & Stem Cell technology
304	M.Sc. Biotechnology 2008 Pattern		BT32 FERMENTATION TECHNOLOGY	MBT- 302 Bioprocess engineering
305	M.Sc. Biotechnology 2008 Pattern		BT33A PRINCIPLES OF VIROLOGY	MBT- 202 Bacteriology and Virology
306	M.Sc. Biotechnology 2008 Pattern		BT33B ADVANCED IMMUNOLOGY	MBT- 103 Genetics & Immunology
307	M.Sc. Biotechnology 2008 Pattern	IV	BT41 GENOMICS & PROTEOMICS	MBT- 401 Genomics and Proteomics
308	M.Sc. Biotechnology 2008 Pattern		BT42 LEGAL & ETHICAL ASPECTS IN BITECH.& IPR	MBT- 205 Clinical Research, Data Base management, & IPR (CBOP)
309	M.Sc. Biotechnology 2008 Pattern		BT43 CLINICAL RESEARCH & DATABASE MANAGEMENT	MBT- 205 Clinical Research, Data Base management, & IPR (CBOP)
310	M.Sc. Biotechnology 2008 Pattern		BT44C AGRICULTURAL BIOTECHNOLOGY	MBT - 306 Agricultural Biotechnology (CBOP)
311	M.Sc. Biotechnology 2008 Pattern		BT44A NANOBIOBIOTECHNOLOGY	MBT - 305 Nano Biotechnology (CBOP)
312	M.Sc. Biotechnology 2008 Pattern		BT44B STEM CELL TECHNOLOGY & REGENERATIVE MEDICINES	MBT- 301 Animal & Stem Cell technology
313	M.Sc. Biotechnology 2013 Pattern	I	BT 101 ADVANCED BIOLOGICAL CHEMISTRY	MBT- 101 Advanced Biological Chemistry
314	M.Sc. Biotechnology 2013 Pattern		BT 102 MOLECULAR BIOLOGY	MBT- 102 Cell & Molecular Biology
315	M.Sc. Biotechnology 2013 Pattern		BT 103 ENVIRONMENTAL BIOTECHNOLOGY	MBT -105 Environmental Biotechnology (CBOP)
316	M.Sc. Biotechnology 2013 Pattern		BT 104 CELL BIOLOGY	MBT- 102 Cell & Molecular Biology
317	M.Sc. Biotechnology 2013 Pattern	II	BT 201 GENETIC ENGINEERING	MBT- 201 Genetic Engineering
318	M.Sc. Biotechnology 2013 Pattern		BT 202 IMMUNOLOGY	MBT- 103 Genetics & Immunology

319	M.Sc. Biotechnology 2013 Pattern		BT 203 PRINCIPLES OF BACTERIOLOGY & VIROLOGY	MBT- 202	Bacteriology and Virology
320	M.Sc. Biotechnology 2013 Pattern		BT 204 PLANT BIOTECHNOLOGY	MBT- 203	Plant Biotechnology
321	M.Sc. Biotechnology 2013 Pattern	III	BT 301 ANIMAL BIOTECHNOLOGY	MBT- 301	Animal & Stem Cell technology
322	M.Sc. Biotechnology 2013 Pattern		BT 302 BIOPROCESS ENGINEERING & FERMENTATION TECHNOLOGY	MBT- 302	Bioprocess engineering
323	M.Sc. Biotechnology 2013 Pattern		BT 303 DATA BASE MANAGEMENT & IPR IN BIOTECHNOLOGY	MBT- 205 Clinical Research, Data Base management, & IPR (CBOP)	
324	M.Sc. Biotechnology 2013 Pattern		BT 304 ADVANCED GENETICS	MBT- 103	Genetics & Immunology
325	M.Sc. Biotechnology 2013 Pattern		BT 305 BIOINFORMATICS	MBT- 303	Bioinformatics & Biostatistics
326	M.Sc. Biotechnology 2013 Pattern		BT 401 GENOMICS & PROTEOMICS	MBT- 401	Genomics and Proteomics
327	M.Sc. Biotechnology 2013 Pattern	IV	BT 402 BIOCHEMICAL & BIOPHYSICAL TECHNIQUES	MBT- 402	Advanced Bio analytical Techniques
328	M.Sc. Biotechnology 2013 Pattern		BT 404 NANOBIOTECHNOLOGY	MBT - 305	Nano Biotechnology (CBOP)
329	M.Sc. Biotechnology 2013 Pattern		BT 405 ANIMAL DEVELOPMENT AND STEAM CELL TECHNOLOGY(4C)	MBT- 301	Animal & Stem Cell technology
330	M.Sc. Biotechnology 2013 Pattern		BT 406 AGRICULTURAL BIOTECHNOLOGY	MBT - 306	Agricultural Biotechnology (CBOP)