

B.Sc. (Hons.) Biotechnology Scheme 2022

Year	FIRST SEMESTER						SECOND SEMESTER					
	Course Code	Course Name	L	T	P	C	Course Code	Course Name	L	T	P	C
I	BT1101	Diversity of Lower Plants	2	1	0	3	BT1201	Mycology and Plant Pathology	2	1	0	3
	BT1102	Fundamentals of Biotechnology	2	1	0	3	BT1202	Elements of Biochemistry	2	1	0	3
	BT1103	Cell Biology: Structure & Functions	2	1	0	3	BT1203	Gymnosperms and Palaeobotany	2	1	0	3
	BT1130	Botany Laboratory- I	0	0	2	1	BT1204	Essentials of Microbiology	2	1	0	3
	BT1131	Biotechnology Laboratory-I	0	0	4	2	BT1230	Botany Laboratory- II	0	0	4	2
	CA1170	Fundamentals of Computer	1	1	0	2	BT1231	Biotechnology Laboratory-II	0	0	4	2
	CA1175	Fundamentals of Computer lab	0	0	2	1	*****	GE-II (A)	2	1	0	3
	CY1003	Environmental Science	2	1	0	3	*****	GE-II (A) Lab	0	0	2	1
	LN1106	Communicative English	2	0	0	2	*****	GE-II (B)	2	1	0	3
	*****	GE – I	2	1	0	3	*****	GE-II (B) Lab	0	0	2	1
	*****	GE – I Lab	0	0	2	1						
			13	6	10	24			12	6	12	24
	Total Contact Hours (L + T + P)		29			Total Contact Hours (L + T + P)		30				
II	THIRD SEMESTER						FOURTH SEMESTER					
	BT2101	Fundamentals of Bioinformatics	2	1	0	3	BT2201	Introduction to Biotechniques	2	1	0	3
	BT2102	Molecular Biology	2	1	0	3	BT2202	Fundamentals of Immunology	2	1	0	3
	BT2103	Principles of Genetics	2	1	0	3	BT2203	Recombinant DNA Technology and Forensics	3	1	0	4
	BT2104	Plant Tissue Culture Techniques	2	1	0	3	BT2204	Biotechnology in Agriculture	2	1	0	3
	BT2130	Botany Laboratory-III	0	0	2	1	BT2206	Plant Morphology	2	1	0	3
	BT2131	Biotechnology Laboratory-III	0	0	4	2	BT2230	Botany Laboratory-IV	0	0	4	2
	BT2132	Plant Tissue Culture Lab	0	0	2	1	BT2231	Biotechnology Laboratory-IV	0	0	4	2
	*****	GE – III (A)	2	1	0	3	*****	DSE – I	3	1	0	4
	*****	GE – III (A) Lab	0	0	2	1	*****	Open Elective				3
	*****	GE – III (B)	2	1	0	3						
*****	GE – III (B) Lab	0	0	2	1							
			12	6	12	24			14	6	8	27
	Total Contact Hours (L + T + P)		30			Total Contact Hours (L + T + P) + OE		28 + 3 = 31				
III	FIFTH SEMESTER						SIXTH SEMESTER					
	BT3101	Ethnobotany	2	1	0	3	BT3201	Physiology of Living Systems	2	1	0	3
	BT3102	Fundamentals of Cell Culture	2	1	0	3	BT3202	Medical Biotechnology	2	1	0	3
	BT3103	Industrial Biotechnology	2	1	0	3	BT3203	Applied Plant Biology	2	1	0	3
	BT3130	Botany Laboratory-V	0	0	2	1	BT3230	Botany Laboratory-VI	0	0	4	2
	BT3131	Biotechnology Laboratory-V	0	0	4	2	BT3231	Biotechnology Laboratory-VI	0	0	2	1
	BT3170	DSE-II - Project	0	0	24	8	*****	DSE – IV (A)	2	1	0	3
	*****	DSE- IIIA MOOC course	2	0	0	2	*****	DSE – IV (B)	2	1	0	3
	*****	DSE- IIIB MOOC course	2	0	0	2	*****	GE – IV	2	1	0	3
							*****	GE – IV Lab	0	0	2	1
							*****	Open Elective				3
			9	4	30	24			12	6	8	25
	Total Contact Hours (L + T + P)		43			Total Contact Hours (L + T + P) + OE		26 +3 = 29				

<u>Discipline Specific Electives (DSE)</u>	<u>Generic Electives (GE)</u>	<u>Open Electives (OE) offered by the Department</u>
<u>DSE – I</u> - BT2240 Ethical issues and IPR in Biotechnology - BT2241 Cell Based Assay	<u>GE – I & Lab</u> - CY1160 General Chemistry- I - CY1138 Organic Chemistry Laboratory	- BT2080 Elements of Bioscience and Biotechnology - BT2081 Science of Living Systems
<u>DSE – II Project</u>	<u>GE – II (A) & Lab</u> - CY1260 General Chemistry –II - CY1238 Inorganic Chemistry Laboratory	
<u>DSE – III MOOC</u>		
<u>DSE – IV (A)</u> - BT3240 Plant Breeding - BT3241 System Biology	<u>GE – II (B) & Lab</u> - CY1261 General Chemistry –III - CY1239 Physical Chemistry Laboratory	
<u>DSE – IV (B)</u> - BT3242 Food Biotechnology - BT3243 Expression Purification of Therapeutic Proteins - BT3247 Sanitation and Sludge Management	<u>GE – III (A) & Lab</u> - CY2160 Analytical Chemistry - CY2138 Analytical Chemistry Laboratory	
	<u>GE – III (B) & Lab</u> - MA2146 Fundamentals of Biostatistics - MA2134 Lab on Fundamentals of Biostatistics	
	<u>GE – IV & Lab</u> - CY3260 Biophysical Chemistry - CY3238 Applied Chemistry Laboratory	