





Semester - 5													
Open Elective 01						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total
Subject Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int.+Ext.	Int.+Ext.	Total
203101346	Basic Aircraft Science	2	2	0	0	20	0	20	60	0	40	0	100
203104346	Disaster Preparedness and Planning	2	2	0	0	20	0	20	60	0	40	0	100
203105346	Cyber Security	2	2	0	0	20	0	20	60	0	40	0	100
203107346	Fundamentals of Communication Engineering	2	2	0	0	20	0	20	60	0	40	0	100
203108346	Internet of Things	2	2	0	0	20	0	20	60	0	40	0	100
203109346	Renewable Energy Sources	2	2	0	0	20	0	20	60	0	40	0	100
Semester - 5													
						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total
Subject Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int.+Ext.	Int.+Ext.	Total
203144301	Heat and Mass Transfer	3	3	0	0	20	0	20	60	0	40	0	100
203144302	Heat and Mass Transfer Lab	1	0	2	0	0	20	0	0	30	0	25	50
203111303	Intellectual property rights & Bioethics	2	2	0	0	20	0	20	60	0	40	0	100
203144303	Instrumentation and Process control	3	3	0	0	20	0	20	60	0	40	0	100
203144304	Instrumentation and Process control Lab	1	0	2	0	0	20	0	0	30	0	25	50
203144305	Genetic Engineering	3	3	0	0	20	0	20	60	0	40	0	100
203144306	Genetic Engineering Lab	1	0	2	0	0	20	0	0	30	0	25	50
203144307	Industrial Biotechnology	3	3	0	0	20	0	20	60	0	40	0	100
203193301	Programming Skills and Placement Essentials (All Branches Except CSE/IT/ICT)	2	0	0	2	0	0	100	0	0	40	0	100
	Open Elective 01 (Compulsory Subjects :1)	2	2	0	0	20	0	20	60	0	40	0	100
	PEC 01 (Compulsory Subjects :1)	4	3	2	0	20	20	20	60	30	40	25	150
	<b>Total</b>	<b>25</b>	<b>19</b>	<b>8</b>	<b>2</b>								<b>1000</b>
PEC 01													
						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total
Subject Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int.+Ext.	Int.+Ext.	Total
203144331	Molecular Modeling and Drug Designing	3	3	0	0	20	0	20	60	0	40	0	100
203144332	Molecular Modeling and Drug Designing Lab	1	0	2	0	0	20	0	0	30	0	25	50
203144333	Medical Instrumentation and Surgical Procedures	3	3	0	0	20	0	20	60	0	40	0	100
203144334	Medical Instrumentation and Surgical Procedures Lab	1	0	2	0	0	20	0	0	30	0	25	50
203111331	Biomaterials & Implants	3	3	0	0	20	0	20	60	0	40	0	100
203111332	Biomaterials & Implants Lab	1	0	2	0	0	20	0	0	30	0	25	50

Semester - 6														
Open Elective 02						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total	
Subject Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int.+Ext.	Int.+Ext.		
203100351	Life Science	2	2	0	0	20	0	20	60	0	40	0	100	
203100353	Engineering Geology	2	2	0	0	20	0	20	60	0	40	0	100	
203100354	Landscape Planning and Design	2	2	0	0	20	0	20	60	0	40	0	100	
203100355	Fundamentals of Management	2	2	0	0	20	0	20	60	0	40	0	100	
203100356	Corporate Social Responsibility	2	2	0	0	20	0	20	60	0	40	0	100	
203100357	Innovation and Entrepreneurship	2	2	0	0	20	0	20	60	0	40	0	100	
203100358	Constitution of India	2	2	0	0	20	0	20	60	0	40	0	100	
203100359	Cyber Law & Ethics	2	2	0	0	20	0	20	60	0	40	0	100	
Semester - 6														
Open Elective 02						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total	
Subject Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int.+Ext.	Int.+Ext.		
203144351	Bioinformatics	3	3	0	0	20	0	20	60	0	40	0	100	
203144352	Bioinformatics Lab	1	0	2	0	0	20	0	0	30	0	25	50	
203144353	Metabolic Engineering	3	3	0	0	20	0	20	60	0	40	0	100	
203144355	Animal Biotechnology	2	2	0	0	20	0	20	60	0	40	0	100	
203144356	Animal Biotechnology Lab	1	0	2	0	0	20	0	0	30	0	25	50	
203144357	Advances in Molecular Techniques	3	3	0	0	20	0	20	60	0	40	0	100	
203193351	Advanced Programming and Placement Essentials	2	0	0	2	0	0	100	0	0	40	0	100	
Open Elective 02 (Compulsory Subjects :1)		2	2	0	0	20	0	20	60	0	40	0	100	
PEC 02 (Compulsory Subjects :1)		3	3	0	0	20	0	20	60	0	40	0	150	
<b>Total</b>		<b>20</b>	<b>16</b>	<b>4</b>	<b>2</b>								<b>850</b>	
PEC 02														
PEC 02						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total	
Subject Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int.+Ext.	Int.+Ext.		
203111383	Biomechanics & Rehabilitation Engineering	3	3	0	0	20	0	20	60	0	40	0	100	
203111384	Biomechanics & Rehabilitation Engineering Lab	1	0	2	0	0	20	0	0	30	0	25	50	
203144381	Nano-Biotechnology	3	3	0	0	20	0	20	60	0	40	0	100	
203144382	Nano-Biotechnology Lab	1	0	2	0	0	20	0	0	30	0	25	50	
203144383	Nuclear medicine	3	3	0	0	20	0	20	60	0	40	0	100	
203144384	Nuclear medicine Lab	1	0	2	0	0	20	0	0	30	0	25	50	

Semester - 7														
Subject Code	Subject	Credit	Lect	Lab	Tut	Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total	
						T	P	CE	T	P	Int.+Ext.	Int.+Ext.		
203144401	Molecular medicine	3	3	0	0	20	0	20	60	0	40	0	100	
203144403	Bioseparation techniques	3	3	0	0	20	0	20	60	0	40	0	100	
203144404	Bioseparation techniques Lab	1	0	2	0	0	20	0	0	30	0	25	50	
203144405	Cell signaling	3	3	0	0	20	0	20	60	0	40	0	100	
203144407	Bioreactor design	4	3	0	2	20	0	20	60	0	40	0	100	
203144409	Summer Internship	2	0	0	0	0	50	0	0	0	0	25	50	
203144410	Project I	5	0	10	0	0	100	0	0	100	0	100	200	
	PEC 03 (Compulsory Subjects :1)	3	3	0	0	20	0	20	60	0	40	0	100	
	<b>Total</b>	<b>24</b>	<b>15</b>	<b>12</b>	<b>2</b>								<b>800</b>	
Semester - 8														
Subject Code	Subject	Credit	Lect	Lab	Tut	Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total	
						T	P	CE	T	P	Int.+Ext.	Int.+Ext.		
203144431	Environmental Biotechnology	3	3	0	0	20	0	20	60	0	40	0	100	
203144433	Pharmaceutical Biotechnology	3	3	0	0	20	0	20	60	0	40	0	100	
203144435	Tissue Engineering	3	3	0	0	20	0	20	60	0	40	0	100	
Semester - 8														
Subject Code	Subject	Credit	Lect	Lab	Tut	Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total	
						T	P	CE	T	P	Int.+Ext.	Int.+Ext.		
203144451	Protein Engineering	3	3	0	0	20	0	20	60	0	40	0	100	
203144454	Project II	6	0	12	0	0	100	0	0	100	0	100	200	
	PEC 04 (Compulsory Subjects :1)	3	3	0	0	20	0	20	60	0	40	0	100	
	<b>Total</b>	<b>12</b>	<b>6</b>	<b>12</b>	<b>0</b>								<b>400</b>	
Semester - 8														
Subject Code	Subject	Credit	Lect	Lab	Tut	Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total	
						T	P	CE	T	P	Int.+Ext.	Int.+Ext.		
203144481	Stem cell technology	3	3	0	0	20	0	20	60	0	40	0	100	
203111483	Radiotherapy	3	3	0	0	20	0	20	60	0	40	0	100	
203144485	Proteomics & Genomics	3	3	0	0	20	0	20	60	0	40	0	100	