	B.Tech. BIOTECHNOI	_OGY					
	Minimum Credits to be Ea	rned 172.0					
First Semeste	r						
	_	Objectives &Outcomes					Т
Code No.	Course	PEOs	POs	L	T	P	C
18BT101	ENGINEERING MATHEMATICS I	I,II	a,b	3	1	0	4
18BT102	ENGINEERING PHYSICS I	1,11,111	a,b,i	2	0	2	3
18BT103	ENGINEERING CHEMISTRY I	1,11	a,b	2	0	2	3
18BT104	COMPUTER PROGRAMMING	1,11	a,b,c,e	2	0	2	3
18HS101	COMMUNICATIVE ENGLISH I	1,11,111	i,j	1	0	2	2
18BT106	BIOTECHNOLOGY LABORATORY PRACTICES	1,11,111	c,d,e,i,j,k,n,o	0	0	4	2
		.,,	Total	10	1	12	17.0
Second Seme	ster						
		Ohioativa	- 2 Outoomoo		I	I	1
Code No.	Course	Objective	s &Outcomes	L	т	Р	c
	333	PEOs	POs				
18BT201	ENGINEERING MATHEMATICS II	1,11	a,b	3	1	0	4
18BT202	ENGINEERING PHYSICS II	1,11,111	a,b,i	2	0	2	3
18BT203	ENGINEERING CHEMISTRY II	1,11	a,b,c,e	2	0	2	3
18BT204	BASICS OF ELECTRICAL AND ELECTRONICS ENGINEERING	1,11	a,b	2	0	2	3
	LANGUAGE ELECTIVE	-	-	-	-	-	2
18BT206	BIOCHEMISTRY	1,11,111	a,b,c,g,i,k,n	3	0	0	3
18BT207	BASICS OF BIOTECHNOLOGY	1,11	a,b,c,n,o	3	0	0	3
		<u>'</u>	Total	15	1	6	21.0
Third Semeste	er						
		Ob in a time	- 00				
Code No.	Course	Objective	s &Outcomes	L	Т	Р	c
		PEOs	POs				
18BT301	ENGINEERING MATHEMATICS III	I,II	a,b	3	1	0	4
18BT302	PROCESS CALCULATIONS AND UNIT OPERATIONS	1,11	a,b,c	3	0	2	4
18BT303	INSTRUMENTATION AND ANALYTICAL TECHNIQUES	1,11	a,b,c,d,e,m	3	0	0	3
18BT304	CELL BIOLOGY	1,11	a,b,d,n	3	0	0	3
18BT305	BIOORGANIC CHEMISTRY	1,11	a,b,d,e,h,n	3	0	0	3
18BT306	MICROBIOLOGY	1,11,111	a,c,g,i,m,o	3	0	0	3
18BT307	MICROBIOLOGY LAB	1,11,111	a,c,g,i,m	0	0	4	2
18BT308	BIOCHEMISTRY AND BIOORGANIC CHEMISTRY LAB	1,11,111	c,d,e,i,j,m,n	0	0	4	2
18GE301	SOFT SKILLS - VERBAL ABILITY	-	-	2	0	0	0
1002001	OOT TORREST VERBALE ABILITY						
			Total	20			24.0
Fourth Semes	ter		Total	20	1	10	24.0
Fourth Semes	ter I			20			24.0
		Objective	Total				24.0 C
Fourth Semes Code No.	Course	Objective PEOs		20 L	1	10	
			es &Outcomes		1	10	
Code No.	Course	PEOs	s &Outcomes	L	1 T	10 P	С
Code No. 18BT401	Course BIOPROCESS ENGINEERING	PEOs , ,	POs a,b,c,m a,b,c,m	L 3	1 T	10 P	C
Code No. 18BT401 18BT402 18BT403	Course BIOPROCESS ENGINEERING FUNDAMENTALS OF TRANSPORT PROCESS	PEOs , , ,	POs a,b,c,m a,b,c,m a,b,c,d,f,g,h,n	L 3 3 3 3	1 T 1 1	10 P	C 4 4
Code No. 18BT401 18BT402	Course BIOPROCESS ENGINEERING FUNDAMENTALS OF TRANSPORT PROCESS IMMUNOLOGY	PEOs , , , , , ,	POs a,b,c,m a,b,c,d,f,g,h,n a,d,g,l,m,n	L 3 3	T 1 1 0	10 P 0 0 2	C 4 4 4 4
Code No. 18BT401 18BT402 18BT403 18BT404 18BT405	Course BIOPROCESS ENGINEERING FUNDAMENTALS OF TRANSPORT PROCESS IMMUNOLOGY MOLECULAR BIOLOGY PHARMACOGNOSY AND PHARMACOLOGY	PEOs	POs a,b,c,m a,b,c,d,f,g,h,n a,d,g,l,m,n a,b,c,d,n,o	L 3 3 3 3 3 3	T 1 1 0 0 0	10 P 0 0 2 0 0	C 4 4 4 3
Code No. 18BT401 18BT402 18BT403 18BT404 18BT405 18BT406	Course BIOPROCESS ENGINEERING FUNDAMENTALS OF TRANSPORT PROCESS IMMUNOLOGY MOLECULAR BIOLOGY PHARMACOGNOSY AND PHARMACOLOGY CHEMICAL THERMODYNAMICS	PEOs I,II I,II I,II,III I,II,III I,II,I	POs a,b,c,m a,b,c,d,f,g,h,n a,d,g,l,m,n a,b,c,d,n,o a,b,c,m	L 3 3 3 3 3 3 3 3	T 1 1 0 0 0 0 1 1	P 0 0 0 2 0 0 0 0 0 0 0	C 4 4 4 3 3 3 4
Code No. 18BT401 18BT402 18BT403 18BT404 18BT405 18BT406 18BT407	Course BIOPROCESS ENGINEERING FUNDAMENTALS OF TRANSPORT PROCESS IMMUNOLOGY MOLECULAR BIOLOGY PHARMACOGNOSY AND PHARMACOLOGY CHEMICAL THERMODYNAMICS BIOPROCESS LABORATORY	PEOs I,II I,II I,II,III I,II,III I,II,I	POs a,b,c,m a,b,c,d,f,g,h,n a,d,g,l,m,n a,b,c,d,n,o a,b,c,d,n,o a,b,c,d,n,o a,b,c,m c,d,e,i,j,m	L 3 3 3 3 3 3 3 0	T 1 1 0 0 0 1 0 0	P 0 0 0 2 0 0 0 0 4	C 4 4 4 3 3 3 4 2
Code No. 18BT401 18BT402 18BT403 18BT404 18BT405 18BT406 18BT407	Course BIOPROCESS ENGINEERING FUNDAMENTALS OF TRANSPORT PROCESS IMMUNOLOGY MOLECULAR BIOLOGY PHARMACOGNOSY AND PHARMACOLOGY CHEMICAL THERMODYNAMICS BIOPROCESS LABORATORY MOLECULAR BIOLOGY LABORATORY	PEOs I,II I,II I,II,III I,II,III I,II,I	POs a,b,c,m a,b,c,d,f,g,h,n a,d,g,l,m,n a,b,c,d,n,o a,b,c,m c,d,e,i,j,m a,b,d,e,i,n	L 3 3 3 3 3 3 0 0	T 1 1 0 0 0 1 0 0 0 0 0	P 0 0 0 2 0 0 0 0 4 4 4	C 4 4 4 3 3 3 4 4 2 2 2
Code No. 18BT401 18BT402 18BT403 18BT404 18BT405 18BT406 18BT407 18BT408	Course BIOPROCESS ENGINEERING FUNDAMENTALS OF TRANSPORT PROCESS IMMUNOLOGY MOLECULAR BIOLOGY PHARMACOGNOSY AND PHARMACOLOGY CHEMICAL THERMODYNAMICS BIOPROCESS LABORATORY MOLECULAR BIOLOGY LABORATORY ENVIRONMENTAL SCIENCE	PEOs I,II I,II I,II,III I,II,III I,II,I	POs a,b,c,m a,b,c,d,f,g,h,n a,d,g,l,m,n a,b,c,d,n,o a,b,c,d,n,o a,b,c,d,n,o a,b,c,m c,d,e,i,j,m	L 3 3 3 3 3 3 0 0 0 2	T 1 1 0 0 0 1 0 0 0 0 0 0 0 0	P 0 0 0 2 0 0 0 0 4 4 0 0	C 4 4 4 3 3 3 4 2 2 0 0
Code No. 18BT401 18BT402 18BT403 18BT404 18BT405 18BT406 18BT407	Course BIOPROCESS ENGINEERING FUNDAMENTALS OF TRANSPORT PROCESS IMMUNOLOGY MOLECULAR BIOLOGY PHARMACOGNOSY AND PHARMACOLOGY CHEMICAL THERMODYNAMICS BIOPROCESS LABORATORY MOLECULAR BIOLOGY LABORATORY	PEOs I,II I,II I,II,III I,II,III I,II,I	POs a,b,c,m a,b,c,d,f,g,h,n a,d,g,l,m,n a,b,c,d,n,o a,b,c,m c,d,e,i,j,m a,b,d,e,i,n a,b -	L 3 3 3 3 3 3 0 0 0 2 2 2	T 1 1 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0	P 0 0 2 0 0 4 4 0 0 0	4 4 4 3 3 3 4 2 2 0
Code No. 18BT401 18BT402 18BT403 18BT404 18BT405 18BT406 18BT407 18BT408 18HS001 18GE401	Course BIOPROCESS ENGINEERING FUNDAMENTALS OF TRANSPORT PROCESS IMMUNOLOGY MOLECULAR BIOLOGY PHARMACOGNOSY AND PHARMACOLOGY CHEMICAL THERMODYNAMICS BIOPROCESS LABORATORY MOLECULAR BIOLOGY LABORATORY ENVIRONMENTAL SCIENCE SOFT SKILLS-REASONING	PEOs I,II I,II I,II,III I,II,III I,II,I	POs a,b,c,m a,b,c,d,f,g,h,n a,d,g,l,m,n a,b,c,d,n,o a,b,c,m c,d,e,i,j,m a,b,d,e,i,n	L 3 3 3 3 3 3 0 0 0 2	T 1 1 0 0 0 1 0 0 0 0 0 0 0 0	P 0 0 0 2 0 0 0 0 4 4 0 0	C 4 4 4 3 3 3 4 2 2 0 0
Code No. 18BT401 18BT402 18BT403 18BT404 18BT405 18BT406 18BT407 18BT408	Course BIOPROCESS ENGINEERING FUNDAMENTALS OF TRANSPORT PROCESS IMMUNOLOGY MOLECULAR BIOLOGY PHARMACOGNOSY AND PHARMACOLOGY CHEMICAL THERMODYNAMICS BIOPROCESS LABORATORY MOLECULAR BIOLOGY LABORATORY ENVIRONMENTAL SCIENCE SOFT SKILLS-REASONING	PEOs I,II I,II I,II,III I,II,III I,II,I	POs a,b,c,m a,b,c,d,f,g,h,n a,d,g,l,m,n a,b,c,d,n,o a,b,c,m c,d,e,i,j,m a,b,d,e,i,n a,b -	L 3 3 3 3 3 3 0 0 0 2 2 2	T 1 1 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0	P 0 0 2 0 0 4 4 0 0 0	4 4 4 3 3 3 4 2 2 0
Code No. 18BT401 18BT402 18BT403 18BT404 18BT405 18BT406 18BT407 18BT408 18HS001 18GE401 Fifth Semester	BIOPROCESS ENGINEERING FUNDAMENTALS OF TRANSPORT PROCESS IMMUNOLOGY MOLECULAR BIOLOGY PHARMACOGNOSY AND PHARMACOLOGY CHEMICAL THERMODYNAMICS BIOPROCESS LABORATORY MOLECULAR BIOLOGY LABORATORY ENVIRONMENTAL SCIENCE SOFT SKILLS-REASONING	PEOs I,II I,II I,II,III I,II,III I,II,I	POs a,b,c,m a,b,c,d,f,g,h,n a,d,g,l,m,n a,b,c,d,n,o a,b,c,m c,d,e,i,j,m a,b,d,e,i,n a,b -	L 3 3 3 3 3 0 0 2 2 22	T 1 1 0 0 0 1 0 0 0 3	P 0 0 0 2 0 0 4 4 0 10	C 4 4 4 3 3 3 4 2 2 0 0 0 26.0
Code No. 18BT401 18BT402 18BT403 18BT404 18BT405 18BT406 18BT407 18BT408 18HS001 18GE401	Course BIOPROCESS ENGINEERING FUNDAMENTALS OF TRANSPORT PROCESS IMMUNOLOGY MOLECULAR BIOLOGY PHARMACOGNOSY AND PHARMACOLOGY CHEMICAL THERMODYNAMICS BIOPROCESS LABORATORY MOLECULAR BIOLOGY LABORATORY ENVIRONMENTAL SCIENCE SOFT SKILLS-REASONING	PEOs I,II I,II I,II,III I,II,III I,II,I	POs a,b,c,m a,b,c,d,f,g,h,n a,d,g,l,m,n a,b,c,d,n,o a,b,c,m c,d,e,i,j,m a,b,d,e,i,n a,b - Total	L 3 3 3 3 3 3 0 0 0 2 2 2	T 1 1 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0	P 0 0 2 0 0 4 4 0 0 0	4 4 4 3 3 3 4 2 2 0
Code No. 18BT401 18BT402 18BT403 18BT404 18BT405 18BT406 18BT407 18BT408 18HS001 18GE401 Fifth Semester	BIOPROCESS ENGINEERING FUNDAMENTALS OF TRANSPORT PROCESS IMMUNOLOGY MOLECULAR BIOLOGY PHARMACOGNOSY AND PHARMACOLOGY CHEMICAL THERMODYNAMICS BIOPROCESS LABORATORY MOLECULAR BIOLOGY LABORATORY ENVIRONMENTAL SCIENCE SOFT SKILLS-REASONING	PEOs I,II I,II I,II,III I,II,III I,II,I	POs a,b,c,m a,b,c,d,f,g,h,n a,d,g,l,m,n a,b,c,d,n,o a,b,c,m c,d,e,i,j,m a,b,d,e,i,n a,b - Total	L 3 3 3 3 3 0 0 2 2 22	T 1 1 0 0 0 1 0 0 0 3	P 0 0 0 2 0 0 4 4 0 10	C 4 4 4 3 3 3 4 2 2 0 0 0 26.0
Code No. 18BT401 18BT402 18BT403 18BT404 18BT405 18BT406 18BT407 18BT408 18HS001 18GE401 Fifth Semester Code No.	BIOPROCESS ENGINEERING FUNDAMENTALS OF TRANSPORT PROCESS IMMUNOLOGY MOLECULAR BIOLOGY PHARMACOGNOSY AND PHARMACOLOGY CHEMICAL THERMODYNAMICS BIOPROCESS LABORATORY MOLECULAR BIOLOGY LABORATORY ENVIRONMENTAL SCIENCE SOFT SKILLS-REASONING Course DOWNSTREAM PROCESSING	PEOs I,II I,II I,II,III I,II,III I,II,I	POs a,b,c,m a,b,c,d,f,g,h,n a,b,c,d,n,o a,b,c,d,n,o a,b,c,m c,d,e,i,j,m a,b,d,e,i,n a,b Total S & Outcomes POs a,b,c,e,f,l,n	L 3 3 3 3 3 0 0 2 2 22 L	T 1 1 1 0 0 0 1 0 0 0 3 T 1	P 0 0 0 2 0 0 4 4 0 0 10 P 0	C 4 4 4 3 3 3 4 2 2 0 0 26.0
Code No. 18BT401 18BT402 18BT403 18BT404 18BT405 18BT406 18BT407 18BT408 18HS001 18GE401 Fifth Semester Code No.	BIOPROCESS ENGINEERING FUNDAMENTALS OF TRANSPORT PROCESS IMMUNOLOGY MOLECULAR BIOLOGY PHARMACOGNOSY AND PHARMACOLOGY CHEMICAL THERMODYNAMICS BIOPROCESS LABORATORY MOLECULAR BIOLOGY LABORATORY ENVIRONMENTAL SCIENCE SOFT SKILLS-REASONING Course	PEOs I,II I,II I,II,III I,II,III I,II,I	POS a,b,c,m a,b,c,d,f,g,h,n a,d,g,l,m,n a,b,c,d,n,o a,b,c,m c,d,e,i,j,m a,b - Total ss &Outcomes POs	L 3 3 3 3 3 0 0 2 2 2 2 L	T 1 1 0 0 0 1 0 0 0 3	P 0 0 0 2 0 0 4 4 0 10	C 4 4 4 3 3 3 4 2 0 0 26.0
Code No. 18BT401 18BT402 18BT403 18BT404 18BT405 18BT406 18BT407 18BT408 18HS001 18GE401 Fifth Semester Code No.	BIOPROCESS ENGINEERING FUNDAMENTALS OF TRANSPORT PROCESS IMMUNOLOGY MOLECULAR BIOLOGY PHARMACOGNOSY AND PHARMACOLOGY CHEMICAL THERMODYNAMICS BIOPROCESS LABORATORY MOLECULAR BIOLOGY LABORATORY ENVIRONMENTAL SCIENCE SOFT SKILLS-REASONING Course DOWNSTREAM PROCESSING	PEOs I,II I,II I,II,III I,II,III I,II,I	POs a,b,c,m a,b,c,d,f,g,h,n a,b,c,d,n,o a,b,c,m c,d,e,i,j,m a,b,d,e,i,n a,b Total ss &Outcomes POs a,b,c,e,f,l,n a,b,c,d,e,h,m,	L 3 3 3 3 3 0 0 2 2 22 L	T 1 1 1 0 0 0 1 0 0 0 3 T 1	P 0 0 0 2 0 0 4 4 0 0 10 P 0	C 4 4 4 3 3 3 4 2 2 0 0 26.0
Code No. 18BT401 18BT402 18BT403 18BT404 18BT405 18BT406 18BT407 18BT408 18HS001 18GE401 Fifth Semester Code No. 18BT501 18BT502	BIOPROCESS ENGINEERING FUNDAMENTALS OF TRANSPORT PROCESS IMMUNOLOGY MOLECULAR BIOLOGY PHARMACOGNOSY AND PHARMACOLOGY CHEMICAL THERMODYNAMICS BIOPROCESS LABORATORY MOLECULAR BIOLOGY LABORATORY ENVIRONMENTAL SCIENCE SOFT SKILLS-REASONING Course DOWNSTREAM PROCESSING NANO BIOTECHNOLOGY	PEOs I,II I,II I,II,III I,II,III I,II,I	POs a,b,c,m a,b,c,d,f,g,h,n a,b,c,d,n,o a,b,c,d,n,o a,b,c,m c,d,e,i,j,m a,b,d,e,i,n a,b Total SS & Outcomes POs a,b,c,e,f,l,n a,b,c,d,e,h,m,n	L 3 3 3 3 3 0 0 2 2 2 2 L 3 3	T 1 1 0 0 0 1 0 0 0 3 T 1 0	P 0 0 0 2 0 0 0 4 4 0 0 10 P 0 2	C 4 4 4 3 3 3 4 2 0 0 26.0
Code No. 18BT401 18BT402 18BT403 18BT404 18BT405 18BT406 18BT407 18BT408 18HS001 18GE401 Fifth Semester Code No. 18BT501 18BT502	BIOPROCESS ENGINEERING FUNDAMENTALS OF TRANSPORT PROCESS IMMUNOLOGY MOLECULAR BIOLOGY PHARMACOGNOSY AND PHARMACOLOGY CHEMICAL THERMODYNAMICS BIOPROCESS LABORATORY MOLECULAR BIOLOGY LABORATORY ENVIRONMENTAL SCIENCE SOFT SKILLS-REASONING Course DOWNSTREAM PROCESSING NANO BIOTECHNOLOGY GENETIC ENGINEERING	PEOS I,II I,II I,II,III I,II,III I,II,I	POs a,b,c,m a,b,c,d,f,g,h,n a,b,c,d,n,o a,b,c,d,n,o a,b,c,m c,d,e,i,j,m a,b,d,e,i,n a,b - Total S & Outcomes POs a,b,c,e,f,l,n a,b,c,e,f,l,n a,b,c,d,e,h,m,n a,b,c,e,f,l,n a,b,c,e,f,l,n a,b,c,e,f,l,n a,b,c,e,f,l,n a,b,c,e,f,l,n	L 3 3 3 3 3 0 0 2 2 2 2 L 3 3 3	T 1 1 0 0 0 1 0 0 0 3 T 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 0 0 0 2 0 0 0 4 4 0 0 10 P 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C 4 4 4 3 3 4 2 2 0 0 26.0 C 4 4 3
Code No. 18BT401 18BT402 18BT403 18BT404 18BT405 18BT406 18BT407 18BT408 18HS001 18GE401 Fifth Semester Code No. 18BT501 18BT502	BIOPROCESS ENGINEERING FUNDAMENTALS OF TRANSPORT PROCESS IMMUNOLOGY MOLECULAR BIOLOGY PHARMACOGNOSY AND PHARMACOLOGY CHEMICAL THERMODYNAMICS BIOPROCESS LABORATORY MOLECULAR BIOLOGY LABORATORY ENVIRONMENTAL SCIENCE SOFT SKILLS-REASONING Course DOWNSTREAM PROCESSING NANO BIOTECHNOLOGY GENETIC ENGINEERING PLANT TISSUE CULTURE	PEOS I,II I,II I,II,III I,II,III I,II,I	POs a,b,c,m a,b,c,d,f,g,h,n a,b,c,d,n,o a,b,c,d,n,o a,b,c,m c,d,e,i,j,m a,b,d,e,i,n a,b - Total S & Outcomes POs a,b,c,e,f,l,n a,b,c,e,f,l,n a,b,c,d,e,h,m,n a,b,c,e,f,l,n a,b,c,e,f,l,n a,b,c,e,f,l,n a,b,c,e,f,l,n a,b,c,e,f,l,n	L 3 3 3 3 3 0 0 2 2 2 2 L 3 3 3	T 1 1 0 0 0 1 0 0 0 3 T 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 0 0 0 2 0 0 0 4 4 0 0 10 P 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C 4 4 4 3 3 4 2 0 0 26.0 C 4 4 3 3 3
Code No. 18BT401 18BT402 18BT403 18BT404 18BT405 18BT406 18BT407 18BT408 18HS001 18GE401 Fifth Semester Code No. 18BT501 18BT502	BIOPROCESS ENGINEERING FUNDAMENTALS OF TRANSPORT PROCESS IMMUNOLOGY MOLECULAR BIOLOGY PHARMACOGNOSY AND PHARMACOLOGY CHEMICAL THERMODYNAMICS BIOPROCESS LABORATORY MOLECULAR BIOLOGY LABORATORY ENVIRONMENTAL SCIENCE SOFT SKILLS-REASONING Course DOWNSTREAM PROCESSING NANO BIOTECHNOLOGY GENETIC ENGINEERING PLANT TISSUE CULTURE PROFESSIONAL ELECTIVE I	PEOS I,II I,II,III I,II,III I,II,III I,II,I	## ## ## ## ## ## ## ## ## ## ## ## ##	L 3 3 3 3 3 0 0 2 2 2 2 L 3 3 3	T 1 1 0 0 0 1 0 0 0 3 T 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 0 0 0 2 0 0 0 4 4 0 0 10 P 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C 4 4 4 3 3 4 2 0 0 26.0 C 4 4 3 3 3 3 3 3
Code No. 18BT401 18BT402 18BT403 18BT404 18BT405 18BT406 18BT407 18BT408 18HS001 18GE401 Fifth Semester Code No. 18BT501 18BT502 18BT503 18BT504	BIOPROCESS ENGINEERING FUNDAMENTALS OF TRANSPORT PROCESS IMMUNOLOGY MOLECULAR BIOLOGY PHARMACOGNOSY AND PHARMACOLOGY CHEMICAL THERMODYNAMICS BIOPROCESS LABORATORY MOLECULAR BIOLOGY LABORATORY ENVIRONMENTAL SCIENCE SOFT SKILLS-REASONING Course DOWNSTREAM PROCESSING NANO BIOTECHNOLOGY GENETIC ENGINEERING PLANT TISSUE CULTURE PROFESSIONAL ELECTIVE I PROFESSIONAL ELECTIVE II GENETIC ENGINEERING LABORATORY	PEOS I,II I,II I,II,III I,II,III I,II,I	## ## ## ## ## ## ## ## ## ## ## ## ##	L 3 3 3 3 3 0 0 2 2 22 L 3 3 3 - 0 0	T 1 1 0 0 0 1 0 0 0 3 T 1 0 0 0 0 0 0	P 0 0 0 0 0 4 4 0 0 10 P 0 2 0 0 0 10	C 4 4 4 3 3 4 2 2 0 0 26.0 C 4 4 3 3 3 3 3 2
Code No. 18BT401 18BT402 18BT403 18BT404 18BT405 18BT406 18BT407 18BT408 18HS001 18GE401 Fifth Semester Code No. 18BT501 18BT502 18BT503 18BT504	BIOPROCESS ENGINEERING FUNDAMENTALS OF TRANSPORT PROCESS IMMUNOLOGY MOLECULAR BIOLOGY PHARMACOGNOSY AND PHARMACOLOGY CHEMICAL THERMODYNAMICS BIOPROCESS LABORATORY MOLECULAR BIOLOGY LABORATORY ENVIRONMENTAL SCIENCE SOFT SKILLS-REASONING Course DOWNSTREAM PROCESSING NANO BIOTECHNOLOGY GENETIC ENGINEERING PLANT TISSUE CULTURE PROFESSIONAL ELECTIVE I PROFESSIONAL ELECTIVE II GENETIC ENGINEERING LABORATORY DOWNSTREAM PROCESSING LABORATORY	PEOS I,II I,II,III I,II,III I,II,III I,II,I	## ## ## ## ## ## ## ## ## ## ## ## ##	L 3 3 3 3 3 0 0 2 2 2 2 L 3 3 3	T 1 1 0 0 0 1 0 0 0 3 T 1 0 0 0 0	P 0 0 0 2 0 0 4 4 0 0 10 P 0 2 0 0 4 4 4 0 0 10 4 4 4 0 4 4 0 4 4 4 0 6 6 7 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	C 4 4 4 3 3 4 2 2 0 0 26.0 C 4 4 3 3 3 3 3 3
Code No. 18BT401 18BT402 18BT403 18BT404 18BT405 18BT406 18BT407 18BT408 18HS001 18GE401 Fifth Semester Code No. 18BT501 18BT502 18BT503 18BT504	BIOPROCESS ENGINEERING FUNDAMENTALS OF TRANSPORT PROCESS IMMUNOLOGY MOLECULAR BIOLOGY PHARMACOGNOSY AND PHARMACOLOGY CHEMICAL THERMODYNAMICS BIOPROCESS LABORATORY MOLECULAR BIOLOGY LABORATORY ENVIRONMENTAL SCIENCE SOFT SKILLS-REASONING Course DOWNSTREAM PROCESSING NANO BIOTECHNOLOGY GENETIC ENGINEERING PLANT TISSUE CULTURE PROFESSIONAL ELECTIVE I PROFESSIONAL ELECTIVE II GENETIC ENGINEERING LABORATORY	PEOS I,II I,II I,II,III I,II,III I,II,I	## ## ## ## ## ## ## ## ## ## ## ## ##	L 3 3 3 3 3 0 0 2 2 22 L 3 3 3 - 0 0 0	T 1 1 0 0 0 1 0 0 0 1 0 0 0 0 1 0 0 0 0	P 0 0 0 2 0 0 4 4 0 0 10 P 0 2 0 0 - 4	C 4 4 4 3 3 4 2 2 0 0 26.0 C 4 4 3 3 3 3 3 2 2 2

		Objectives	&Outcomes				
Code No.	Course			L	Т	Р	c
		PEOs	POs				
18HS002	PROFESSIONAL ETHICS IN ENGINEERING	1,11,111	f,g,h,i,j,k,l	2	0	0	2
18BT602	BIOPHARMACEUTICAL TECHNOLOGY	1,11	a,b,c,m,n	3	0	0	3
18BT603	BIOINFORMATICS	1,11	a,b,c,m	3	0	2	4
18BT604	ANIMAL CELL CULTURE	1,11,111	a,c,f,h,n	3	0	0	3
	PROFESSIONAL ELECTIVE III	-	-	-	-	-	3
	PROFESSIONAL ELECTIVE IV	-	1-	-	-	-	3
18BT607	TISSUE CULTURE LABORATORY	1,11,111	a,b,c,g,h,m	0	0	4	2
18BT608	BIOPHARMACEUTICAL TECHNOLOGY LABORATORY	1,11,111	c,d,e,i,n	0	0	4	2
18GE601	SOFT SKILLS-APTITUDE II	-	-	0	0	2	0
.002001	00.10.4.22074.111032.11		Total	11	0	12	22.0
Seventh Seme	ester				, ,		22.0
Octonin ocm	1				·		
Code No.	Course	Objectives	&Outcomes	L	т	lρ	l c l
		PEOs	PEOs POs			l '	
18HS003	PRINCIPLES OF MANAGEMENT	-	-	2	0	0	2
18BT702	BIOBUSINESS	1,11,111	a,b,c,f,i,j,k,n,o	3	0	0	3
18BT703	ENZYME AND PROTEIN ENGINEERING	1,11,111	a,b,c,d,k,n	3	0	0	3
18BT703	SYSTEMS BIOLOGY			3	0	0	3
1881704		1,11	a,b,c,m	3	U	U	_
	PROFESSIONAL ELECTIVE V		-	-	-		3
	PROFESSIONAL ELECTIVE VI	-	-	-	-	-	3
18BT707	PROJECT WORK I	1,11,111	a,b,c,d,e,f,g,h,	0	0	6	3
<u> </u>		, ,	i,j,k,l,m,n,o	·	·		
			Total	11	0	6	20.0
Eight Semeste	er						
	_	Objectives	&Outcomes				
Code No.	Course			L	Т	P	C
		PEOs	POs				
	PROFESSIONAL ELECTIVE VII	-	-	-	-	-	3
	PROFESSIONAL ELECTIVE VIII	-	-	-	-	-	3
	PROFESSIONAL ELECTIVE IX	-	-	-		-	3
18BT804	PROJECT WORK II	1,11,111	a,b,c,d,e,f,g,h,	0	0	18	9
1001004	I ROJEOT WORKTI	1,11,111	i,j,k,l,m,n,o	U	0	10	J
			Total	0	0	18	18.0
Electives			Total	0	0	18	18.0
Electives	T	Objectives					
Electives Code No.	Course	•	&Outcomes	0 L	0 T	18 P	18.0 C
Code No.		Objectives PEOs					
		•	&Outcomes				
Code No.		•	&Outcomes				
Code No.	LECTIVES	•	&Outcomes	L	т	Р	С
Code No. LANGUAGE E 18HSC01	ELECTIVES CHINESE	PEOs	&Outcomes	L 1	T	P	C
Code No. LANGUAGE E 18HSC01 18HSF01	CHINESE FRENCH	PEOs	&Outcomes	L 1 1	T 0 0	P 2 2 2	c 2 2
Code No. LANGUAGE E 18HSC01 18HSF01 18HSH01	CHINESE FRENCH HINDI JAPANESE	PEOs	&Outcomes	L 1 1 1 1	T 0 0 0 0	P 2 2 2 2	2 2 2
Code No. LANGUAGE E 18HSC01 18HSF01 18HSH01 18HSJ01 DISCIPLINE E	CHINESE FRENCH HINDI JAPANESE	PEOs - - - - - - - - - - - - -	POs - j	L 1 1 1 1 1	T 0 0 0 0 0 0	P 2 2 2 2 2 2	2 2 2
Code No. LANGUAGE E 18HSC01 18HSF01 18HSH01 18HSJ01 DISCIPLINE E 18BT021	CHINESE CHINESE FRENCH HINDI JAPANESE LECTIVES GENETICS	PEOs	&Outcomes	L 1 1 1 1	T 0 0 0 0	P 2 2 2 2	2 2 2 2 2
Code No. LANGUAGE E 18HSC01 18HSF01 18HSH01 18HSJ01 DISCIPLINE E 18BT021 ONE CREDIT	CHINESE FRENCH HINDI JAPANESE LECTIVES GENETICS COURSES	PEOs - ,	POs - j - a,b,c,d,f,m,n	L 1 1 1 1 1 3	T 0 0 0 0 0 0 0	P 2 2 2 2 2 0	2 2 2 2 2
Code No. LANGUAGE E 18HSC01 18HSF01 18HSH01 18HSJ01 DISCIPLINE E 18BT021 ONE CREDIT (18BT0XB	CHINESE FRENCH HINDI JAPANESE LECTIVES GENETICS COURSES TRANSLATIONAL RESEARCH AND TECHNOLOGY TRANSFER	PEOs -	POs - j a,b,c,d,f,m,n	L 1 1 1 1 1 3	T 0 0 0 0 0 0 0 0 0	P 2 2 2 2 2 0 0	2 2 2 2 2
Code No. LANGUAGE E 18HSC01 18HSF01 18HSH01 18HSJ01 DISCIPLINE E 18BT021 ONE CREDIT 18BT0XB 18BT0XC	CHINESE FRENCH HINDI JAPANESE LECTIVES GENETICS COURSES TRANSLATIONAL RESEARCH AND TECHNOLOGY TRANSFER MARINE FOOD TECHNOLOGY	PEOs -	POs - j a,b,c,d,f,m,n	L 1 1 1 1 1 3 1 1 1 1 1	T 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 2 2 2 2 2 2 0 0 0 0 0 0	2 2 2 2 2 2
Code No. LANGUAGE E 18HSC01 18HSF01 18HSJ01 DISCIPLINE E 18BT021 ONE CREDIT (18BT0XB 18BT0XC 18BT0XD	CHINESE FRENCH HINDI JAPANESE LECTIVES GENETICS COURSES TRANSLATIONAL RESEARCH AND TECHNOLOGY TRANSFER MARINE FOOD TECHNOLOGY BEVERAGE, BAKING AND CONFECTIONARY TECHNOLOGY	PEOs -	POs - j a,b,c,d,f,m,n a,i a,i a,i	L 1 1 1 1 3 3 1 1 1 1	T 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 2 2 2 2 2 2 0 0 0 0 0 0 0 0	2 2 2 2 2 2 1 1
Code No. LANGUAGE E 18HSC01 18HSF01 18HSJ01 DISCIPLINE E 18BT021 ONE CREDIT (18BT0XD 18BT0XD	CHINESE FRENCH HINDI JAPANESE LECTIVES GENETICS COURSES TRANSLATIONAL RESEARCH AND TECHNOLOGY TRANSFER MARINE FOOD TECHNOLOGY BEVERAGE, BAKING AND CONFECTIONARY TECHNOLOGY APPLIED SYSTEMS BIOLOGY	PEOs -	POs - j a,b,c,d,f,m,n a,i a,i a,i a,i a,i,k	L 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	T 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 2 2 2 2 2 2 0 0 0 0 0 0 0 0 0	2 2 2 2 2 2 1 1 1
Code No. LANGUAGE E 18HSC01 18HSF01 18HSJ01 DISCIPLINE E 18BT021 ONE CREDIT (18BT0XB 18BT0XC 18BT0XD	CHINESE FRENCH HINDI JAPANESE LECTIVES GENETICS COURSES TRANSLATIONAL RESEARCH AND TECHNOLOGY TRANSFER MARINE FOOD TECHNOLOGY BEVERAGE, BAKING AND CONFECTIONARY TECHNOLOGY APPLIED SYSTEMS BIOLOGY FUNDAMENTALS OF LIQUID CHROMATOGRAPHY	PEOs -	s &Outcomes POs - j a,b,c,d,f,m,n a,i a,i a,i	L 1 1 1 1 3 3 1 1 1 1	T 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 2 2 2 2 2 2 0 0 0 0 0 0 0 0	2 2 2 2 2 2 1 1
Code No. LANGUAGE E 18HSC01 18HSF01 18HSJ01 DISCIPLINE E 18BT021 ONE CREDIT (18BT0XD 18BT0XD	CHINESE FRENCH HINDI JAPANESE LECTIVES GENETICS COURSES TRANSLATIONAL RESEARCH AND TECHNOLOGY TRANSFER MARINE FOOD TECHNOLOGY BEVERAGE, BAKING AND CONFECTIONARY TECHNOLOGY APPLIED SYSTEMS BIOLOGY FUNDAMENTALS OF LIQUID CHROMATOGRAPHY PROCESS VALIDATION AND QUALITY ASSURANCE FOR	PEOs -	a,b,c,d,f,m,n a,i a,i a,i a,i a,i a,i,k a,i	L 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	T 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 2 2 2 2 2 2 0 0 0 0 0 0 0 0 0	2 2 2 2 2 2 1 1 1
Code No. LANGUAGE E 18HSC01 18HSF01 18HSJ01 DISCIPLINE E 18BT021 ONE CREDIT 18BT0XD 18BT0XD 18BT0XC 18BT0XC 18BT0XE 18BT0XF	CHINESE FRENCH HINDI JAPANESE LECTIVES GENETICS COURSES TRANSLATIONAL RESEARCH AND TECHNOLOGY TRANSFER MARINE FOOD TECHNOLOGY BEVERAGE, BAKING AND CONFECTIONARY TECHNOLOGY APPLIED SYSTEMS BIOLOGY FUNDAMENTALS OF LIQUID CHROMATOGRAPHY PROCESS VALIDATION AND QUALITY ASSURANCE FOR BIOPRODUCTS	PEOs	POs - j a,b,c,d,f,m,n a,i a,i a,i a,i a,i,k	L 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	T 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 2 2 2 2 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0	2 2 2 2 2 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Code No. LANGUAGE E 18HSC01 18HSF01 18HSH01 18HSJ01 DISCIPLINE E 18BT021 ONE CREDIT 18BT0XB 18BT0XC 18BT0XC 18BT0XC 18BT0XC 18BT0XC	CHINESE FRENCH HINDI JAPANESE LECTIVES GENETICS COURSES TRANSLATIONAL RESEARCH AND TECHNOLOGY TRANSFER MARINE FOOD TECHNOLOGY BEVERAGE, BAKING AND CONFECTIONARY TECHNOLOGY APPLIED SYSTEMS BIOLOGY FUNDAMENTALS OF LIQUID CHROMATOGRAPHY PROCESS VALIDATION AND QUALITY ASSURANCE FOR BIOPRODUCTS DIAGNOSTICS AND HEALTH CARE	PEOs -	a,b,c,d,f,m,n a,i a,i a,i a,i,k a,i g,i,j,k,l	L 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	T 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 2 2 2 2 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0	2 2 2 2 2 2 3 1 1 1 1 1
Code No. LANGUAGE E 18HSC01 18HSF01 18HSH01 18HSJ01 DISCIPLINE E 18BT021 ONE CREDIT 18BT0XB 18BT0XC 18BT0XC 18BT0XF 18BT0XF 18BT0XG 18BT0XG	CHINESE FRENCH HINDI JAPANESE LECTIVES GENETICS COURSES TRANSLATIONAL RESEARCH AND TECHNOLOGY TRANSFER MARINE FOOD TECHNOLOGY BEVERAGE, BAKING AND CONFECTIONARY TECHNOLOGY APPLIED SYSTEMS BIOLOGY FUNDAMENTALS OF LIQUID CHROMATOGRAPHY PROCESS VALIDATION AND QUALITY ASSURANCE FOR BIOPRODUCTS DIAGNOSTICS AND HEALTH CARE CLINICAL RESEARCH	PEOs	a,b,c,d,f,m,n a,i a,i a,i a,i a,i a,i,k a,i	L 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	T 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 2 2 2 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 2 2 2 2 2 3 1 1 1 1 1 1
Code No. LANGUAGE E 18HSC01 18HSF01 18HSH01 18HSJ01 DISCIPLINE E 18BT021 ONE CREDIT 18BT0XB 18BT0XC 18BT0XC 18BT0XC 18BT0XC 18BT0XC	CHINESE FRENCH HINDI JAPANESE LECTIVES GENETICS GENETICS COURSES TRANSLATIONAL RESEARCH AND TECHNOLOGY TRANSFER MARINE FOOD TECHNOLOGY BEVERAGE, BAKING AND CONFECTIONARY TECHNOLOGY APPLIED SYSTEMS BIOLOGY FUNDAMENTALS OF LIQUID CHROMATOGRAPHY PROCESS VALIDATION AND QUALITY ASSURANCE FOR BIOPRODUCTS DIAGNOSTICS AND HEALTH CARE CLINICAL RESEARCH MEDICAL CODING	PEOs -	a,b,c,d,f,m,n a,i a,i a,i a,i,k a,i g,i,j,k,l	L 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	T 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 2 2 2 2 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0	2 2 2 2 2 2 3 1 1 1 1 1
Code No. LANGUAGE E 18HSC01 18HSF01 18HSH01 18HSJ01 DISCIPLINE E 18BT021 ONE CREDIT 18BT0XC 18BT0XC 18BT0XC 18BT0XC 18BT0XC 18BT0XC 18BT0XC 18BT0XC 18BT0XC 18BT0XI 18BT0XG	CHINESE FRENCH HINDI JAPANESE LECTIVES GENETICS GENETICS COURSES TRANSLATIONAL RESEARCH AND TECHNOLOGY TRANSFER MARINE FOOD TECHNOLOGY BEVERAGE, BAKING AND CONFECTIONARY TECHNOLOGY APPLIED SYSTEMS BIOLOGY FUNDAMENTALS OF LIQUID CHROMATOGRAPHY PROCESS VALIDATION AND QUALITY ASSURANCE FOR BIOPRODUCTS DIAGNOSTICS AND HEALTH CARE CLINICAL RESEARCH MEDICAL CODING PRODUCTION AND CHARACTERIZATION OF THERAPUTIC	PEOs	a,b,c,d,f,m,n a,i a,i a,i a,i a,i a,i a,i a,c a,c a,c a,c c a,b,c,e -	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	T 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 2 2 2 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 2 2 2 2 2 3 1 1 1 1 1 1 1
Code No. LANGUAGE E 18HSC01 18HSF01 18HSF01 18HSJ01 DISCIPLINE E 18BT021 ONE CREDIT 18BT0XC 18BT0XC 18BT0XC 18BT0XF 18BT0XF 18BT0XG 18BT0XG 18BT0XH 18BT0XI 18BT0XJ	CHINESE FRENCH HINDI JAPANESE LECTIVES GENETICS GENETICS COURSES TRANSLATIONAL RESEARCH AND TECHNOLOGY TRANSFER MARINE FOOD TECHNOLOGY BEVERAGE, BAKING AND CONFECTIONARY TECHNOLOGY APPLIED SYSTEMS BIOLOGY FUNDAMENTALS OF LIQUID CHROMATOGRAPHY PROCESS VALIDATION AND QUALITY ASSURANCE FOR BIOPRODUCTS DIAGNOSTICS AND HEALTH CARE CLINICAL RESEARCH MEDICAL CODING PRODUCTION AND CHARACTERIZATION OF THERAPUTIC MONOCLONAL ANTIBODIES	PEOs	a,i a,i a,i a,i a,i,k a,i g,i,j,k,l - a,b,c,e - a,c,d,m,n	L 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	T 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 2 2 2 2 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0	2 2 2 2 2 2 1 1 1 1 1 1 1 1
Code No. LANGUAGE E 18HSC01 18HSF01 18HSF01 18HSJ01 DISCIPLINE E 18BT021 ONE CREDIT 18BT0XB 18BT0XC 18BT0XC 18BT0XF 18BT0XF 18BT0XG 18BT0XG 18BT0XH 18BT0XJ 18BT0XJ	CHINESE FRENCH HINDI JAPANESE LECTIVES GENETICS COURSES TRANSLATIONAL RESEARCH AND TECHNOLOGY TRANSFER MARINE FOOD TECHNOLOGY BEVERAGE, BAKING AND CONFECTIONARY TECHNOLOGY APPLIED SYSTEMS BIOLOGY FUNDAMENTALS OF LIQUID CHROMATOGRAPHY PROCESS VALIDATION AND QUALITY ASSURANCE FOR BIOPRODUCTS DIAGNOSTICS AND HEALTH CARE CLINICAL RESEARCH MEDICAL CODING PRODUCTION AND CHARACTERIZATION OF THERAPUTIC MONOCLONAL ANTIBODIES PRODUCTION OF BIOPHARMACEUTICALS	PEOs	a,b,c,d,f,m,n a,i a,i a,i a,i a,i a,i a,i a,c a,c a,c a,c c a,b,c,e -	L 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	T 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 2 2 2 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 2 2 2 2 2 3 1 1 1 1 1 1 1
Code No. LANGUAGE E 18HSC01 18HSF01 18HSF01 18HSJ01 DISCIPLINE E 18BT021 ONE CREDIT 18BT0XC 18BT0XC 18BT0XC 18BT0XF 18BT0XF 18BT0XG 18BT0XG 18BT0XH 18BT0XI 18BT0XJ	CHINESE FRENCH HINDI JAPANESE LECTIVES GENETICS GENETICS COURSES TRANSLATIONAL RESEARCH AND TECHNOLOGY TRANSFER MARINE FOOD TECHNOLOGY BEVERAGE, BAKING AND CONFECTIONARY TECHNOLOGY APPLIED SYSTEMS BIOLOGY FUNDAMENTALS OF LIQUID CHROMATOGRAPHY PROCESS VALIDATION AND QUALITY ASSURANCE FOR BIOPRODUCTS DIAGNOSTICS AND HEALTH CARE CLINICAL RESEARCH MEDICAL CODING PRODUCTION AND CHARACTERIZATION OF THERAPUTIC MONOCLONAL ANTIBODIES	PEOs	a,i a,i a,i a,i a,i,k a,i g,i,j,k,l - a,b,c,e - a,c,d,m,n	L 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	T 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 2 2 2 2 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0	2 2 2 2 2 2 3 1 1 1 1 1 1 1 1
Code No. LANGUAGE E 18HSC01 18HSF01 18HSF01 18HSJ01 DISCIPLINE E 18BT021 ONE CREDIT 18BT0XB 18BT0XC 18BT0XC 18BT0XF 18BT0XF 18BT0XG 18BT0XG 18BT0XH 18BT0XJ 18BT0XJ	CHINESE FRENCH HINDI JAPANESE LECTIVES GENETICS COURSES TRANSLATIONAL RESEARCH AND TECHNOLOGY TRANSFER MARINE FOOD TECHNOLOGY BEVERAGE, BAKING AND CONFECTIONARY TECHNOLOGY APPLIED SYSTEMS BIOLOGY FUNDAMENTALS OF LIQUID CHROMATOGRAPHY PROCESS VALIDATION AND QUALITY ASSURANCE FOR BIOPRODUCTS DIAGNOSTICS AND HEALTH CARE CLINICAL RESEARCH MEDICAL CODING PRODUCTION AND CHARACTERIZATION OF THERAPUTIC MONOCLONAL ANTIBODIES PRODUCTION OF BIOPHARMACEUTICALS ALGAE FOR HEALTH AND WEALTH	PEOs	a,i a,i a,i a,i a,i a,i a,i a,i a,c,d,f,m,n a,b,c,d,f,m,n	L 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	T 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 2 2 2 2 2 2 2 0 0 0 0 0 0 0 0 0 0 0 0	2 2 2 2 2 2 1 1 1 1 1 1 1 1 1
Code No. LANGUAGE E 18HSC01 18HSF01 18HSH01 18HSJ01 DISCIPLINE E 18BT021 ONE CREDIT 18BT0XC 18BT0XC	CHINESE FRENCH HINDI JAPANESE LECTIVES GENETICS COURSES TRANSLATIONAL RESEARCH AND TECHNOLOGY TRANSFER MARINE FOOD TECHNOLOGY BEVERAGE, BAKING AND CONFECTIONARY TECHNOLOGY APPLIED SYSTEMS BIOLOGY FUNDAMENTALS OF LIQUID CHROMATOGRAPHY PROCESS VALIDATION AND QUALITY ASSURANCE FOR BIOPRODUCTS DIAGNOSTICS AND HEALTH CARE CLINICAL RESEARCH MEDICAL CODING PRODUCTION AND CHARACTERIZATION OF THERAPUTIC MONOCLONAL ANTIBODIES PRODUCTION OF BIOPHARMACEUTICALS ALGAE FOR HEALTH AND WEALTH	PEOs	a,b,c,d,f,m,n a,i a,i a,i a,i a,i a,i a,i a,c,d,f,m,n a,b,c,e - a,c,d,m,n a,b,e,f,g,h,l,m a,c,f,g,i,k	L 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	T 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 2 2 2 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 2 2 2 2 3 1 1 1 1 1 1 1 1 1 1
Code No. LANGUAGE E 18HSC01 18HSF01 18HSF01 18HSJ01 DISCIPLINE E 18BT021 ONE CREDIT 18BT0XB 18BT0XC 18BT0XC 18BT0XF 18BT0XF 18BT0XF 18BT0XG 18BT0XI 18BT0XI 18BT0XI 18BT0XJ 18BT0XL	CHINESE FRENCH HINDI JAPANESE LECTIVES GENETICS COURSES TRANSLATIONAL RESEARCH AND TECHNOLOGY TRANSFER MARINE FOOD TECHNOLOGY BEVERAGE, BAKING AND CONFECTIONARY TECHNOLOGY APPLIED SYSTEMS BIOLOGY FUNDAMENTALS OF LIQUID CHROMATOGRAPHY PROCESS VALIDATION AND QUALITY ASSURANCE FOR BIOPRODUCTS DIAGNOSTICS AND HEALTH CARE CLINICAL RESEARCH MEDICAL CODING PRODUCTION AND CHARACTERIZATION OF THERAPUTIC MONOCLONAL ANTIBODIES PRODUCTION OF BIOPHARMACEUTICALS ALGAE FOR HEALTH AND WEALTH JIRSES	PEOs	a,i a,i a,i a,i a,i a,i a,i a,i a,c,d,f,m,n a,b,c,d,f,m,n	L 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	T 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 2 2 2 2 2 2 2 0 0 0 0 0 0 0 0 0 0 0 0	2 2 2 2 2 2 1 1 1 1 1 1 1 1 1
Code No. LANGUAGE E 18HSC01 18HSF01 18HSH01 18HSJ01 DISCIPLINE E 18BT021 ONE CREDIT 18BT0XC 18BT0XC	CHINESE FRENCH HINDI JAPANESE LECTIVES GENETICS COURSES TRANSLATIONAL RESEARCH AND TECHNOLOGY TRANSFER MARINE FOOD TECHNOLOGY BEVERAGE, BAKING AND CONFECTIONARY TECHNOLOGY APPLIED SYSTEMS BIOLOGY FUNDAMENTALS OF LIQUID CHROMATOGRAPHY PROCESS VALIDATION AND QUALITY ASSURANCE FOR BIOPRODUCTS DIAGNOSTICS AND HEALTH CARE CLINICAL RESEARCH MEDICAL CODING PRODUCTION AND CHARACTERIZATION OF THERAPUTIC MONOCLONAL ANTIBODIES PRODUCTION OF BIOPHARMACEUTICALS ALGAE FOR HEALTH AND WEALTH JRSES ELECTROPHORETIC TECHNIQUES AND BIOMOLECULES CHARACTERIZATION	PEOs	a,b,c,d,f,m,n a,i a,i a,i a,i a,i a,i a,i a,c,d,f,m,n a,b,c,e - a,c,d,m,n a,b,e,f,g,h,l,m a,c,f,g,i,k	L 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	T 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 2 2 2 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 2 2 2 2 3 1 1 1 1 1 1 1 1 1 1
Code No. LANGUAGE E 18HSC01 18HSF01 18HSF01 18HSJ01 DISCIPLINE E 18BT021 ONE CREDIT 18BT0XB 18BT0XC 18BT0XC 18BT0XC 18BT0XF 18BT0XG 18BT0XG 18BT0XG 18BT0XH 18BT0XJ 18BT0XJ 18BT0XL 18BT0XL 18BT0XL 18BT0XM SPECIAL COL 18BTV01	CHINESE FRENCH HINDI JAPANESE LECTIVES GENETICS COURSES TRANSLATIONAL RESEARCH AND TECHNOLOGY TRANSFER MARINE FOOD TECHNOLOGY BEVERAGE, BAKING AND CONFECTIONARY TECHNOLOGY APPLIED SYSTEMS BIOLOGY FUNDAMENTALS OF LIQUID CHROMATOGRAPHY PROCESS VALIDATION AND QUALITY ASSURANCE FOR BIOPRODUCTS DIAGNOSTICS AND HEALTH CARE CLINICAL RESEARCH MEDICAL CODING PRODUCTION AND CHARACTERIZATION OF THERAPUTIC MONOCLONAL ANTIBODIES PRODUCTION OF BIOPHARMACEUTICALS ALGAE FOR HEALTH AND WEALTH JRSES ELECTROPHORETIC TECHNIQUES AND BIOMOLECULES CHARACTERIZATION	PEOs	a,b,c,d,f,m,n a,i a,i a,i a,i a,i a,i a,i a,c,d,f,m,n a,b,c,e - a,c,d,m,n a,b,e,f,g,h,l,m a,c,f,g,i,k	L 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	T 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 2 2 2 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 2 2 2 2 3 1 1 1 1 1 1 1 1 1
Code No. LANGUAGE E 18HSC01 18HSF01 18HSF01 18HSJ01 DISCIPLINE E 18BT021 ONE CREDIT (18BT0XB 18BT0XC 18BT0XC 18BT0XC 18BT0XC 18BT0XC 18BT0XF 18BT0XG 18BT0XG 18BT0XG 18BT0XJ 18BT0XJ 18BT0XL 18BT0XL 18BT0XM SPECIAL COL 18BTV01 OPEN ELECTI	CHINESE FRENCH HINDI JAPANESE LECTIVES GENETICS COURSES TRANSLATIONAL RESEARCH AND TECHNOLOGY TRANSFER MARINE FOOD TECHNOLOGY BEVERAGE, BAKING AND CONFECTIONARY TECHNOLOGY APPLIED SYSTEMS BIOLOGY FUNDAMENTALS OF LIQUID CHROMATOGRAPHY PROCESS VALIDATION AND QUALITY ASSURANCE FOR BIOPRODUCTS DIAGNOSTICS AND HEALTH CARE CLINICAL RESEARCH MEDICAL CODING PRODUCTION AND CHARACTERIZATION OF THERAPUTIC MONOCLONAL ANTIBODIES PRODUCTION OF BIOPHARMACEUTICALS ALGAE FOR HEALTH AND WEALTH JRSES ELECTROPHORETIC TECHNIQUES AND BIOMOLECULES CHARACTERIZATION IVES	PEOs	a,b,c,d,f,m,n a,i a,i a,i a,i a,i,k a,i a,i,k a,i a,b,c,e - a,c,d,m,n a,b,e,f,g,h,l,m a,c,f,g,i,k a,c,d,m	L 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	T 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 2 2 2 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C 2 2 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Code No. LANGUAGE E 18HSC01 18HSF01 18HSF01 18HSJ01 DISCIPLINE E 18BT021 ONE CREDIT 18BT0XC 18BT0XL	CHINESE FRENCH HINDI JAPANESE LECTIVES GENETICS COURSES TRANSLATIONAL RESEARCH AND TECHNOLOGY TRANSFER MARINE FOOD TECHNOLOGY BEVERAGE, BAKING AND CONFECTIONARY TECHNOLOGY APPLIED SYSTEMS BIOLOGY FUNDAMENTALS OF LIQUID CHROMATOGRAPHY PROCESS VALIDATION AND QUALITY ASSURANCE FOR BIOPRODUCTS DIAGNOSTICS AND HEALTH CARE CLINICAL RESEARCH MEDICAL CODING PRODUCTION AND CHARACTERIZATION OF THERAPUTIC MONOCLONAL ANTIBODIES PRODUCTION OF BIOPHARMACEUTICALS ALGAE FOR HEALTH AND WEALTH JRSES ELECTROPHORETIC TECHNIQUES AND BIOMOLECULES CHARACTERIZATION VES MOLECULAR SIMULATIONS CORROSION SCIENCE AND ENGINEERING	PEOs PEOs	a,b,c,d,f,m,n a,i a,i a,i a,i a,i a,i,k a,i g,i,j,k,l - a,b,c,e - a,c,d,m,n a,b,e,f,g,h,l,m a,c,f,g,i,k a,c,d,m	L 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	T 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 2 2 2 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 2 2 2 2 2 3 1 1 1 1 1 1 1 1 1 1 1 1
Code No. LANGUAGE E 18HSC01 18HSF01 18HSF01 18HSJ01 DISCIPLINE E 18BT021 ONE CREDIT 18BT0XC 18BT0XL	CHINESE FRENCH HINDI JAPANESE LECTIVES GENETICS COURSES TRANSLATIONAL RESEARCH AND TECHNOLOGY TRANSFER MARINE FOOD TECHNOLOGY BEVERAGE, BAKING AND CONFECTIONARY TECHNOLOGY APPLIED SYSTEMS BIOLOGY FUNDAMENTALS OF LIQUID CHROMATOGRAPHY PROCESS VALIDATION AND QUALITY ASSURANCE FOR BIOPRODUCTS DIAGNOSTICS AND HEALTH CARE CLINICAL RESEARCH MEDICAL CODING PRODUCTION AND CHARACTERIZATION OF THERAPUTIC MONOCLONAL ANTIBODIES PRODUCTION OF BIOPHARMACEUTICALS ALGAE FOR HEALTH AND WEALTH JRSES ELECTROPHORETIC TECHNIQUES AND BIOMOLECULES CHARACTERIZATION VES MOLECULAR SIMULATIONS CORROSION SCIENCE AND ENGINEERING ENERGY STORING DEVICES	PEOs	a,b,c,d,f,m,n a,i a,i a,i a,i a,i a,i a,i,k a,i g,i,j,k,l - a,b,c,e - a,c,d,m,n a,c,f,g,i,k a,c,d,m a,b,e,f,g,h,l,m a,c,f,g,i,k a,c,d,m	L 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	T 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 2 2 2 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 2 2 2 2 2 3 1 1 1 1 1 1 1 1 1 1 1 1 1
Code No. LANGUAGE E 18HSC01 18HSF01 18HSF01 18HSJ01 DISCIPLINE E 18BT021 ONE CREDIT 18BT0XC 18BT0XL	CHINESE FRENCH HINDI JAPANESE LECTIVES GENETICS COURSES TRANSLATIONAL RESEARCH AND TECHNOLOGY TRANSFER MARINE FOOD TECHNOLOGY BEVERAGE, BAKING AND CONFECTIONARY TECHNOLOGY APPLIED SYSTEMS BIOLOGY FUNDAMENTALS OF LIQUID CHROMATOGRAPHY PROCESS VALIDATION AND QUALITY ASSURANCE FOR BIOPRODUCTS DIAGNOSTICS AND HEALTH CARE CLINICAL RESEARCH MEDICAL CODING PRODUCTION AND CHARACTERIZATION OF THERAPUTIC MONOCLONAL ANTIBODIES PRODUCTION OF BIOPHARMACEUTICALS ALGAE FOR HEALTH AND WEALTH JRSES ELECTROPHORETIC TECHNIQUES AND BIOMOLECULES CHARACTERIZATION VES MOLECULAR SIMULATIONS CORROSION SCIENCE AND ENGINEERING	PEOs PEOs	a,b,c,d,f,m,n a,i a,i a,i a,i a,i a,i,k a,i g,i,j,k,l - a,b,c,e - a,c,d,m,n a,b,e,f,g,h,l,m a,c,f,g,i,k a,c,d,m	L 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	T 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 2 2 2 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 2 2 2 2 2 3 1 1 1 1 1 1 1 1 1 1 1 1

18GE0P2	SEMICONDUCTOR PHYSICS AND DEVICES	 -	-	3	0	0	3
18GE0P3	APPLIED LASER SCIENCE	-	-	3	0	0	3
18GE0P4	BIO-PHOTONICS	-	-	3	0	0	3
18GE0P5	PHYSICS OF SOFT MATTER	-	-	3	0	0	3
ADDITIONAL (ONE CREDIT COURSE						
18GE0XA	ETYMOLOGY	-	-	1	0	0	1
18GE0XB	GENERAL PSYCHOLOGY	-	-	1	0	0	1
18GE0XC	NEURO BEHAVIORAL SCIENCE	Ш	i	1	0	0	1
18GE0XD	VISUAL MEDIA AND FILM MAKING	1,11,111	b,f	1	0	0	1
18GE0XE	YOGA FOR HUMAN EXCELLENCE	-	-	1	0	0	1
18GE0XF	VEDIC MATHEMATICS	-	-	1	0	0	1
18GE0XG	HEALTH AND FITNESS	-	-	1	0	0	1
18GE0XH	CONCEPT, METHODOLOGY AND APPLICATIONS OF VERMICOMPOSTING	-	-	1	0	0	1
18GE0XI	BLOG WRITING	1,11,111	f,g,j	1	0	0	1
18GE0XJ	INTERPERSONAL SKILLS	-	-	1	0	0	1
18GE0XL	NATIONAL CADET CORPS	III	g,i	1	0	0	1
18GE0XM	COMMUNITY SERVICE AND LEADERSHIP DEVELOPMENT	-	-	1	0	0	1
18GE0XN	DISRUPTIVE INNOVATION BASED STARTUP ACTIVITIES	-	-	1	0	0	1
18GE0XO	SOCIAL PSYCHOLOGY	III	i	1	0	0	1
18GE0XP	FM RADIO BROADCASTING TECHNOLOGY	-	-	1	0	0	1
18GE0XQ	Introduction to MATLAB	-	-	1	0	0	1
18GE0XR	INDIA VISION PROGRAM	-	-	1	0	0	1
LANGUAGE E		T			_	_	
18HS201	COMMUNICATIVE ENGLISH II	1,11,111	i,j	1	0	2	2
18HSG01	GERMAN	-	<u> </u> -	1	0	2	2
DISCIPLINE E		Tr ii	In the state of			^	
18BT001	CANCER BIOLOGY	1,11	a,b,d,e,h,n,o	3	0	0	3
18BT002	CELLULAR BIOPHYSICS	1,11	a,b,c,m	3	0	0	3
18BT003	METABOLIC ENGINEERING	1,11,111	a,c,d,f,g,h,n	3	0	0	3
18BT004	BIOPOLYMERS	1,11,111	a,b,c,d,e,f,g,n	3	0	0	3
18BT005	BIOSENSORS	1,11,111	b,c,d,g,m	3	0	0	3
18BT006 18BT007	BIOMATERIALS	1,11,111	a,b,c,d,f,h,n	3	0	0	3
18BT007	STEM CELL TECHNOLOGY GENOMICS AND PROTEOMICS	1,11,111	a,d,e,f,j,k,m,o	3	0	0	3
18BT009	PHARMACOVIGILANCE	1,11	a,b,c,m	3	0	0	3
18BT010	VACCINE TECHNOLOGY	1,11,111	a,d,e,n	3	0	0	3
18BT010	MOLECULAR MODELLING AND DRUG DESIGN	1,11,111	a,b,c,d,e,f,n,o a,c,d,e,n	3	0	0	3
18BT012	MOLECULAR PATHOGENESIS AND DISEASE DIAGNOSIS	1,11,111	b,c,e,f,m,n	3	0	0	3
18BT013	BIOLOGICAL SPECTROSCOPY	1111	a,b,d,e,m	3	0	0	3
18BT014	BIOPROCESS MODELLING AND SIMULATION	1,11	a,b,c,e,m	3	0	0	3
18BT015	INTELLECTUAL PROPERTY RIGHTS AND TECHNOLOGY TRANSFER	1,11,111	c,e,h,k,n,o	3	0	0	3
18BT016	BIOETHICS AND BIOSAFETY	1,11,111	c,f,g,h,o	3	0	0	3
18BT017	BIOREMEDIATION	1,11,111	c,f,g,h,o	3	0	0	3
18BT018	BIOMASS AND BIOENERGY	1,11,111	a,b,c,d,e,f,g,n,	3	0	0	3
18BT019	WASTE MANAGEMENT AND UTILIZATION	1,11,111	a,b,c,d,e,f,g,h,	3	0	0	3
1007000			0	2	^	^	_
18BT020	BIODIVERSITY AND BIOPROSPECTING	1,11,111	a,f,g,n	3	0	0	3
18BT0XA	MOLECULAR MARKER TECHNOLOGIES	Tr ir iii	aik	1	0	0	1
	MOLECULAR MARKER TECHNOLOGIES ONE CREDIT COURSE	1,11,111	a,i,k	1	0	0	1
	NEW AGE INNOVATION AND ENTREPRENEURSHIP	1_	L	1	0	0	1
OPEN ELECTI		<u>r</u>	<u> </u>	'	U	U	1
18BT0YA	BIOFUELS	1,11,111	a c c c c	3	0	0	3
18BT0YA	MUSHROOM CULTIVATION AND VERMICOMPOSTING	1,11,111	a,c,g,o b,c,e,g,n,o	3	0	0	3
18BT0YC	FORENSIC TECHNOLOGY	1,11,111	a,b,c,d,e,m	3	0	0	3
18AE0YA	NON-DESTRUCTIVE TESTING	-,"	a,b,c,a,e,iii -	3	0	0	3
18AE0YB	SMART MATERIALS	 -	-	3	0	0	3
18AE0YC	FUNDAMENTALS OF AIRCRAFT ENGINEERING	-	-	3	0	0	3
18AG0YA	ENTREPRENEURSHIP DEVELOPMENT AND FOOD QUALITY MANAGEMENT FOOD INDUSTRY	-	-	3	0	0	3
18AG0YB	HUMAN ENGINEERING AND SAFETY IN AGRICULTURE	1-	-	3	0	0	3
18AG0YB	ENERGY MANGEMENT IN AGRICULTURE	<u>-</u>	-	3	0	0	3
18AG0YC 18AG0YD	FARM MECHANISATION	[<u> </u> -	3	0	0	3
18AU0YA	AUTOMOTIVE ENGINEERING	<u> </u>	-	3	0	0	3
18AU0YA 18AU0YB	VEHICLE CONTROL SYSTEMS	Ĭ.	-	3	0	0	3
18AU0YB	PUBLIC TRANSPORT MANAGEMENT	<u> </u>	-	3	0	0	3
10/10010			 	3	0	0	3
18AU0YD	TECHNOLOGIES FOR GREEN MOBILITY	-					

10 V I I I V E	TROUBLE SHOOTING AND MAINTENANCE OF AUTOMOBILES	1		3	0	0	3
		-	-				
	GREEN BUILDINGS	-	-	3	0	0	3
18CE0YB	DISASTER PREPAREDNESS AND PLANNING	-	-	3	0	0	3
18CE0YC	ENVIRONMENTAL IMPACT ASSESSMENT	-	-	3	0	0	3
18CE0YD	BUILDING SERVICES	-	-	3	0	0	3
18CE0YE	INDUSTRIAL WASTE MANAGEMENT	-	-	3	0	0	3
	WEALTH FROM WASTE	-		3	0	0	3
		<u> </u>	-			·	
	RISK AND SAFETY MANAGEMENT	-	-	3	0	0	3
18CE0YH	ENERGY SCIENCE AND ENGINEERING	-	-	3	0	0	3
18CE0YI	CONCEPTS OF REMOTE SENSING	-	-	3	0	0	3
18CS0YA	E-LEARNING TECHNIQUES	-	-	3	0	0	3
18CS0YB	SOFTWARE TESTING AND QUALITY ASSURANCE	<u> </u> -	-	3	0	0	3
	JAVA FUNDAMENTALS	-	_	3	0	0	3
			-			_	
	NETWORK ENGINEERING AND MANAGEMENT	-	-	3	0	0	3
	AGENT BASED INTELLIGENT SYSTEMS	-	-	3	0	0	3
18CS0YF	E-BUSINESS	-	-	3	0	0	3
18CS0YG	KNOWLEDGE DISCOVERY IN DATABASES	-	-	3	0	0	3
18CS0YH	SOCIAL NETWORK ANALYSIS CONCEPTS	-	-	3	0	0	3
18CS0YI	OPERATING SYSTEM CONCEPTS	<u> </u> -	-	3	0	0	3
	OBJECT ORIENTED PROGRAMMING	-	_	3	0	0	3
	BASICS OF ANALOG AND DIGITAL ELECTRONICS	-	-	3	0	0	3
	AUTOMOTIVE ELECTRONICS	-	-	3	0	0	3
	PCB DESIGN AND PROTOTYPING	-	-	3	0	0	3
18EC0YD	MICROCONTROLLER PROGRAMMING	-	-	3	0	0	3
18EC0YE	ENGINEERING COMPUTATION WITH MATLAB	-	-	3	0	0	3
18EC0YF	BASICS OF HARDWARE DESCRIPTION LANGUAGES	-	-	3	0	0	3
18EC0YG	FUNDAMENTALS OF EMBEDDED SYSTEMS	-	-	3	0	0	3
	PRINCIPLES OF COMMUNICATION SYSTEMS	<u> </u>	_	3	0	0	3
	ELECTRONIC PRODUCT DESIGN AND PACKAGING			3			3
		-	-		0	0	-
	PRINCIPLES OF COMPUTER COMMUNICATION AND NETWORKS	-	-	3	0	0	3
18EE0YA	ENERGY CONSERVATION AND MANAGEMENT	-	-	3	0	0	3
18EE0YB	ELECTRICAL SAFETY	-	-	3	0	0	3
18EE0YC	INDUSTRIAL DRIVES AND CONTROL	-	-	3	0	0	3
18EI0YA	PROGRAMMABLE LOGIC CONTROLLERS	-	-	3	0	0	3
18EI0YB	SENSOR TECHNOLOGY	-	-	3	0	0	3
	FUNDAMENTALS OF VIRTUAL INSTRUMENTATION	_	_	3	0	0	3
	OPTOELECTRONICS AND LASER INSTRUMENTATION	<u> </u>	_	3	0	0	3
	TRADITIONAL FOODS	<u> </u>	_		-		
		-	-	3	0	0	3
	FOOD LAWS AND REGULATIONS	-	-	3	0	0	3
18FD0YC	POST HARVEST TECHNOLOGY OF FRUITS AND VEGETABLES	-	-	3	0	0	3
18FT0YA	FASHION CRAFTS	-	-	3	0	0	3
18FT0YB	FASHION ACCESSORIES	-	-	3	0	0	3
18FT0YC	FASHION VISUAL MERCHANDISING	-	-	3	0	0	3
18FT0YD	INTERIOR DESIGN	-	-	3	0	0	3
	SURFACE EMBELLISHMENT	-	-	3	0	0	3
	BUSINESS ANALYTICS	-	_	3	0	0	3
	INDUSTRIAL SAFETY			3	0	0	3
		-	-			,	
	OPERATIONS RESEARCH	-	-	3	0	0	3
	COST MANAGEMENT OF ENGINEERING PROJECTS	-	-	3	0	0	3
18GE05	COMPOSITE MATERIALS	-	-	3	0	0	3
18GE06	WASTE TO ENERGY	-	-	3	0	0	3
18IT0YA	DATABASE MANAGEMENT SYSTEMS	-	-	3	0	0	3
18IT0YB	DATA STRUCTURES AND ALGORITHMS	-	-	3	0	0	3
	DATA SCIENCES AND ANALYTICS	-	-	3	0	0	3
	OBJECT ORIENTED PROGRAMMING	 -	-	3	0	0	3
				3	0	0	3
	ARTIFICIAL INTELLIGENCE	ļ	_				
	INDUSTRIAL PROCESS ENGINEERING	-	-	3	0	0	3
	SAFETY ENGINEERING	-	-	3	0	0	3
18ME0YC	MAINTENANCE ENGINEERING	-	-	3	0	0	3
18ME0YD	BASICS OF NON-DESTRUCTIVE TESTING	-	-	3	0	0	3
18ME0YE	DIGITAL MANUFACTURING	-	-	3	0	0	3
18ME0YF	WORK STUDY AND ERGONOMICS	-	-	3	0	0	3
	METROLOGY IN INDUSTRY	-	-	3	0	0	3
	PLANT LAYOUT AND MATERIAL HANDLING	-	-	3	0	0	3
18MF0YH				3	0	0	3
	CONCEPTS OF ENGINEERING DESIGN	I-				,	
18ME0YI	CONCEPTS OF ENGINEERING DESIGN OIL HYDRALILICS AND PNELIMATICS	-	-				-
18ME0YI 18ME0YJ	OIL HYDRAULICS AND PNEUMATICS	-	-	3	0	0	3
18ME0YI 18ME0YJ 18ME0YK		- -	-				-

18ME0YM	HEATING VENTILATION AND AIRCONDITIONING	-	-	3	0	0	3
18TT0YA	YARN AND FABRIC MANUFACTURE	-	-	3	0	0	3
18TT0YB	COLOURATION OF TEXTILES	-	-	3	0	0	3
18TT0YC	TEXTILES IN ENGINEERING APPLICATION	-	-	3	0	0	3
18TT0YD	GENERAL TEXTILE TECHNOLOGY	-	-	3	0	0	3