

KAZI NAZRUL UNIVERSITY				FACULTY OF SCIENCE, TECHNOLOGY & VOCATIONAL STUDIES		3-Year UG Degree /4-Year UG Degree (Honours) / 4-Year UG Degree (Honours with Research)			WITH EFFECT FROM THE ACADEMIC SESSION: 2023-24									
Abbreviated Degree	Discipline	Degree Programme	Semester	Course Name	Course Type	Course Code	Course Details	L - T - P	Course Credit	Sem Credit	CA Marks		ESE Marks		Total Marks	Sem Marks		
											Practical	Theoretical	Practical	Theoretical				
BSC	Biochemistry	3-year UG Degree	I	Molecules of Life	MAJOR	BSCBCMMJ101	MJC-1	3 - 0 - 4	5	20	30	15	20	35	100	350		
				Choose from the Pool of Minor Courses offered in 1st Semester by other Disciplines within the faculty	MINOR	See Pool	MNC-1	See Pool	5		See Pool				100			
				Choose from the Pool of Multidisciplinary Courses offered in 1st Semester across the faculties	MD	See Pool	MDC-1	2 - 1 - 0	3			15		35	50			
				English/MIL Communication	AE	See Pool	AEC-1	4 - 0 - 0	4			15		35	50			
				Tools and Techniques in Biochemistry	SE	BSCBCMSE101	SEC-1	0 - 1 - 4	3		30		20		50			
			II	Cell Biology	MAJOR	BSCBCMMJ201	MJC-2	3 - 0 - 4	5	20	30	15	20	35	100	350		
				Choose from the Pool of Minor Courses offered in 2nd Semester by other Disciplines within the faculty	MINOR	Corresponding Course Code of Minor opted in 1st Semester	MNC-2	See Pool	5		See Pool				100			
				Choose from the Pool of Multidisciplinary Courses offered in 2nd Semester across the faculties	MD	See Pool	MDC-2	2 - 1 - 0	3			15		35	50			
				Environment Studies	VA	VA201	VAC-1	4 - 0 - 0	4			15		35	50			
				Protein Purification Techniques	SE	BSCBCMSE201	SEC-2	0 - 1 - 4	3		30		20		50			
			Student exiting the programmes after securing 40 credits will be awarded UG Certificate in the relevant Discipline/Subject provided they secure following 4 credits in work based vocational courses / summer internship during 1st year															
			II	Vocational Course	Any One	VC	VC201	VCC-1	0 - 0 - 8	4	24	30		20		50	400	
				Summer Internship		SI	SI201	SIC-1										
			III	Biochemistry of Proteins	MAJOR	BSCBCMMJ301	MJC-3	3 - 0 - 4	5	22	30	15	20	35	100	400		
				Enzymes	MAJOR	BSCBCMMJ302	MJC-4	3 - 0 - 4	5		30	15	20	35	100			
				Choose from the Pool of Minor Courses offered in 3rd Semester by other Disciplines within the faculty	MINOR	See Pool	MNC-3	See Pool	5		See Pool				100			
				Choose from the Pool of Multidisciplinary Courses offered in 3rd Semester across the faculties	MD	See Pool	MD-3	2 - 1 - 0	3			15		35	50			
				MIL/English Communication	AE	See Pool	AEC-2	4 - 0 - 0	4			15		35	50			
			Students who opted English in SEM-I have to opt for any course from MIL (Bengali/Hindi/Urdu/Alternative English) in SEM -III and Students who opted MIL (Bengali/Hindi/Urdu/Alternative English) in SEM -I have to opt English in SEM -III															
			IV	Metabolism of Carbohydrates and Lipids	MAJOR	BSCBCMMJ401	MJC-5	3 - 0 - 4	5	22	30	15	20	35	100	400		
				Membrane Biology and Bioenergetics	MAJOR	BSCBCMMJ402	MJC-6	3 - 0 - 4	5		30	15	20	35	100			
				Choose from the Pool of Minor Courses offered in 4th Semester by other Disciplines within the faculty	MINOR	See Pool	MNC-4	See Pool	5		See Pool				100			
				Clinical Biochemistry	SE	BSCBCMSE401	SEC-3	3 - 0 - 0	3		30		20		50			
				Choose from the Pool of Value Added Course offered in 4th Semester	VA	See Pool	VAC-2	See Pool	4			15		35	50			
			Student exiting the programmes after securing 84 credits will be awarded UG Diploma in the relevant Discipline/Subject provided they secure following 4 credits in work based vocational courses / summer internship during 2nd year															
			IV	Vocational Course	Any One	VC	VC401	VCD-1	0 - 0 - 8	4	26	30		20		50	450	
				Summer Internship		SI	SI401	SID-1										
			V	Metabolism of Amino Acids and Nucleotides	MAJOR	BSCBCMMJ501	MJC-7	3 - 0 - 4	5	20	30	15	20	35	100	400		
				Human Physiology	MAJOR	BSCBCMMJ502	MJC-8	3 - 0 - 4	5		30	15	20	35	100			
				Gene Organization, Replication and Repair	MAJOR	BSCBCMMJ503	MJC-9	3 - 0 - 4	5		30	15	20	35	100			

				Choose from the Pool of Minor Courses offered in 5th Semester by other Disciplines within the faculty	MINOR	See Pool	MNC-5	See Pool	5		See Pool				100			
			VI	Hormone: Biochemistry and Function	MAJOR	BSCBCMMJ601	MJC-10	3 - 0 - 4	5	22	30	15	20	35	100	450		
				Concepts in Genetics	MAJOR	BSCBCMMJ602	MJC-11	3 - 0 - 4	5		30	15	20	35	100			
				Gene Expression and Regulation	MAJOR	BSCBCMMJ603	MJC-12	3 - 0 - 4	5		30	15	20	35	100			
				Molecular Basis of Infectious Diseases	MAJOR	BSCBCMMJ604	MJC-13	3 - 0 - 4	5		30	15	20	35	100			
				Summer Internship	SI	SI601	SIMC-1	0 - 0 - 4	2		30		20		50			
					Total Credit and Marks			TOTAL CREDIT				126	TOTAL MARKS				2350	
			Students who want to undertake 3-year UG programme will be awarded UG Degree in the relevant Discipline / Subject upon securing 126 credits															
			4 - Year UG Degree (Honours)	VII	Immunology	MAJOR	BSCBCMMJ701	MJC-14	3 - 0 - 4	5	25	30	15	20	35	100	500	
					Basic Concepts on Developmental Biology	MAJOR	BSCBCMMJ702	MJC-15	3 - 0 - 4	5		30	15	20	35	100		
					Basic Microbiology	MAJOR	BSCBCMMJ703	MJC-16	3 - 0 - 4	5		30	15	20	35	100		
					Molecular Basis of Non-infectious Human Diseases	MAJOR	BSCBCMMJ704	MJC-17	3 - 0 - 4	5		30	15	20	35	100		
					Choose from the Pool of Minor Courses offered in 7th Semester by other Disciplines within the faculty	MINOR	See Pool	MNC-6	See Pool	5		See Pool				100		
				VIII	Genetic Engineering and Biotechnology	MAJOR	BSCBCMMJ801	MJC-18	3 - 0 - 4	5	22	30	15	20	35	100	500	
					Pharmacology & Toxicology	MAJOR	BSCBCMMJ802	MJC-19	2 - 0 - 4	4		30	15	20	35	100		
Plant Biochemistry	MAJOR	BSCBCMMJ803			MJC-20	2 - 0 - 4	4	30	15	20		35	100					
Computational Biology & Bioinformatics	MAJOR	BSCBCMMJ804			MJC-21	2 - 0 - 4	4	30	15	20		35	100					
Choose from the Pool of Minor Courses offered in 8th Semester by other Disciplines within the faculty	MINOR	See Pool	MNC-7		See Pool	5	See Pool					100						
		Total Credit and Marks			TOTAL CREDIT				173	TOTAL MARKS				3350				
Students who want to undertake 4-year UG Honours program will be awarded UG Degree (Honours) in the relevant Discipline / Subject provided they secure 173 credits																		
4 - Year UG Degree (Honours with Research)	VII	Immunology	MAJOR	BSCBCMMJ701	MJC-14	3 - 0 - 4	5	25	30	15	20	35	100	500				
		Basic Concepts on Developmental Biology	MAJOR	BSCBCMMJ702	MJC-15	3 - 0 - 4	5		30	15	20	35	100					
		Basic Microbiology	MAJOR	BSCBCMMJ703	MJC-16	3 - 0 - 4	5		30	15	20	35	100					
		Molecular Basis of Non-infectious Human Diseases	MAJOR	BSCBCMMJ704	MJC-17	3 - 0 - 4	5		30	15	20	35	100					
		Choose from the Pool of Minor Courses offered in 7th Semester by other Disciplines within the faculty	MINOR	See Pool	MNC-6	See Pool	5		See Pool				100					
	VIII	Genetic Engineering and Biotechnology	MAJOR	BSCBCMMJ801	MJC-18	3 - 0 - 4	5	22	30	15	20	35	100	500				
		Research Methodology	RP	BSCBCMRP801	RPC-1	4 - 0 - 0	4			30		70	100					
		Dissertation	RP	BSCBCMRP802	RPC-2	0 - 0 - 16	8		120		80		200					
		choose from the Pool of Minor Courses offered in 8th Semester by other Disciplines within the faculty	MINOR	See Pool	MNC-7	See Pool	5		See Pool				100					
			Total Credit and Marks			TOTAL CREDIT				173	TOTAL MARKS				3350			
Students who want to undertake 4-year UG Honours with Research program will be awarded UG Degree (Honours with Research) in the relevant Discipline / Subject provided they secure 173 credits																		
Abbreviations: MJ-= Major;MJC-= Major Course;MN= Minor;MNC= Minor Course; AE= Ability Enhancement; AEC= Ability Enhancement Course; SE= Skill Enhancement; SEC= Skill Enhancement Course; MD= Multidisciplinary ; MDC= Multidisciplinary Course; SI - Summer Internship;SIC - Summer Internship for Certificate; SID:Summer Internship for Diploma; SIMC - Summer Internship Mandatory Course; RP= Research Project ;RPC= Research Project Course; VA= Value Added;VAC= Value Added Course; VC= Vocational Course; VCC= Vocational Course for Certificate; VCD= Vocational Course for Diploma; CA= Continuous Assessment, ESE= End Semester Examination, L= Lecture Hour; T= Tutorial Hour and P= Practical Hour/ Field Work and NA= Not Applicable																		
Note: Minor Courses (MNC) : Students of a particular UG Course will choose from the Pool of Minor Courses offered by disciplines other than the major discipline opted by the student within the faculty. The student is required to opt the same Minor Discipline in the 2nd semester which he had opted in 1st semester. Explanation: If a student of Physics Major, opts for a Minor Course offered by Chemistry in 1st semester then that student is required to continue with the Minor Course offered by Chemistry for 2nd semester as Minor Course in the 2nd semester.																		
Semesterwise Pool of Minor Courses offered by Biochemistry for other Disciplines within the Faculty																		
Disciplin e	Semester	Course Name		Course Type	Course Code	Course Details	L - T - P	Course Credit	Sem Credit	CA Marks		ESE Marks		Total Marks	Sem Marks			
										Practical	Theoretical	Practical	Theoretical					

Pool of Value Added Courses offered in Semester-IV for all Disciplines across all Faculties																
Offered By Discipline	Semester	Course Name		Course Type	Course Code	Course Details	L - T - P	Course Credit	Sem Credit	CA Marks		ESE Marks		Total Marks	Sem Marks	
										Practical	Theoretical	Practical	Theoretical			
Physiology	IV	Any One	Yoga and Health	VA	VAC401	VAC-2	4 - 0 - 0	4	NA		15		35	50	NA	
Philosophy			Social Values and Ethics		VAC402											
Computer Science			Digital and Technological Solutions		VAC403											
History			Understanding India		VAC404											
Economics			Sustainable Development: Issues and Challenges		VAC405											
Commerce			Goods and Services Tax		VAC406											
Political Science			Basics of Indian Constitution		VAC407											
Physical Education			Integrated Self Defence		VAC408											0- 2 - 4