K	AZI NAZRUL I	UNIVERSITY		FACULTY OF SCIENCE, TECHNO STUDIES	LOGY & VOCATIONAL		egree /4-Year UG ar UG Degree (Ho Research)				WITH E	FFECT FROM 1	THE ACADEM	IIC SESSION:	2023-24		
Abbrevia			er									CA M	arks	ESE I	Marks		
ted Degree	Discipline	Degree Programme	Semester	Course Name		Course Type	Course Code	Course Details	L - T - P	Course Credit	Sem Credit	Practical	Theoretical	Practical	Theoretical	Total Marks	Sem Marks
				Mechanics and General Properties of Matter		MAJOR	BSCPHSMJ101	MJC-1	3 - 0 - 4	5		30	15	20	35	100	
				Choose from the Pool of Minor Courses offer	red in 1st Semester by other			MNC-1		5			See P			100	=
			_	Disciplines within the faculty		MINOR	See Pool	MNC-1	See Pool	3			Sec r	001		100	
			I	Choose from the Pool of Multidisciplinary Coacross the faculties	ourses offered in 1st Semester	MD	See Pool	MDC-1	3 - 0 - 0	3	20		15		35	50	350
				English/MIL Communication		AE	See Pool	AEC-1	4 - 0 - 0	4	1		15		35	50	
				Computer Programming		SE	BSCPHSSE101	SEC-1	0 - 0 - 6	3		15		35		50	_
				Electricity and Magnetism		MAJOR	BSCPHSMJ201	MJC-2	3 - 0 - 4	5		30	15	20	35	100	
				Choose from the Pool of Minor Courses offer Disciplines within the faculty	red in 2nd Semester by other	MINOR	Corresponding Course Code of Minor opted in 1st Semester	MNC-2	See Pool	5			See P	ool		100	
			II	Choose from the Pool of Multidisciplinary Coacross the faculties	ourses offered in 2nd Semester	MD	See Pool	MDC-2	3 - 0 - 0	3	20		15		35	50	350
				Environment Studies		VA	VA201	VAC-1	4 - 0 - 0	4			15		35	50	
				Electrical Circuits and Network Skill	4	SE	BSCPHSSE201	SEC-2	0 - 0 - 6	3	1	30		20		50	
				Basic Instrumentation Skills	Any One	SE	BSCPHSSE202	SEC-2	0-0-6	3		30		20		30	
				Student exiting the program	mes after securing 40 credits wil	l be awarded UG Certificate	in the relevant Discipline/S	ubject provided the	v secure following	ng 4 credits i	n work based vo	cational courses /	summer interns	hip during 1st v	/ear		
				Vocational Course		VC	VC201	VCC-1	1	1	1						
			II	Summer Internship	Any One	SI	SI201	SIC-1	0 - 0 - 8	4	24	30		20		50	400
				Mathematical Methods in Physics I		NA TOR	DOCUMENTA (1201	2410.2	4 1 0	T -	1 1		20		70	100	
				Optics		MAJOR MAJOR	BSCPHSMJ301 BSCPHSMJ302	MJC-3 MJC-4	4 - 1 - 0 3 - 0 - 4	5	1	30	30 15	20	70 35	100 100	
		3-year UG	Ш	Choose from the Pool of Minor Courses offer Disciplines within the faculty	red in 3rd Semester by other	MINOR	See Pool	MNC-3	See Pool	5	22	30	See P		33	100	400
		Degree		Choose from the Pool of Multidisciplinary Coacross the faculties	ourses offered in 3rd Semester	MD	See Pool	MD-3	2 - 1 - 0	3			15		35	50	
				English Communication		AE	See Pool	AEC-2	4 - 0 - 0	4			15		35	50	
				Classical Machanian and Consider Till Con-	-1-4:-:4	MAJOR	December (1401	MICS	4 1 6		<del>                                     </del>		20		70	100	
				Classical Mechanics and Special Theory of R Heat and Thermal Physics	ciativity	MAJOR MAJOR	BSCPHSMJ401 BSCPHSMJ402	MJC-5 MJC-6	4 - 1 - 0 3 - 0 - 4	5	1	30	30 15	20	70 35	100	1
				Choose from the Pool of Minor Courses offer Disciplines within the faculty	red in 4th Semester by other	MINOR	See Pool	MNC-4	See Pool	5		30	See P		33	100	1
			IV	Computer Oriented Numerical Analysis Scientific Writing and Documentation	Any One	SE	BSCPHSSE401 BSCPHSSE402	SEC-3	0 - 0 - 6	3	22	30		20		50	400
				Choose from the Pool of Value Added Cours	Le offered in 4th Semester	VA	See Pool	VAC-2	See Pool	4			15		35	50	1
				Student exiting the p	rogrammes after securing 84 cre-	dits will be awarded UG Dip	loma in the relevant Discipl	ine/Subject provide	d they secure fo	llowing 4 cre	dits in work bas	ed vocational cou	rses / summer in	nternship during	g 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		<u> </u>							
BSC	Physics			Analog Electronics		MAJOR	BSCPHSMJ501	MJC-7	3 - 0 - 4	5		30	15	20	35	100	
250	, sics			Quantum Mechanics-I		MAJOR	BSCPHSMJ502	MJC-8	3 - 0 - 4	5	1	30	15	20	35	100	
			V	EM Theory and its Applications		MAJOR	BSCPHSMJ503	MJC-9	4 - 1 - 0	5	20		30		70	100	400

		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 I	Pool		100	1
		Nuclear and Particle Physics	MAJOR	BSCPHSMJ601	MJC-10	4 - 1 - 0	5			30		70	100	
		Digital Electronics	MAJOR	BSCPHSMJ602	MJC-11	3 - 0 - 4	5		30	15	20	35	100	
	VI	Thermodynamics and Statistical Mechanics	MAJOR	BSCPHSMJ603	MJC-12	4 - 1 - 0	5	22		30		70	100	
		Condensed Matter-I and Atomic and Molecular Physics	MAJOR	BSCPHSMJ604	MJC-13	4 - 1 - 0	5			30		70	100	
		Summer Internship	SI	SI601	SIMC-1	0 - 0 - 4	2		30		20		50	
		Total Credit and Marks		TOTAL CR	REDIT			126		TO	TAL MARKS			
		Students who	want to undertake 3-year	UG programme will be av	varded UG Degree	e in the relevant	Discipline / S	ubject upon se	curing 126 credit	is				_
						_				,	,			
		Statistical Mechanics-II	MAJOR	BSCPHSMJ701	MJC-14	4 - 1 - 0	5			30		70	100	_
		Quantum Mechanics-II	MAJOR	BSCPHSMJ702	MJC-15	4 - 1 - 0	5			30		70	100	_
	VII	Condensed Matter Physics-II	MAJOR	BSCPHSMJ703	MJC-16	4 - 1 - 0	5	25		30		70	100	_
	711	Mathematical Methods in Physics-II	MAJOR	BSCPHSMJ704	MJC-17	4 - 1 - 0	5	23		30		70	100	_
		Choose from the Pool of Minor Courses offered in 7th Semester by other	MINOR	See Pool	MNC-6	See Pool	5			See I	Pool		100	
4 - Year UG		Disciplines within the faculty	Mintok	500 1 001	I	Sec 1 001				5001			100	
Degree	1													Π
(Honours)		Computational Physics	MAJOR	BSCPHSMJ801	MJC-18	3 - 0 - 4	5		30	15	20	35	100	Τ
		Relativistic Mechanics and Electrodynamics	MAJOR	BSCPHSMJ802	MJC-19	4 - 1 - 0	4			30		70	100	
	VIII	Experimental Techniques in Physics	MAJOR	BSCPHSMJ803	MJC-20	2 - 0 - 4	4	22	30	15	20	35	100	
	VIII	Advanced Electronics and Communication System	MAJOR	BSCPHSMJ804	MJC-21	2 - 0 - 4	4	22	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 I	Pool		100	
_		Total Credit and Marks		TOTAL CR	REDIT			173		то	OTAL MARKS			_
	ш													
		Students who want to undertake	4-year UG Honours progra	m will be awarded UGD	egree (Honours) i	n the relevant Di	scipline / Su	oject provided	they secure 173 c	redits				
		Students who want to undertake	4-year UG Honours progra	m will be awarded UG E	egree (Honours) i	n the relevant Di	scipline / Su	oject provided	they secure 173 c	redits				
		Students who want to undertake  Statistical Mechanics-II	4-year UG Honours progra	m will be awarded UG D  BSCPHSMJ701	Degree (Honours) in	n the relevant Di	scipline / Su	oject provided	they secure 173 c	redits 30		70	100	
		Statistical Mechanics-II Quantum Mechanics-II					•	oject provided	they secure 173 c			70 70	100	
	VII	Statistical Mechanics-II	MAJOR	BSCPHSMJ701	MJC-14	4 - 1 - 0	5		they secure 173 c	30				
	VII	Statistical Mechanics-II Quantum Mechanics-II Condensed Matter Physics-II Mathematical Methods in Physics II	MAJOR MAJOR	BSCPHSMJ701 BSCPHSMJ702	MJC-14 MJC-15	4 - 1 - 0 4 - 1 - 0	5 5	pject provided	they secure 173 c	30 30		70	100	
4 - Year UG Degree		Statistical Mechanics-II Quantum Mechanics-II Condensed Matter Physics-II	MAJOR MAJOR MAJOR	BSCPHSMJ701 BSCPHSMJ702 BSCPHSMJ703	MJC-14 MJC-15 MJC-16	4 - 1 - 0 4 - 1 - 0 4 - 1 - 0	5 5 5		they secure 173 c	30 30 30	Pool	70 70	100 100	
		Statistical Mechanics-II Quantum Mechanics-II Condensed Matter Physics-II Mathematical Methods in Physics II Choose from the Pool of Minor Courses offered in 7th Semester by other	MAJOR MAJOR MAJOR MAJOR	BSCPHSMJ701 BSCPHSMJ702 BSCPHSMJ703 BSCPHSMJ704	MJC-14 MJC-15 MJC-16 MJC-17	4 - 1 - 0 4 - 1 - 0 4 - 1 - 0 4 - 1 - 0	5 5 5 5		they secure 173 c	30 30 30 30 30	Pool	70 70	100 100 100	
Degree		Statistical Mechanics-II Quantum Mechanics-II Condensed Matter Physics-II Mathematical Methods in Physics II Choose from the Pool of Minor Courses offered in 7th Semester by other	MAJOR MAJOR MAJOR MAJOR	BSCPHSMJ701 BSCPHSMJ702 BSCPHSMJ703 BSCPHSMJ704	MJC-14 MJC-15 MJC-16 MJC-17	4 - 1 - 0 4 - 1 - 0 4 - 1 - 0 4 - 1 - 0	5 5 5 5		they secure 173 c	30 30 30 30 30	Pool	70 70	100 100 100	
Degree (Honours with		Statistical Mechanics-II Quantum Mechanics-II Condensed Matter Physics-II Mathematical Methods in Physics II Choose from the Pool of Minor Courses offered in 7th Semester by other Disciplines within the faculty	MAJOR MAJOR MAJOR MAJOR MINOR	BSCPHSMJ701 BSCPHSMJ702 BSCPHSMJ703 BSCPHSMJ704 See Pool	MJC-14 MJC-15 MJC-16 MJC-17 MNC-6	4-1-0 4-1-0 4-1-0 4-1-0 See Pool	5 5 5 5			30 30 30 30 30 See F		70 70 70	100 100 100 100	
Degree (Honours with	n en	Statistical Mechanics-II Quantum Mechanics-II Condensed Matter Physics-II Mathematical Methods in Physics II Choose from the Pool of Minor Courses offered in 7th Semester by other Disciplines within the faculty  Computational Physics	MAJOR MAJOR MAJOR MAJOR MINOR MAJOR	BSCPHSMJ701 BSCPHSMJ702 BSCPHSMJ703 BSCPHSMJ704 See Pool BSCPHSMJ801	MJC-14 MJC-15 MJC-16 MJC-17 MNC-6	4-1-0 4-1-0 4-1-0 4-1-0 See Pool	5 5 5 5 5			30 30 30 30 30 See F		70 70 70 70	100 100 100 100	
Degree (Honours with	n en	Statistical Mechanics-II Quantum Mechanics-II Condensed Matter Physics-II Mathematical Methods in Physics II Choose from the Pool of Minor Courses offered in 7th Semester by other Disciplines within the faculty  Computational Physics Research Methodology and Ethics	MAJOR MAJOR MAJOR MAJOR MINOR  MAJOR  MAJOR  MAJOR	BSCPHSMJ701 BSCPHSMJ702 BSCPHSMJ703 BSCPHSMJ704 See Pool  BSCPHSMJ801 BSCPHSMJ801	MJC-14 MJC-15 MJC-16 MJC-17 MNC-6 MJC-18 RPC-1	4-1-0 4-1-0 4-1-0 4-1-0 See Pool	5 5 5 5 5	25	30	30 30 30 30 30 See F	20	70 70 70 70	100 100 100 100 100	

Abbreviations: MJ= Major;MJC= Major Course;MN= Minor;MNC= Minor Course; AE= Ability Enhancement; AEC= Ability Enhancement Course; SE= 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;

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.

Semesterwise	Pool o	f Minor (	ourses off	ered by	Physics fo	r other I	disciplines w	ithin the	Faculty
Semesterwise	rooi o	i villor (	JOHESES OIL	ered by	FIIVSICS 10	r other t	Jiscibillies w	mmm me	racuity

Disciplin	Semester	Course Name	Commo Tomo	Course Code	Course Details	L - T - P	Course Credit	Sem	CA	Marks	ESE	Marks	Total Marks	Sem Marks
e	Semester	Course Name	Course Type	Course Code	Course Details	L-1-P	Course Credit	Credit	Practical	Theoretical	Practical	Theoretical	1 otai Marks	Sem Marks
	I	Mechanics and General properties of Matter		BSCPHSMN101	MNC-1	3 - 0 - 4	5		30	15	20	35	100	
	II	Electricity and magnetism		BSCPHSMN201	MNC-2	3 - 0 - 4	5		30	15	20	35	100	ļ
	III	Fundamentals of Optics		BSCPHSMN301	MNC-3	4 - 1 - 0	5			30		70	100	
sics	IV	Fundamentals of Thermal Physics	MINOR	BSCPHSMN401	MNC-4	4 - 1 - 0	5	NA		30		70	100	NA
Phy	V	Basic Electroneis	MINOR	BSCPHSMN501	MNC-5	4 - 1 - 0	5	NA		30		70	100	IVA
	VI	NA			NA									
	VII	Modern Physics-I		BSCPHSMN701	MNC-6	4 - 1 - 0	5			30		70	100	
	VIII	Modern Physics-II		BSCPHSMN801	MNC-7	4 - 1 - 0	5			30		70	100	
	VIII	Modern Physics-II		BSCPHSMN801	MNC-7	4 - 1 - 0	5			30		70	100	

Semester wise Pool of Multidisciplinary Courses offered by Physics for other Disciplines across the Faculties

Discipline	Semester	Course Name Course T	· · · · ·	Course Code	Course Details	L - T - P	Course Credit	Sem	CA	Marks	ESE	Marks	Total Marks	Sem Marks
Discipline	Semester	Course Name Course i	ype	Course Coue	Course Details	L-1-1	Course Credit	Credit	Practical	Theoretical	Practical	Theoretical	Total Marks	Sem Marks
Physics	I	Physical Science		MDC101	MDC-1	2 - 1 - 0	3	NA		15		35	50	

Pool of Communication Courses offered as Ability Enhancement Courses in Semester-I

Discipline	Semester	Course Name	Course Type	Course Code	Course Details	L - T - P	Course Credit	Sem	CA	Marks	ESE	Marks	Total Marks	Sem Marks
								Credit	Practical	Theoretical	Practical	Theoretical		<u>'</u>
		ω English Communication		AECE101										,
English/MIL	т .	5 Bengali Communication	AE	AECB101	AEC-1	4 0 0	4	NA		15		25	50	NA
Communication	1	Hindi Communication	AL	AECH101	ALC-1	4 - 0 - 0	4	INA		13		33	30	INA
		Urdu Communication		AECU101										<u>'</u>

Pool of Value Added Courses offered in Semester-IV for all Disciplines across all Faculties

Discipline	Semester		Course Name	Course Type	Course Code	Course Details	L - T - P	Course Credit	Sem	CA	Marks	ESE	Marks	Total Marks	Sem Marks
Discipline	Schiester		Course Ivanic	Course Type	Course Coue	Course Details	1,-1-1	Course Crean	Credit	Practical	Theoretical	Practical	Theoretical	Total Walks	Sem Marks
			Yoga And Health		VAC401										
			Social Values and Ethics		VAC402										
		е	Digital and Technological Solutions		VAC403										
NA	IV	ny On	Understanding India	VA	VAC404	VAC-2	4 - 0 - 0	4	NA		15		35	50	NA
			Sustainable Development: Issues and Challenges		VAC405										
			Goods and Services Tax		VAC406										
			Basics of Indian Constitution		VAC407										

Semester wise roof of frid		Jourses	offered for all Disciplines across the Facultie	<del>,</del>				1	Sem	CA	Marks	Ecc	Marks		
Offered By Discipline	Semester		Course Name	Course Type	Course Code	Course Details	L - T - P	Course Credit	Credit	Practical	Theoretical	Practical	Theoretical	Total Marks	Sem Marks
Physics		1	Physical Science		MDC101				Credit	Practical	Theoretical	Fractical	пеогенсан		
BBA	-		E-Commerce		MDC101	_									
Political Science	+		Human Rights		MDC102 MDC103	+									
Geography	+		Disaster Management		MDC103										
Physical Education	+		Fitness and Wellness		MDC104 MDC105										
Zoology	+		Application of Bio-Science		MDC105	+									
English	+		Film Appreciation		MDC100	+									
Commerce	+		Accounting for All		MDC107	+									
			Exploring Early Medieval Bengal: C.7th			-									
History		One	Century CE to 1206 CE		MDC109										
Bengali	I		Bangla Sahitya O Sanskriti	MD	MDC110	MDC-1	2 - 1 - 0	3	NA		15		35	50	NA
Economics		Any	Money and Banking		MDC111										
Hindi			Patrakarita		MDC112										
Mathematics			Business Mathematics		MDC113										
Sociology			Indian Society		MDC114										
Philosophy	1		Yoga for Daily Life		MDC115	_									
Electronics	4		Electronic Measurements		MDC116	_									
Computer Science	1		Tll		MDC117										
Botany	1		Introduction to Local Flora		MDC118										
Computer Applications			Information and Media Literacy		MDC119										
Commerce	<u> </u>	<u> </u>	Personal Finance		MDC120					L					
3.6.d	1		he a series de la constantina della constantina		1		T	1		1		1	ı	1	
Mathematics BBA	4		Mathematical Science		MDC201	4									
Statistics			Business Environment		MDC202	_									
Statistics			Basic Statistics		MDC203	_									
History			Understanding Medieval Bengal Select Themes: 1206 CE-1727 CE		MDC204										
Commerce			Personal Finance		MDC205										
Nutrition			Nutrition and Public Health		MDC206										
Education		o o	Educational Philosophy		MDC207										
Psychology	II	One	Stress Management	MD	MDC208	MDC-2	2 -1 - 0	3	NA		15		35	50	NA
Computer	11	Any	Social Media and Cyber Awareness	MD	MDC209	MIDC-2	2-1-0	3	INA		13		33	50	1874
Bengali		⋖	Adhunik Bangla Sahitya		MDC210										
Nazrul Sangeet			Nazrul Sangeet		MDC211										
Electronics	_		E-Waste Management		MDC212					1					
Chemistry	1		Chemical Science		MDC213					1					
Sanskrit	1		Critical Survey of Sanskrit Language		MDC214	_									
Urdu	1		Asnaf- E -Adab		MDC215	_									
Hindi	1		Anuvad Vigyan		MDC216	_									
Botany	<u> </u>		Herbal Home Remedies		MDC217	<u> </u>				<u> </u>			<u> </u>		
	1		<u> </u>		<u> </u>	<u> </u>		1				1	1		
Geography	1		Bharatavarsha—A Land of Rare Natural		MDC301					1					
517	4		Endowments			4									
Sanskrit	1		The Vedangas and other Streams of Indian		MDC302					1					
	4	One	Knowledge System			_									
Physics	Ш		Indian Astronomy	MD	MDC303	MDC-3	2 - 1 - 0	3	NA		15		35	50	NA
Zoology	4	Any	Indian Health Sciences		MDC304	_				1	_				
Mathematics	4	1	Indian Mathematics		MDC305	_									
Education	4		Indian Education		MDC306	_									
Political Sc	1		Indian Polity and Economy		MDC307	_				1					
Philosophy			Methodology of Indian Knowledge System		MDC308		1			1		1	1		

# **Department of Physics, Kazi Nazrul University, Asansol**

# Curriculum For B.Sc. Honours in Physics [CBCS & LOCF]

#### **Semester-I**

Sr.	Name of the Subject	Nature	Code	Teachin hour	ng Scho per w		credit
No.				L	T	P	CI CUIT
1	Mathematical Methods of Physics-I	Core Course-I		5	1	0	6
2	Mechanics	Core Course-II		4	0	4	6
2	Wechanics	(Theory +Lab)		4	U	4	O
3	a	GE-I (Theory)		_			_
	GE -I			5	1	0	6
4		GE-I		4	0	4	6
		(Theory +Lab)				_	0
5	EVS	AEC-I		4	0	0	4
		1			์ ว	Total C	redit =22

# **Semester-II**

Sr.	Name of the Subject	Nature	Code		ning Sc ur per		credit
No.	-			L	T	P	Clouit
1	Mathematical Methods of Physics-II	Core Course III		4	0	4	6
	Wathematical Methods of Fifysics-11	(Theory +Lab)		4	U	4	U
2	Electricity and Magnetism	Core Course- IV (Theory +Lab)		4	0	4	6
3	GE -II	GE-II (Theory)		5	1	0	6
4		GE-II		4	0	4	6
		(Theory +Lab)		+	U	+	U
5	Eng/MIL	AEC-II		4	0	0	4
					7	Total C	Credit =22

# **Semester-III**

Sr. No.	Name of the Subject	Nature	Code		ning Sc ur per		credit
INU.				L	T	P	
1	Classical Mechanics and Special Theory of Relativity	Core Course-V (Theory +Lab)		4	0	4	6
2	Thermal Physics- I	Core Course-VI (Theory +Lab)		4	0	4	6
3	Analog Systems and Applications	Core Course VII		4	0	4	6
4	GE -III	GE-III (Theory)		5	1	0	6
5		GE-III (Theory +Lab)		4	0	4	6
6	SEC –I	SEC-I		0	0	8	4
					· ]	Γotal C	Credit =28

#### **Semester-IV**

Sr. No.	Name of the Subject	Nature	Code		T         P           0         4           0         4           1         0           0         4           1         0           0         4           0         8	credit	
110.				L	T	P	
1	Electromagnetic Theory	Core Course-VIII (Theory +Lab)		4	0	4	6
2	Waves and Optics	Core Course IX (Theory +Lab)		4	0	4	6
3	Digital Systems and Applications	Core Course X( Theory +Lab)		4	0	4	6
4	GE -I	GE-I (Theory)		5	1	0	6
		GE-I (Theory +Lab)		4	0	4	6
5	SEC –II	SEC-II		0	0	8	4
	1				Τ	Cotal C	redit = 2

# **Semester-V**

Sr.	Name of the Subject	Nature	Code	Teaching Scheme in hour per week			Credit
No.				L	T	P	010010
1	Quantum Mechanics	Core Course-XI		4	0	4	6
1 Quantum Meenames	(Theory +Lab)		•	Ü	•		
2	Thermal Physics-II	Core Course XII (Theory +Lab)		4	0	4	6
3							
	DSE -III	E -III DSE-III (Theory)		5	1	0	6
		DSE-III		4	0	4	6
		(Theory +Lab)		4	U	4	0
4	DSE -IV	DSE-IV(Theory)		5	1	0	6
					1		O
		DSE-IV		4	0	4	6
		(Theory +Lab)		7	U	7	
		·		Total Credit = 24			

# **Semester-VI**

Sr.	Name of the Subject	Nature	Code	Teaching Scheme in hour per week			Credit
No.				L	T	P	
1	Statistical Machanias	Core Course-XIII		5	1	0	6
1	Statistical Mechanics	(Theory)		5	1	U	0
2	Condensed Matter Physics	Core Course XIV (Theory +Lab)		4	0	4	6
3	D 07 111	DSE-III (Theory)		5	1	0	6
	DSE -III	DSE-III		4	0	4	-
		(Theory +Lab)		4	0	4	6
4	DSE -IV	DSE-IV(Theory)		5	1	0	6
		DSE-IV		4	0	4	6
		(Theory +Lab)		+	U	4	U
				Total Credit =24			

# **Department of Physics, KaziNazrul University, Asansol**

# Curriculum For B.Sc. with Physics [CBCS & LOCF]

#### **Semester-I**

Sr. No.	Name of the Subject	Nature	Code	Teaching Scheme in hour per week			credit
NO.				L	Т	P	01 0020
1	Machanias	Core Course		4	0	4	6
1	Mechanics	(Theory +Lab)		4	U	4	6
		Core Course (Theory)		-	1	0	
2	Discipline 2	OR		5	1	0	6
	2.001.00.0	Core Course		4	0	4	6
		(Theory +Lab)		4		4	O
		Core Course (Theory)		5	1	0	6
3	Discipline3	OR			1	U	U
	Disciplines	Core Course		4	0	4	6
		(Theory +Lab)		_	4 0	4	U
4	EVS	AECC					4
			Total Credit =22				

#### **Semester-II**

Sr.	Name of the Subject	Nature Code		Teaching Scheme in hour per week			credit
No.				L	Т	P	
1	Electricity and Magnetism	Core Course		4	0	4	6
1	1 Electricity and Magnetism	(Theory +Lab)		4	U	4	O
		Core Course (Theory)		5	1	0	6
2	2 Discipline 2	OR		3	1	U	O
		Core Course		4	0	4	6
		(Theory +Lab)		4	U	4	O
		Core Course					
3	Discipline3	(Theory)		5	1	0	6
		OR					
		Core Course		4	0	4	6
		(Theory +Lab)		4	U	+	U
4	Eng/MIL	AEC		4	0	0	4
	Total C					redit =22	

# **Semester-III**

Sr. No.	Name of the Subject	Nature	Code	Teaching Scheme in hour per week			credit
NO.				L	T	P	020020
1	Thermal Physics and	Core Course		4	0	4	6
1	Statistical Mechanics	(Theory +Lab)		4	0	4	0
		Core Course (Theory)		5	1	0	6
	Discipline 2	OR		3	1	U	0
2		Core Course		4	0	4	6
		(Theory +Lab)		+	U	4	Ü
		Core Course (Theory)		5	1	0	6
3	Discipline3	OR		3	1	0	U
	2 isospinios	Core Course		4	0	4	6
		(Theory +Lab)		_		_	O
4	Electrical Circuit Network Skills	SEC-I		0	0	8	8
				Total Credit =22			

# Semester-IV

Sr.	Name of the Subject	Nature	Code	Teaching Scheme in hour per week			credit
No.				L	T	P	
1	Waves and Optics	Core Course		4	0	4	6
1	waves and Optics	(Theory +Lab)		7		4	U
		Core Course					
	Discipline 2	(Theory)		5	1	0	6
2		OR Core Course (Theory +Lab)		4	0	4	6
3	Discipline3	Core Course (Theory)		5	1	0	6
		Core Course (Theory +Lab)		4	0	4	6
4	Basic Instrumentation Skills	SEC-III		0	0	8	4
		1		Total Credit =2			

# **Semester-V**

Sr.	Name of the Subject	Nature	Code	Teaching Scheme in hour per week			credit
No.				L	T	P	
	Discipline Specific Elective	Core Course (Theory)		5	1	0	6
1	(Discipline 1: Physics)	OR					
1	(Discipline 1.1 Hysics)	Core Course		4		4	6
		(Theory +Lab)		4	0	4	0
		Core Course (Theory)					
2	Discipline Specific Elective	OR		5	1		6
2	(Discipline 2: )						
	•	Core Course		4	0	4	6
		(Theory +Lab)		4	U	4	0
		Core Course (Theory)		_	1	0	
3	Discipline Specific Elective	OR		5	1	U	6
3	(Discipline-3: )	Core Course		4	0	4	
		(Theory +Lab)		4	0	4	6
4	Technical Drawing Skills	SEC-V		8	0	0	4
		1			]	Total C	redit =22

#### **Semester-VI**

Sr.	Name of the Subject	Nature	Code	Teaching Scheme in hour per week			credit
No.				L	Т	P	010020
1	Discipline Specific Elective (Discipline 1: Physics)	Core Course (Theory) OR		5	1	0	6
1		Core Course (Theory +Lab)		4	0	4	6
	Discipline Specific Elective (Discipline 2: )	Core Course (Theory) OR		5	1	0	6
2	_	Core Course (Theory +Lab)		4	0	4	6
3	Discipline Specific Elective	Core Course (Theory) OR		5	1	0	6
	(Discipline-3: )	Core Course (Theory +Lab)		4	0	4	6
4	Computational Physics	SEC-IV		8	0	0	4
	Total Credit						redit =22