### **Department of Chemistry**

#### 2017-18

Class: B.Sc. Ist Year

Paper Name	Paper Code	Objects	
Inorganic	CH - 101	Chemical bonding, periodic	
Chemistry		properties, Qualitative Analysis.	
·		Properties of Glans and Cement.	
Organic	CH - 102	Mechanism of organic chemistry,	
Chemistry		Stenochemish arenes and its	
·		aromaticity.	
Physical	CH - 103	Liquid, Colloidal state, solution	
chemistry		phase, Gaseous state and kinetic	
		of reactions.	

#### Class: B.Sc. IInd Year

Paper Name	Paper Code	Objects
Inorganic	CH - 201	Periodic properties acid and bases
Chemistry		and coordination concepts.
Organic Chemistry	CH - 202	Absorption spectroscopy noncelature, properties reactions of phenols, Aldepydes, carboxylic and nitrogen containing compounds.
Physical chemistry	СН - 203	laws of thermodynamic phase, component and equiluitorim.

#### Class: B.Sc. IInd Year

Paper Name	Paper Code	Objects	
Inorganic	CH - 301	Hard and soft acids, bioinorganic	
Chemistry		metallurgy concept.	
Organic	CH - 302	NMR spectroscopy, Str, properties	
Chemistry		and chemical Rx <sup>n</sup> of Heterocyclic.	
		Compounds and synthetic polymer.	

Physical	CH - 303	Different types of spectroscopy,	
chemistry		photochemical process, solid state	
		and adsorption p	

### Class: M.Sc. (P) I Sem.

Paper Name	Paper Code	Objects	
Inorganic	CH - 101	Metal - legend equilibrium and	
Chemistry		types of trans	
Organic	CH - 102	Stereo chemistry and aromaticity	
Chemistry		organic compunds.	
Physical	CH - 103	Catalytic, Chemical kin,	
chemistry		adsorption polymer and electro	
		chemistry of solution.	
Instrumental	CH - 104	Insrumental analysis methids,	
Method of		atomic spectro analytical	
Analysis		techniques and chromatograpgy	
		te	

#### Class: M.Sc. (P) II Sem.

Paper Name	Paper Code	Objects
Inorganic	CH - 201	Acid, Base hydrolysis,
Chemistry		Substitution is square planer
		complexes and metal clusters.
Organic	CH - 202	Aliphatic, aromatic nuclephilic
Chemistry		and etectrophilic substitution
		reactions and its properties.
Physical	CH - 203	Classical and statistical
chemistry		thermodynamic concepts.
Instrumental	CH - 204	Electro analytic methods thermal
Method of		analysis and basic concepts of
Analysis		analytical instruments and
		voltammeter.

### Class: M.Sc. (F) III Sem.

Paper Name	Paper Code	Objects
Group Theory	CH - 301	Symmetry operations, point
And Inorganic		group. ESR, NMR and vibration
Spectroscopy		spechoscopy.
Application of	CH - 302	U.V, Visible, IR, NMR and Mass
organic		spectroscopy and its applications.
spcetroscopy		
Organo Metallic	CH - 303	Organo transition metal
Chemistry		compounds, transition metal and
		composes its banding and
		structure.
Nanotechnology	CH - 304	Nanostructure material and
and		characterization techques of Nano
Nanometerals		materials.

### Class: M.Sc. (F) IV Sem.

Paper Name	Paper Code	Objects
Solid State	CH - 401	Electronic str. of solids,
Chemistry		properties of solid and different
		types of solid state reactions.
Biochemistry	CH - 402	Role of metal ions in biological
		process, enzyme coenzyme
		chemistry and Bio - Energetic
		and Bio polymers interaction.
Industrial	CH - 403	Chemistry of colors, ores and
Chemistry		minerals.
Polymer	CH - 404	Structure and properties and
Chemistry		commercial polymer and polymer
		processing.

# **Department of Physics**

### 2017-18

CLASS NAME	PAPER NAME	PAPER CODE	OBJECTIVE OF PAPER/STUDENT GAIN
B.SC -1 YEAR	MECHANICS	Phy.101	The objective of this paper is to make the students understand the concept of stress and strain in different types of structure different loading condition
	OPTICS	Phy.102	In this PAPER students should gain a greater understanding of what is light and how it interacts with different media.
	Electromagnetics	Phy.103	IN this Paper students to gain an in-Departmenth understanding of fundamental electromagnetic concepts, theorems, and analytical techniques
B.SC -2 YEAR	STATISTICAL AND THERMAL PHYSICS	Phy.201	Sstudents will be able to analyze and evaluate various thermodynamic cycles used for energy production - work and heat, within the natural limits of conversion.
	QUANTUM MECHANICS AND SPECTROSCOPY	Phy.202	Have a deep understanding of the mathematical foundations of quantum mechanics,  • Be able to solve the

			Schr odinger equation for simple configurations,  • Understand the effect of symmetries in quantum mechanics.
	Electronics	Phy.203	An ability to design a system, component, or process to meet desired needs within realistic constraints.
B.SC 3 YEAR	Solid State Physics	Phy.301	Understanding Solid State will also help to understand how instruments such as CT scan, MR imaging, digital camera, photo detectors and many other similar instruments are working. The information will also give abilities to student to improve their mind to understand and build new instruments.
	Nuclear Physics	Phy.302	The prime aim of the studies in nuclear physics is to understand the structure of nucleus.
	Relativity and Electrodynamics	Phy.303	To apprise the students regarding the concepts of electrodynamics and Maxwell equations and use them various situations

### **Department of Mathematics**

#### 2017-18

Class Name B.Sc. Part III MATHEMATICS

S.N	Paper Name	Paper Code	Objective of Paper /Student Gain(In 2-3 Lines)
1	Abstract Algebra	Paper1	To understand algebraic concept with the help of linear algebra.
2	Analysis and Laplace Transforms	Paper2	To understand Basic Analysis part and there application
3	Mechanics II (Dynamics of Rigid Bodies and Hydrostatics)	Paper3	To understand hydrodynamics and concept of Dynamics eith there application in Life

Class Name B.Sc. Part II MATHEMATICS

S.N	Paper Name	Paper Code	Objective of Paper
			/Student Gain(In 2-3
			Lines)
1	Numerical Analysis and Linear	Paper1	Understand concept of
	Programming		Linear Equation and
			there application in daily
			Life.
2	Differential Equations	Paper2	To solve differential and
			Partial differential
			equation
3	Mechanics I (Statics and Dynamics	Paper3	To understand motion of
	of particle)		particle and friction
			,virtual work

Class Name B.Sc. Part I MATHEMATICS

S.N	Paper Name	Paper Code	Objective of Paper /Student Gain(In 2-3 Lines)
1	Algebra and Co-ordinate Geometry of Two Dimensions	Paper1	Basic idea of 2 dimension geometry and

			Matrix algebra
2	Calculus	Paper2	Understand basic idea
			of differential and
			integral Calculus
3	Co-ordinate Geometry of three	Paper3	Some vector theorem
	Dimensions and Vector Calculus		and Basic Idea of
			coordinate Geometry.

Class Name B.C.A. Part I MATHEMATICS

S.N	Paper Name	Paper Code	Objective of Paper
			/Student Gain(In 2-3
			Lines)
1	Fundamental of Mathematics	BCA101	Basic idea of Matrix
			,trigonometry,
			coordinate geometry.

## Class Name M.Sc. previous 1 sem MATHEMATICS

S.N	Paper Name	Paper Code	Objective of Paper /Student
			Gain(In 2-3 Lines)
1	Algebra – I	Math – 101	Some theorems on algebra
			and there applications
2	Advanced Real Analysis	Math – 102	Understand concept of real
			Analysis by some theorems
3	Differential Equations	Math – 103	Solution of Riccati and
			other Equation
4	Special Functions	Math – 104	To understand basic idea of
			hyper geometric Function
			and other special function
5	Analytical Dynamics and Numerical	Math – 105	Some idea solution of
	Analysis		differential equation by
			numerical Method and
			analytic Dynamics

Class Name M.Sc. previous2 sem MATHEMATICS

S.N	Paper Name	Paper Code	Objective of Paper /Student
			Gain(In 2-3 Lines)
1	Algebra – II	Math – 201	Extension of theorems on
			algebra and there applications
2	Measure Theory and Integration	Math – 202	Some theorems on measure and
			there application on intrgral

3	Hydrodynamics	Math – 203	the branch of science
			concerned with forces acting
			on or exerted by fluids
			(especially liquids).
4	Classical Polynomials and Integral	Math – 204	Some basic Idea of Laggure
	Transforms		,hermit, miline transform
5	Analytical Dynamics and	Math – 205	Solution of Partial Equation by
	Numerical Analysis-II		numerical Analysis .

Class Name M.Sc. Finall3 sem MATHEMATICS

S.N	Paper Name	Paper Code	Objective of Paper /Student Gain(In 2-3 Lines)
1	Complex Analysis	Math – 301	This course is aimed to provide an introduction to the theories for functions of a <b>complex</b> variable The notion of the Riemann sheet is presented to help student visualize multivalued <b>complex</b> functions. <b>Complex</b> integration and <b>complex</b> power series are presented
2	Tensor Analysis	Math – 302	tensor calculus or tensor analysis an extension of vector calculus to tensor fields (tensors that may vary over a manifold, e.g. in spacetime). Developed by Gregorio Ricci-Curbastro and his student Tullio Levi-Civita, it was used by Albert Einstein to develop his theory of general relativity.
3	Functional Analysis  – I	Math – 303	Functional analysis is a branch of mathematical analysis, the core of which is formed by the study of vector spaces endowed with some kind of limit-related structure (e.g. inner product, norm, topology, etc.) and the linear functions defined on these spaces and respecting these structures in a suitable sense
4	Operation research/Integral equation	Math – 304	The objective of the course module is to study Integral Equations and to know that what is the relationship between the integral equations and ordinary differential equations
5	MHD/LVFT	Math – 305	Define laminar flow and turbulent flow. Explain what <i>viscosity</i> is. Calculate flow and resistance with Poiseuille's law

### Class Name M.Sc. Final4sem MATHEMATICS

S.N	Paper Name	Paper Code	Objective of Paper /Student Gain(In 2-3
	m 1	3.5.1. 404	Lines)
1	Topology	Math – 401	study of geometrical properties and
			spatial relations unaffected by the
			continuous change of shape or size of
			figures.
2	Differential Geometry	Math-402	<b>Differential Geometry</b> is the
			study <b>geometric</b> properties
			using <b>Differential</b> and Integral Calculus.
			It is a branch of mathematics dealing with
			geometrical forms and the intrinsic
			properties of curves and surfaces as related
			to <b>differential</b> calculus and mathematical
			analysis.
3	Functional Analysis –	Math – 403	Functional analysis is a branch of
	II		mathematical <b>analysis</b> , the core of which
			is formed by the study of vector spaces
			endowed with some kind of limit-related
			structure (e.g. inner product, norm,
			topology, etc.) and the linear functions
			defined on these spaces and respecting
			these structures in a suitable sense
4	Operation	Math – 404	<b>Operations research</b> (OR) is an
	research2/Integral		analytical method of problem-solving and
	equation2		decision-making that is useful in the
	- 1		management of organizations.
			In <b>operations research</b> , problems are
			broken down into basic components and
			then solved in defined steps by
			mathematical analysis
5	MHD2/LVFT2	Math – 405	Magnetohydrodynamics (MHD;
			also magneto-fluid dynamics or
			hydromagnetics) is the study of the
			magnetic properties and behaviour of
			electrically conducting fluids.

# Department of Zoology 2017-18

Class Name: B.Sc. First Year

S.N	Paper Name	Paper Code	Objective of Paper /Student
			Gain(In 2-3 Lines)
1	PAPER I: ANIMAL	1513	Provides knowledge about
	DIVERSITY AND		diversity of invertebrate animals in
	EVOLUTION		nature with their key features,
			taxonomy and understanding of the
			process of evolution
2	PAPER II: BIOLOGY OF	1514	Giving a detailed knowledge about
	NON-CHORDATES		life of non-chordates.
3	PAPER III: CELL BIOLOGY	1515	Provides information about cell and
	AND GENETICS		its components along with
			inheritance of characters

Class Name: B.Sc. Second Year

S.N	Paper Name	Paper Code	Objective of Paper /Student
	_	_	Gain(In 2-3 Lines)
1	PAPER I: CHORDATE	1561	Provides knowledge about
	STRUCTURE AND		chordate classification and their
	FUNCTIONS		life, biological process and
			adaptations.
2	PAPER II: DEVELOPMENT	1562	Giving a detailed understanding
	BIOLOGY		about the fact the journey of life
			from gametogenesis to
			organogenesis. Provides
			knowledge about twins, stem
			cells, cloning, artificial
			insemination etc.
3	PAPER III: IMMUNOLOGY	1563	Provides knowledge about our
	MICROBIOLOGY		defense system, medical and
	BIOTECHNOLOGY		applied microbiology, microbes
			study, applications of
			biotechnology in different fields.

Class Name: B.Sc. Third Year

S.N	Paper Name	Paper Code	Objective of Paper
	_	_	/Student Gain(In 2-3 Lines)
1	PAPER I: ANIMAL	1616	Provides complete
	PHYSIOLOGY AND		knowledge aboutdifferent
	BIOCHEMISTRY		physiological systems of
			humans and their mechanism
			with detailed information
			about biomolecules
2	PAPER II : ECOLOGY	1617	The paper giving knowledge
	AND BEHAVIOUR		about the environment,
			different ecosystems of
			earth, pollution, communities
			and different behaviors of
			animals and their social
			organization and wildlife
3	PAPER III : APPLIED	1618	Provides knowledge about
	ZOOLOGY		how we earn from zoology
			by understanding the
			different techniques of
			applied zoology like
			Vermiculture, sericulture,
			pest management, fish
			culture etc.

# **Department of Botany**

### 2017-18

S.N	Class	Paper Name	Paper	Objective of Paper /Student
4		-	code	Gain(In 2-3 Lines)
1	B.sc. I yr	Fungi , Microbiology, Plant Pathology	-	Knowledge about Lower plant group and its
				development
2	B.sc. II yr	Anatomy of Angiosperm, and Economy Botany	-	Student gain the information about Internal structure of the plant as well as knowing about commercially important about plant
3	B.sc. Iyear	Practical work- Algae , Plant Pathology, Microbiology	-	Hands on practices of Microorganism like Bacteria and Fungi, as well as divers group of algae and disease of plants
4	B.sc.II year	Practical work- Taxonomy and Cytology	-	Gain the knowledge about Flowering plant in nature and know their chromosome study in laboratory by hand hand
5	M.sc.Isem	Biology and Diversity of Microbes, Algae and Fungi	BOT103	Knowledge about Lower plant group and its development
6	M.sc.IIsem	Plant Resources, Utilization and conservation	BOT203	Student always gain the information about growing pattern of the plant, utilization and conservation in Local Tour
7	M.sc. IIIsem	Microbial Ecology-I	BOT 304	Student gain the knowledge about microbes present in
8	M.sc.IVsem	Microbial Ecology-	BOT	the extreme environment

		II	404B	
9	M.sc.Isem	Practical	BOT	
			103	
10.	M.sc.IIsem	Practical	BOT	
			203	
11	M.sc.IIIsem	Practical	BOT	
			304	
12.	M.sc. IVsem	Practical	BOT	
			404 B	

S.N	Class	Paper Name	Paper	Objective of Paper /Student
			code	Gain
1	B.sc. I yr	Algae, Lichen and Bryophytes	-	To Information about
2	B.sc. II yr	Taxonomy and Embryology of Angiosperm	-	Biodiversity of plant,
3	B.sc. III yr	Plant physiology, Biochemistry	-	Morphological, and internal
4	B.sc. III yr	Practical	-	
5	M.sc.I sem	Biology and Diversity of Microbes, Algae and Fungi	BOT10 3	structure, development and
6	M.sc.II sem	Plant Development And Reproductive Biology	202	internal functioning process of plants theoretically as well
7	M.sc. II sem	Plant physiology	204	or prants theoretically as well
8	M.sc.III sem	Plant Metabolism	302	ac prostically
9	M.sc.I sem	Practical	BOT 106	as practically
10.	M.sc.II sem	Practical	BOT 205	
11	M.sc.II sem	Practical	BOT 206	
12.	M.sc. III sem	Practical	BOT 305	

# **Department of Biotechnology**

### 2017-18

	B.Sc. FIRST YEAR			
PAPER NAME	PAPER	OBJECTIVE OF		
	CODE	PAPER/STUDENT GAIN		
BIOCHEMISTRY AND	PAEPR-I	Students gain knowledge on basics of		
BIOSTATISTICS		Biochemistry- functioning of		
		biomolecules; Biostatistics- data		
		collection and interpretation		
CELL BIOLOGY AND	PAPER-II	Students gain information regarding		
GENETICS		structures of Cell organelles and		
		principles of genetics		
MICROBIOLOGY AND	PAPER-III	Students learn about microbial		
COMPUTATIONAL		diversity, metabolism and genetics		
BIOLOGY		along with basics of Bioinformatics.		
PRACTICALS		Basic Biochemistry through protein		
		and sugar and lipid estimation and		
		chromatography. Staining techniques		
		and Microbial culture.		
В	Sc. SECOND Y	<b>EAR</b>		
MOLECULAR BIOLOGY	PAEPR-I	Students learn the basic working of		
		cell, various activities and gene flow.		
BIOPHYSICS	PAPER-II	Students gain knowledge about		
		mechanism of reactions in		
		biomolecules, photosynthesis, light		
		reception. Information regarding		
		hearing, vision and their basics,		
		instrumentation techniques and their		
		applications		
IMMUNOLOGY AND CELL	PAPER-III	Students learn about the basics of		
CULTURE		Immunology, Antibody-antigen		
		interactions, conditions related to		
		immune responses. Information		
		regarding Animal cell culture and		
		technology and its application is also		

		explained in the paper.
PRACTICALS		DNA extraction procedure for plants, Immuno-diagnostic techniques, Spectrophotometry, Study of Blood cell, type and basics.
1	B.Sc. FINAL Y	EAR
RECOMBINANT DNA TECHNOLOGY	PAEPR-I	Students learn about the tools and techniques of rDNA Technology and its varied applications
PLANT BIOTECHNOLOGY	PAPER-II	Students gain information about the basics of Plant Tissue culture-history, advance, its tools and techniques along with the applications
ENVIRONMENTAL AND ANIMAL BIOTECHNOLOGY	PAPER-III	Students learn about the advances in animal cell culture technology, its application in medical science. Effects of conventional fuel usage on the environment. Biodiversity, Bio remediation and use of nonconventional fuels to help the reduction of carbon emissions.
PRACTICALS		Plant Tissue culture techniques, media preparation, Calculation of D.O and C.O.D, estimation of protein in animal tissue.

# DEPARTMENT OF BIOTECHNOLOGY COURSE OUTCOME- UNDERGRDAUTE PROGRAMME

M.Sc. PREVIOUS				
SEMESTER-I				
PAPER CODE	PAPER NAME	OBJECTIVE OF		
		PAPER/STUDENT GAIN		
BT-101	PRINCIPLES OF	Students learn about the basics of		
	MICROBIOLOGY	Microbial Cell structure, function,		
		classification.		
BT-102	CELL AND	Students gain knowledge regarding		
	DEVELOPMENTAL	the developmental processes in		
	BIOLOGY	animal and plant cells, the metabolic		
		activities in the cell		
BT-103	FUNDAMENTALS OF	Students learn about the basics of		
	IMMUNOLOGY	Immunology, Antibody-antigen		
		interactions, conditions related to		
		immune responses, Auto-immune		
		disease and Immune techniques.		
BT-104	BASIC MOLECULAR	Students learn about the central		
	BIOLOGY	dogma, the molecular biology of		
		replication, transcription and		
		translation. Biology of oncogenes		
		and tumor suppressor genes.		
BT-105	PRACTICAL	Basic Biochemistry through protein		
	EXAMINATION I	and sugar and chromatography.		
	COVERING FIRST TWO	Staining techniques and Microbial		
	THEORY PAPERS	culture.		
BT-106	PRACTICAL	Basic Immuno-techniques, Isolation		
	EXAMINATION II	of DNA, practical related to		
	COVERING SECOND TWO	Immunology, Molecular Biology		
	THEORY PAPERS			
777	SEMESTER			
BT-201	PRINCIPLES OF	Students gain knowledge on basics of		
	BIOCHEMISTRY	Biochemistry- functioning of		
		biomolecules; kinetics and actions.		

BT-202 BT-203	GENETICS AND EVOLUTION  COMPUTATIONAL BIOLOGY AND BIOINFORMATICS	Students learn about the laws of Genetics and its applications to study heredity and variation. Principles of Evolution and its relevance Students learn about Biostatistics and Bioinformatics- basics and application
BT-204	BIOANALYTICAL TECHNIQUES	Students gain information about the various instrumentation techniques used in the Biotechnology and the principles behind them-their working and applications.
BT-205	PRACTICAL EXAMINATION I COVERING FIRST TWO THEORY PAPERS	Experiments related to protein, sugar estimation. Chromatography, Genetics
BT-206	PRACTICAL EXAMINATION II COVERING SECOND TWO THEORY PAPERS	Experiments related to Bioinformatics and Biostatistics and use of Instruments.

# DEPARTMENT OF BIOTECHNOLOGY COURSE OUTCOME- POST-GRADUATE PROGRAM

M.Sc. FINAL				
SEMESTER-III				
PAPER CODE	PAPER NAME	OBJECTIVE OF		
		PAPER/STUDENT GAIN		
BT-301	GENOMICS AND	Students learn about the basics of		
	PROTEOMICS	Genomics and Proteomics, the		
		various techniques used in the		
		analysis of genes and genome. Study		
		of Genome of Prokaryotic and		
		Eukaryotic organisms.		
BT-302	GENETIC ENGINEERING	Students learn about the tools and		
		techniques of rDNA Technology and		
		its varied applications. The novel		
		techniques related to study of genes		
		and disease and application		
BT-303	ENVIRONMENTAL	Students gain knowledge related to		
	BIOTECHNOLOGY	Environmental Pollution and ways to		
		mitigate it through Biotechnological		
		approaches.		
BT-304	IPR, BIOSAFETY AND	Students learn about the basics of		
	BIOETHICS	Intellectual Property rights, patenting		
		procedure, Bioethics in lab and		
DE 205	DD A CONIC A I	Biosafety measures.		
BT-305	PRACTICAL	Experiments related to Gene study,		
	EXAMINATION I	sequence alignment and other		
	COVERING FIRST TWO THEORY PAPERS	Bioinformatics approaches. Mapping		
	THEORY PAPERS	studies and construction,		
DT 206	DDACTICAI	amplification of DNA.		
BT-306	PRACTICAL EXAMINATION II	Experiments related to		
	COVERING SECOND TWO	Environmental Biology and		
	THEORY PAPERS	Biosafety measures.		
	INCURIFAPERS			

	SEMESTER-IV				
BT-401	BIOPROCESS ENGINEERING AND TECHNOLOGY	Students gain information about Bioprocess fundamentals, Downstream processing, applications etc.			
BT-402	PLANT BIOTECHNOLOGY	Students gain information about the basics of Plant Tissue culture-history, advances, its tools and techniques along with the applications			
BT-403	ANIMAL CELL CULTURE AND APPLICATION	Students learn about the basics of Animal cell culture, sterilization and instrumentation and its application in various fields			
BT-404	DISSERTATION	A three month training program aiming to develop research aptitude in the students with presentation of a Dissertation on the topic the student has worked on.			
BT-405	PRACTICAL EXAMINATION I COVERING FIRST TWO THEORY PAPERS	Experiments related to Bioprocess technology basics, Plant Tissue culture and its varied types			
BT-406	PRACTICAL EXAMINATION II COVERING SECOND TWO THEORY PAPERS	Experiments related to Animal Cell Culture and Basic Cell morphology			

# **Department of Computer Science**

### 2017-18

CODE	SUBJECT	DESCRIPTION			
	THEORY				
BCA-	Fundamentals of	Learn basic maths with set relations,			
101	Mathematics	quadratic equations, circle, determinant			
		and Matrices			
BCA-	Programming with 'C'	Concepts of programming and approaches			
102					
BCA-	Internet Technology	Learn basics of Internet and technology			
103					
BCA-	Fundamentals of	Learn basics about computer, Network			
104	Computers	and Digital and analog signals			
BCA-	Digital Logic	Study and designing of Digital circuits			
105					
BCA-	Environmental studies	Get knowledge related to environment.			
106					
	PRA	ACTICAL			
BCA-	HTML Lab	Learn web development			
107					
BCA-	C Programming Lab	Learn code and syntax to develop a			
108		program			
BCA-	MS Office Lab	Learn word, excel, PowerPoint to express			
109		views in attractive manner with			
		formatting.			
BCA-	Digital Electronics Lab	Implementation of designing of Digital			
110		circuits			

### **BCA II YEAR**

CODE	SUBJECT	DESCRIPTION				
	$\mathbf{T}$	HEORY				
BCA-	Operating system	Knowledge about various computer				
201		operating systems				
BCA-	Data structures and	Knowledge about various data structures				
202	algorithms	in computer architecture				
BCA-	Programming with C++	Develops skill in C++ Programming				
203						
BCA-	Computer system	Learns Microprocessor architecture and				

204	architecture	microprocessor programming
BCA-	DBMS	Learns basic database management
205		system through different softwares
BCA-	Visual Programming	Learn web and windows application
206		development related syntax, code and read
		about basic objects and controls
	PR	ACTICAL
BCA-	Visual Basic .NET Lab	Learn implementation of code and syntax
207		for web and windows application
		development
BCA-	Oracle SQL Lab	Study of implementation of database
208		management softwares
BCA-	Programming C++ Lab	Study and implementation of C++
209	-	programming
BCA-	8085 Microprocessor	Study and implementation of
210	Lab	Microprocessor programming

#### **BCA III YEAR**

CODE	SUBJECT	DESCRIPTION
	Т	THEORY
BCA-	Java Programming	Develops skill in JAVA Programming
301		
BCA-	Multimedia Tools	Study about multimedia product
302		development tools Like
		Image, sound, graphics, text, audio Video,
		Animation etc.
BCA-	Computer Networks	study about Network architecture, Data
303		communication process and Lan access
		technology, error detection and correction
		techniques
BCA-	Web Technologies	Study about web based technologies
304	_	
BCA-	System analysis &	Study about various phases of Project
305	Design	development
BCA-	Communication Skills	Study about communicative English
306		

PRACTICAL		
BCA-	Java Lab	Study and implementation of JAVA
307		programming
BCA-	ASP.NET Lab	Study and implementation of ASP.NET
308		programming
BCA-	Project Work	Implementation of Languages and team
309		work
BCA-	Seminar	Presentation and communication skills
310		