# PROGRAMME OUTCOMES & COURSE OUTCOMES

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knowledge in Urdu language and literature and to provide proficiency to the other subject students in Second language Urdu like B.A, B.Com & B.Sc. with opportunities to go for Higher Education and also employment opportunities in research. To provide knowledge in National language Urdu in the field of arts and Literature. Mass communication, Journalism, literary research and criticism are also taught to make the students employable.  B.A H.E.P HISTORY ECONOMICS POLITICAL SCIENCE  Meant to reach the higher peak of examinations i.e., groups, civil and many more  History to mak knowledge in National language Urdu in the field of arts and Literature. Mass communication, Journalism, literary research and criticism are also taught to make the students employable.  B.A H.E.P HISTORY ECONOMICS POLITICAL SCIENCE  Meant to reach the higher peak of examinations i.e., groups, civil and many more  Econo B.A prosocial and Postuden traditic country 2. The subject throw This et an idea and eq of lear	tudent s gain the master
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B.A prisocial and Postuden tradition countries. The subject throw This end and equipment of learn of learn of learn of learn social and equipment tradition countries. The subject throw throw the subject throw throw the subject t	nomics: The curriculum of the
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studen tradition country 2. The subject throw This end an idea and equipment of learn of learn student tradition country 2. The subject throw throw throw throw throw the subject throw throw the subject throw the subject throw the subject throw th	Political Science. It helps the
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subject throw This et an idea and eq of lear	he programmes with humanity
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	nteering. 3. All UG
	enables the students to develop deal society with social concern equity cantered nation. This type earning triggers the spirit of the ents to act upon social issues and acipate in civic life through

programmes curriculum emphasizes on values and ethics. The students learnt the value their life and others and give importance to values and customs and maintain good rapport with others like harmony in the family and society – harmony in human relationship, understanding the harmony in the family – the basic unit of human interaction. Trust and respect as the foundational values of relationship. This course is covered in the I-semester of the UG degree.

Political Science: Comprehend the basic theories of political Science, structures and processes of government systems

- 2. participate as a good citizen of the society;
- 3. analyze political and policy problems and participate in formulating policy options;
- 4. use electronic and traditional library resources to research key local, state, national and international policy issues and present results;
- 5. demonstrate critical thinking, including the ability to form an argument, detect fallacies, and martial evidence, about key issues of public policy and politics;
- 6 discuss the major theories and concepts of political science and its subfields; and deliver thoughtful and well articulated presentations of research findings.

B.A	HISTORY	History: History collaborated with
ADVANCED		Advanced English and Computer
ENGLISH	ADVANCED	Applications to give History a new
	ENGLISH	spice which makes the dishes of
	COMPLETED	subject delicious with new techniques
	COMPUTER	with Computer Applications.
	APPLICATION	with Computer Applications.
		Advanced English: 1. Developing
		and integrating the use of four
		language skills i.e. listening,
		speaking, reading and writing.
		2. Using English language effectively
		for written and oral communication.
		3. Gaining the knowledge of British
		and American literature.
		4.To make the students familiar with
		the basic forms of literature like
		poetic forms, figures of speech,
		literary terms etc.
		Computer Applications: Hands-on
		experience in various practical
		aspects of problem solving/
		programming/ experimental
		techniques, and data analysis and
		presentation competence. Effective
		use the software - MS Excel and C-
		Programming.
B.A H.P.U	HISTORY	History: History connected with Urdu
	DOI ITTICALI	language makes the subject so unique
	POLITICAL	and attractive; Political Science helps
	SCIENCE	the students grow in this political
	URDU	world.
		Political Science: 1.
		Comprehend the basic theories of political Science structures and
		processes of government systems
		2. participate as a good citizen of the
		society;
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			3. analyze political and policy problems and participate in formulating policy options; 4. use electronic and traditional library resources to research key local, state, national and international policy issues and present results; 5. demonstrate critical thinking, including the ability to form an argument, detect fallacies, and martial evidence, about key issues of public policy and politics; 6 discuss the major theories and concepts of political science and its subfields; and deliver thoughtful and well articulated presentations of research findings.
			Urdu: 1. Students gain the master knowledge in communication skills, reading skills and writing skills effectively as professionals and continue learning within the field of Urdu language and literature.  2. Gain specific Knowledge on poetry, prose and grammar of the language and literature.  3. The integrated use of Advanced Urdu, History and Political Science to achieve the sociological awareness and improving the moral values of all human beings with efficient leadership qualities and citizenship.  4. Knowledge about rules, rights and regulations for the welfare of society and Nation.
B.A. R.D	Rural Development Advanced Telugu	All the BA programmes have History / Economics / Political Science as optional subjects . The motto behind is to improve the social cultural,	Rural Development: 1.The curriculum of the B.A programme mainly focuses on social interaction, especially History and Political Science. It helps the students to know history, culture, traditions of

	Psychology	economic conditions of all	India as well as other countries in the
	rsychology	students in the class. All UG	world. 2. The
		programmes curriculum	programmes with humanity subject's
		emphasize on values and ethics.	specifically political science throw
		The students learn to value their	light on effective citizenship. This
		life and others and give	enables the students to develop an
		importance to values and	ideal society with social concern and equity cantered nation. This type of
		customs and maintain good	learning triggers the spirit of the
		rapport with others like	students to act upon social issues and
		harmony in the family and	participate in civic life through
		society – harmony in human	volunteering. 3. All UG
		relationship, understanding the	programmes curriculum emphasise
		harmony in the family – the	on values and ethics. The students
		basic unit of human interaction.	learn to value their life and others and to give importance to values and
		Trust and respect as the	customs and maintain good rapport
		foundational values of	with others like harmony in the
		relationships. This course is	family and society – harmony in
		covered in I semester of the UG	human relationship, understanding
		degree. The B.A., programs	the harmony in the family – the basic
		throw light on to awake the	unit of human interaction. Trust and
		students regarding a concept on	respect as the foundational values of relationships. This course is covered
		"Environment and	in the I semester of the UG degree.
		Sustainability ". The curriculum	
		is designed in such a way to	
		understand the issues of	
		environmental contexts and	
		sustainable development. To	
		mention a few topics included	
		are environment and natural	
		resources, basic principles of	
		ecosystem functioning,	
		environmental pollution, human	
		population and environment.	
		population and environment.	History: History makes the students
	***	Programme outcomes refer to	to convert the world into a better
	History	broad objectives of a BA	place to live in by knowing all the
B.A HEP	Economics	Degree programmme, mainly as	mistakes done in the past and also
		they are relevant to the	not to repeat them in future,
	Political science	excellence and competence of	historically, politically and
		the program. The faculty in	economically
		each academic degree program	,

at KVR Govt. College for Women articulates what they want students in their program to achieve--in terms of knowledge, skills, and values-when they complete the programme referred to as Program Outcomes. By articulating these as things that students will know or be able to do, the benefits of a program of study can be clearly communicated to prospective students, to employers, and to others in the institution. The program's content, student experiences, and teaching methodologies are then aligned in an optimal way to help students achieve these learning outcomes. The college employees a continuous improvement process to evaluate and improve the effectiveness of each academic program. Striving towards achieving the mission of the college the efforts are directed to equip the students with all necessary paraphernalia.

- Economics: The curriculum of the B.A programme mainly focuses on social interaction, especially History and Political Science. It helpes the students to know history, culture, traditions of India as well as other countries in the world.
- 2. The programmes with humanity subject's specifically political science throw light on effective citizenship. This enables the students to develop an ideal society with social concern and equity cantered nation. This type of learning triggers the spirit of the students to act upon social issues and participate in civic life through volunteering.
- 3. All UG programmes curriculum emphasize on values and ethics. The students learnt to value their life and others and to give importance to values and customs and maintain good rapport with others like harmony in the family and society – harmony in human relationship, understanding the harmony in the family – the basic unit of human interaction. Trust and respect as the foundational values of relationships. This course is covered in I semester of the UG degree.

#### Political Science:

- 1. Comprehend the basic theories of political Science structures and processes of government systems 2. participate as a good citizen of the society;
- 3. analyze political and policy problems and participate in formulating policy options;
- 4. use electronic and traditional library resources to research key local, state, national and international policy issues and present results;
- 5. demonstrate critical thinking,

			including the ability to form an argument, detect fallacies, and martial evidence, about key issues of public policy and politics; 6. discuss the major theories and concepts of political science and its subfields; and deliver thoughtful and well articulated presentations of research findings.
B.Com(CA)	B.Com (Computer Applications) and B.Com (General)	Program outcomes refer to broad objectives of a degree program, predominantly as they are relevant to the excellence and competence of the program. The faculty in each academic degree program at KVR Govt. College for Women articulates what they want students in their program to achieve-in terms of knowledge, skills, and values-when they complete the program referred to as Program Outcomes. By articulating these as things that students will know or be able to do, the benefits of a program of study can be clearly communicated to prospective students, to employers, and to others in the institution. The program's content, student experiences, and teaching methodologies are then aligned in an optimal way to help students achieve these learning outcomes. The college employs a continuous improvement process to evaluate and improve the effectiveness of each academic program. Striving towards achieving the mission of the	<ol> <li>To acquaint students with the basic concepts of commerce specially emphasizing upon the use of computers.</li> <li>Use information to support business processes and practices, such as problem analysis and decision making.</li> <li>Demonstrate knowledge of microeconomic and market theory as it relates to markets, firms, government policy, and resource allocation.</li> <li>Use quantitative and qualitative tools and methodologies to solve business problems and to take advantage of business opportunities.</li> <li>Employ critical thinking skills to analyze financial data as well as the effects of differing financial accounting methods.</li> <li>Apply knowledge of Income Tax Laws and procedures to individuals and businesses</li> <li>Computer Applications: Computer Applications: Hands-on experience in various practical aspects of problem solving/ programming/ experimental</li> </ol>

		college the efforts are directed to equip the students with all necessary paraphernalia.	techniques, and data analysis and presentation competence. Effectively use the software - MS Excel and C-Programming.
B.Sc.	B.Sc. – MPCs	Possess a sound understanding of the theoretical foundation of various core subjects. Acquire analytical and logical thinking skills necessary to pursue higher Education. Gain employment at entry level positions based on program curriculum  After the completion of UG program the student gets eligibility to join PG programme, MBA, Student will be eligible to write bank PO/Clerk examinations, Civil services and other group services examinations.	Mathematics: Develop proficiency in high level mathematical methods, Acquire analytical and logical thinking skills  Physics: Master a broad set of knowledge concerning the fundamentals in the basic areas of Physics  Computer Science: Hands-on experience in various practical aspects of problem solving/ programming/ experimental techniques, and data analysis and presentation competence. Effectively use the software - MS Excel and R Programming.
B.Sc.	B.Sc. – MPC	Posses a sound understanding of the theoretical foundation of various core subjects. Acquire analytical and logical thinking skills necessary to pursue higher Education. Gain employment at entry level positions based on program curriculum  After the completion of UG program the student gets eligibility to join in PG programme, MBA, Student will be eligible to write bank PO/Clerk examinations, Civil services and other group	Mathematics: Develop proficiency in high level mathematical methods, Acquire analytical and logical thinking skills  Physics: Master a broad set of knowledge concerning the fundamental in the basic areas of Physics  Chemistry: understand the fundamental theories, the concepts and applications of chemistry. Gains knowledge of important laboratory techniques, methods, and instrumentation.

		services examinations.	
B.Sc.	B.Sc. – BZC	1. Expertise in the basic sciences provides the students with opportunities to go for Higher Education 2. Promotes an in-depth exploration in specific fields, current ways of thinking, new discoveries, and methodologies of the discipline leading the way towards biological research, health professions, business, and education.	Botany: Understand plant diversity in terms of structure, function and environmental relationships, the evaluation of plant diversity, Plant classification, the role of plants in the functioning of the global ecosystem Zoology: understand how animals have evolved, how they function, and the ways in which they interact with their environment.  Chemistry: understand the fundamental theories, the concepts and applications of chemistry. Gains knowledge of important laboratory techniques, methods, and instrumentation.
B.Sc.	B.Sc. (BC.Z.C) Biochemistry, Zoology, Chemistry	Expertise in the Life sciences provides the students with opportunities to go for Higher Education and also employment opportunities in Pharma industries, R&B Labs, Clinical diagnostic Labs, quality control and research. Promotes an indepth exploration in specific fields, current ways of thinking, new discoveries, and methodologies in the areas of biological research, health. Learn how to design and interpret experiments, thereby contributing to the creation of new knowledge in the fields of biochemistry. Develop an awareness of ethical responsibilities in research.	• understand the chemistry, structure and function of bio-molecules. Gets the knowledge of biological mechanisms, such as the processes and control of bioenergetics and metabolism Explain the biochemical processes that underlie the relationship between genotype and phenotype  • Gets a practical experience of wide range of biochemical techniques (e.g. basic molecular biology, cell biology and microbiology methods, spectrophotometry, the use of standards for quantification, enzyme kinetics; macromolecular purification, chromatography and electrophoresis)  •Analyse biochemical data, (e.g. in enzyme kinetics, molecular structure analysis and biological databases)  Zoology: understand how animals have evolved, how they function, and

			the ways in which they interact with their environment.  Chemistry: understand the fundamental theories, the concepts and applications of chemistry. Gains knowledge of important laboratory techniques, methods, and instrumentation.
B.Sc.	B.Sc(Bt.B.C) Biochemistry, Zoology, Chemistry	Expertise in the basic sciences provides the students with opportunities to go for Higher Education and also employment opportunities in industries, diagnostics, quality control and research. Promotes an in-depth exploration in specific fields, current ways of thinking, new discoveries, and methodologies in the areas of biological research, health professional development, business and education	Biotechnology:  1. Gain fundamental Knowledge of Bio-molecules and microorganisms  3. The integrated use of Biotechnology, Botany and Chemistry to achieve the technological application of scientific and engineering principles for processing of materials by biological agents to provide goods and service for the welfare of mankind.  Botany: Understand plant diversity in terms of structure, function and environmental relationships, the evaluation of plant diversity, Plant classification, the role of plants in the functioning of the global ecosystem. Chemistry: understand the fundamental theories, the concepts and applications of chemistry. Gains knowledge of important laboratory techniques, methods, and instrumentation.
B.Sc.	B.Sc. ( Home Science)	Understand the multidisciplinary approach to enhance the quality of life of the individuals, families and communities. Conceptualizes the students' knowledge and skill right from where the human life starts how it	<ol> <li>Understand the concepts of food science and nutrition and plan to meet the nutritional requirements of family and community.</li> <li>Understand various dimensions of human development across life span and family living with respect to</li> </ol>

		develops and expands in varied dimensions through different courses. Develop professional and entrepreneurial skills for social and economic empowerment.	society.  3. Learn about fibers and fabric construction, current trends in the field of textiles and fashion designing.  4. Understand the basics of housing, interior decoration and principles & processes of sustainable resource management.  5. Promote capacity building to extend knowledge and skills from laboratory to the people though effective
			communication and use of technology
B.Sc.	B.Sc (CPCs) Chemistry, Physics, Computer science	Expertise in the basic sciences provides the students with opportunities to go for Higher Education 2. Promotes an indepth exploration in specific field, current ways of thinking, new discoveries, and methodologies of the discipline. Gain employment at entry level positions based on program curriculum	Chemistry: understand the fundamental theories, the concepts and applications of chemistry. Gains knowledge of important laboratory techniques, methods, and instrumentation.  Physics: Master a broad set of knowledge concerning the fundamentals in the basic areas of Physics.  Computer Science: Hands-on experience in various practical aspects of problem solving/ programming/ experimental techniques, and data analysis and presentation competence. Effectively use the software - MS Excel and R-Programming.
B.Sc.	B.Sc. (MCDs) Mathematics, Computers, Data Science	Expertise in the basic sciences provides the students with opportunities to go for Higher Education 2. Promotes an indepth exploration in specific field, current ways of thinking, new discoveries, and methodologies of the discipline. Gain employment at entry level	Apply the knowledge gained during the course of the program to identify, formulate and solve real life complex problems faced in industries and/or during research work with due consideration for the public health and safety, in the context of cultural, societal, and environmental situations.

	positions based on program curriculum. Get ability to analyze a problem, identify and define the computing requirements appropriate to its solution.  Get ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.	Apply the knowledge of ethical and management principles required to work in a team as well as to lead a team.  Comprehend and write effective project reports in multidisciplinary environment in the context of changing technologies.
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## **COURSE OUTCOMES - ARTS**

#### DEPARTMENT OF TELUGU (ADVANCED TELUGU)

S. No.	Code	Title of the Paper	СО	Course Outcomes
1	1121	General Telugu	001	By studying Ancient Poetry of Pothana, Spirituality, Telugu Tradition and Culture will be Improved.
		I SEM I Paper	002	The study of Mother Tongue and Literature improves Personality Development.
			003	To gain the knowledge of modern Literature.
2	2121	General Telugu	001	Students can gain the knowledge in literature and it develops the social awareness.
		II SEM I Paper	002	It develops interest in history, tradition, culture and enhances moral values and incorporates good personality.
			003	To inculcate inner abilities among the students through Telugu Language.
3			001	It will enhance the Linguistics , Letter Writing and Reading Skills
		General Telugu III SEM II Paper	002	Students Vocabulary will be develop and also develop Social awareness.
			003	Students' Psychological development will be Improved. Moral values will be developed
			001	Expertise in the depth of Telugu Literature

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KAVITHVAM
ture.
cient Telugu Literature.
re Student will develop interest
will be developed among the
Modern Literature.
ethods will be developed.
ements and gain Knowledge of eminism, Dalith and Minority
f Telugu Literature.
grammar.
dian Languages and to know the
nts get the job opportunities and a. It will helpful to become a
Telugu Sentence formation and

	DEPARTMENT OF TELUGU						
s.no	Code	Course	со	Course outcome			
1	101	Sampradaya sahithya adhyanam ISEM IPaper	001	Students will get an idea about ancient literature by reading Traditional text.  Students get a chance to know about			
		ISEM IF aper	002	Nannaya,Thikkanna Mahabharatha and Pothna Mahabhagavatham.			
	201		001	Study of Traditional Text			
		II SEM	002	Student gets Knowledge and information about the Literature of 15 <sup>th</sup> and 16 <sup>th</sup> Centuries.			
2	102	Prachina Sampradya Adhyana rithulu	001	Ancient Traditional study provides The information about the characteristic Features of Kavya, the writers of kavithrayam and popular vaggeyakarulu.			
			002	Students will know about the great writers.			
	202	II SEM	001	Students will know the characteristics of great writings Like sathaka, Bhakthi, Neethi and all other sathkas.			
			002	To know the Different forms of Ancient & Modern Literature.			
3	103	Samanya Basha vignanam	001	Students will understand ancient language, origin of language and relation of other Languages.			
			002	Students get clarity of Language. Will get job opportunities in the field of speech therapy and social worker will know about difference between Different Dialects.			
	203	II SEM	001	Students brought to known about the changes in Languages of different Periods.			
			002	Student will aware of the function of Official Language.			
4			001	Expertise in the Folk Literature			
	104	Janapada sahithyamu	002	To know about the Folk stories, Folk Songs and different forms.			

	204	II SEM	001	To know about Folk Traditions, Proverbs, Riddles, Art, Believes and speeches
			002	To gain the Knowledge of Folktales of Andhra Pradesh, Folk lore of AP.
5	105	Aadhunica Telugu Sahithya Vikasam	001	To Know the Modern Language And inculcate the inner abilities among the students.
			002	To gain the knowledge of Novels, Natakas and Poetic stories.
	205	II SEM	001	To know the modern Literature and modern Poetry.
6	106	Telugu pathrika rangam – Rachna vidanamu	001	By reading Journalism students get the job Opportunities and also knows about the Media. It will helpful to become a Journalist
	206	Anuvada vidanalu- Naipunyalu.	001	By Studying students will get idea about Translation and get opportunities in Different fields.

#### **DEPARTMENT OF URDU**

**Course Outcomes ( Advance Urdu)** 

S.No.	Paper Code	Paper Title	Course Outcomes
1	1461	Urdu Fiction & Drama	Knowledge on short stories, novels and dramas and also the method of writing.
2	2461	Non Fiction Literature	Able to differentiate between Fiction and nonfiction Essays and articles.
3	3461	Urdu Poetry	To develop the poetry skills with its phonetics. Annotation of Poems.
4	4461	Urdu Poetry and Prose	Able to differentiate between Poetry and Prose and its grammar.
5	5461	History of Urdu Literature-I	Improving the Knowledge about the History of Urdu Literature Part - I
6	5462	History of Urdu Literature-II	Improving the Knowledge about the History of Urdu Literature Part - II
7	6461	Criticism	The specific knowledge of research and criticism for the purpose of higher education

8	6462	Means of Communication	For the purpose of Journalism and to develop the communication skills
9	6463	Grammar	To understand the concept of language and grammar.
10	6464	Translation	Option of more learning languages and to understand the other language enrichment and translate it into your own.

## COURSE OUTCOMES ( SECOND LANGUAGE URDU)

S.No.	<b>Course Code</b>	Course	Course Outcomes
1	1131	Urdu Poetry	To develop the poetry skills with its meaning, phonetics and grammar. Annotation of Poems
2	2131	Urdu Poetry and Prose	Able to differentiate between Poetry and Prose and writing skills. Annotation of Poems and prose.
3	3131	Urdu Poetry and Prose	Annotation of selected Poems and prose of the syllabi.

## DEPARTMENT OF POLITICAL SCIENCE

	Paper			
S.No.	Code	Paper Title	CO	Course Outcomes
			CO1	Acquire Basic Concepts of Political Science
			CO2	Acquaint with Explanatory Frameworks of Politics
4	D. 144		CO3	To know What is the State and its origin
1	BA -1441	Paper I Basic	C04	Equip with the knowledge of Nations and Nationalism
		Concepts of Political Science	C05	Aware of the Rights and Citizenship, Freedom, Equality and Justice
			CO1	Understand the scope of Business, and its importance.
			CO2	This helps them to understand the functions of Political Institutions
2	BA -2441	Paper II Political	CO3	Make the students aware of The Purpose of Constitutional law and Theory of Separation of Powers
		Institutions (Concepts,	CO4	Understand the Institutional forms of the Modern State
		Theories and Institutions)	CO5	Helps to comprehend the functions of Judiciary in Democratic State
3	BA -3441	Paper III Indian	CO1	Understand The ideological legacy of the Indian

		Constitution		National Movement on the Constituent Assembly.
				The underlying values of the Indian Constitution
			CO2	The underlying values of the Indian Constitution
			CO3	Fundamental rights and Directive principles of State Policy
			C04	Evaluate the functioning of Indian Federalism
			C05	Analyze Working of the Indian Constitution
			CO1	Acquaint with Approaches to Study the Political Processes in India
			CO2	Understand Social Structure and Democratic Process
4	BA -4441		CO3	Analyze the relationship between Religion and Politics
			CO4	Comprehend the Party and Electoral Processes in India, Describing the Marxist Approach to politics.
		Paper IV Indian Political Process	C05	Understand the Determinants of Voting Behaviour in India
			CO1	Understand the Traditions of Ancient Indian Political Thought
5	BA -5441		CO2	Understand Renaissance Thought
3	BA -5441		CO3	Know about Early Nationalism
		Paper V Indian	CO4	Learn about Religious Nationalism
		Political Thought	CO5	Comprehend Democratic Egalitarianism
			CO1	Know Classical Western Political Thought
			CO2	Understand Early Medieval to the Beginning of Modern thought
6	BA -5442		CO3	Early Medieval to the Beginning of Modern Thought
		Paper VI Western	CO4	Distinguish between Liberal thought and Liberal Democratic Thought
		Political Thought	CO5	Critical analysis Philosophical Idealism,
			CO1	Understand the Evolution of Local Self-Government in India
			CO2	Aware of the Historical Importance of Constitutional Amendments
			CO3	Know the Structure and functions of Panchayati Raj in Andhra Pradesh
7	BA -6441		CO4	Analyze Structure and functions of Urban local bodies in Andhra Pradesh
		Paper VII-(C): Local Self - Government in Andhra Pradesh	CO5	5. Understand Role of Leadership and Emerging Challenges

			CO1	1.Comprehend the Basic Concepts of International Relations	
			CO2	2. Know the Phases of International Relations	
8	BA -6442	Paper VIII-C-1	CO3	Understand the Phases of International Relations after 1945	
		International	CO4	Know the International Organizations	
		Relations	CO5	understand Problems of the Third World	
			CO1	Understand the Evolution of Indian Foreign of Policy	
			CO2	learn objectives, Structure and functions of Non-Alignment and UNO	
9	BA -6443		CO3	Study India's Relation with USA and China	
		Paper VIII-C-2:	CO4	Understanding the India and her Neighbors	
		Indian Foreign Policy	CO5	learn objectives, Structure and functions of SAARC	
			CO1	Understand the Concept of Globalization	
			CO2	Understand the Anchors of Global Political Economy	
10	BA -6444		CO3	Know about Nation State and Globalization	
		Paper VIII-C-3	CO4	Comprehend Contemporary Global issues	
		Contemporary Global Issues	CO5	Acquire knowledge and consequences steps to eradicate International Terrorism	

## **DEPARTMENT OF COMMERCE**

S.No.	Paper Code	Paper Title	СО	Course Outcomes
		FUNDAMENTALS OF	CO1	1. Acquire conceptual knowledge of basics of accounting.
	B.Com 1511 FUNDAMENTALS O ACCOUNTING - I		CO2	2. Develop the skill of recording financial transactions and preparation of reports in accordance with GAAP.
1			СОЗ	3. Describe the role of accounting information and its limitations.
1		ACCOUNTING - I	C04	4. Equip with the knowledge of accounting process and preparation of final accounts of sole trader.
			C05	5. Identify and analyze the reasons for the difference between cash book and pass book balances

			CO1	1. Understand the scope of Business, and its importance.
		BUSINESS ORGANIZATION	CO2	2. This helps them to deal with individual and group behavior in the organization and increase their decision making capabilities
2	B.Com 1512		CO3	3. Describe the Social Responsibility and Ethics of Business
			CO4	4. Analyze different forms of business organizations
			CO5	5. Identify various vital documents of a company
			CO1	1. Understand economics in terms of business
			CO2	2. Evaluate supply and demand analysis
	B.Com	BUSINESS	CO3	3. Analyze the consumer behavior.
3	1513	ECONOMICS	C04	4. Interpret the factors affecting firm such as production, costs and revenue
			C05	5. Analyze the performance of firms under different market structures.
	B.Com 2511	FUNDAMENTALS OF ACCOUNTING - II	CO1	1. Appreciate the need for negotiable instruments and procedure of accounting for them
			CO2	2. Evaluate the concept of Consignment and learn its accounting treatment
5			CO3	3. Distinguish Joint Venture and Partnership and to learn the methods of maintaining records under
			CO4	4. Determine the ascertainment of profit under Single Entry system.
			C05	5. Understand the meaning and features of Non-Profit Organizations
			CO1	1. Understand the importance of Administration & Management.
6			CO2	2. Interpret the Principles of Management in traditional & modern scientific way.
	B.Com	PRINCIPLES OF	CO3	3. Demonstrate the details about Planning and MBO
	2512	MANAGEMENT	CO4	4. Learn about Principles of Organization & various types of Organizations.
			CO5	5. Learn about Co-ordination, Control,

				4 77 1 . 1
			CO1	1. Understand economic environment, effective managerial decision-making process
		BUSINESS ECONOMICS - II	CO2	2. Understand of the theory and analytical tools that can be used in decision-making problems.
7	B.Com 2513		СОЗ	3. Analyze knowledge of the economic theory with decision-making techniques.
			CO4	4. Use economic models to isolate the relevant elements of a managerial problem, identify their relationships
			CO5	5. Formulate them into a managerial model to which decision making tools can be applied.
			CO1	2. To impart the knowledge of concept of Corporate accounting process
	P Com	CODDODATE	CO2	To know about the types of shares and issue of share capital and issue, redemption process of Debentures
8	B.Com 3501	CORPORATE ACCOUNTING	CO3	3. Apply the New Companies Act provisions regarding Company accounts.
			CO4	4. Evaluate the different ways for a company to raise finances from public.
			CO5	5. Understand Profits prior to incorporation of a Company.
			CO1	1. Understand basic statistical concepts such as statistical collection, statistical series, tabular
	<b>.</b>		CO2	2. Predict values of strategic variables using regression and correlation analysis
9	B.Com 3502	BUSINESS STASTISTCS	СОЗ	3. Calculate measures of central tendency, dispersion and asymmetry
			CO4	4. Interpret the meaning of the calculated statistical indicators.
			CO5	practical problems.
			CO1	1. Describe the Origin and Growth of Banking in India
			CO2	2. Discuss the role and functions of RBI.
10	B.Com 3503	BANKING THEORY AND PRACTICE	СОЗ	3. Explain different types of banks and their functions.
	3303		CO4	4. Understanding the Banker And Customer relationship
			CO5	5. Classify and compare the Negotiable Instruments

				1. Demonstrate, understand and
			CO1	communicate all the Legal Terminology of Business.
			CO2	2. Understanding Development of Business Law in India
11	B.Com 4501	BUSINESS LAWS	CO3	3. Outline Essentials of a valid Contract and agreements expressly declared to be void
			CO4	Discharge.
			CO5	5. Acquire knowledge about Sale of Goods Act 1930.
			CO1	1. Apply the conceptual and legal knowledge about Income Tax provisions.
		INCOME TAX	CO2	2. Computation of Income from different heads with reference to an Individual Assessee.
12	B.Com 4502		CO3	3. Identify intra and inter head set of losses and carry forward of losses
			CO4	4. Understand clubbing of income and the term aggregation of income
			CO5	5. Identify various deductions under section u/s80 C to 80 U.
	B.Com	COST ACCOUNTING	CO1	1. Imbibe conceptual knowledge of cost accounting.
			CO2	2. Select the costs according to their impact on business
13			CO3	consumption.
	5501		CO4	4. Identify the specifics of different costing methods and interpret the impact of the selected costs
			CO5	5. Demonstrate mastery of costing systems, cost management systems, budgeting systems
			CO1	1. Understanding Auditing as per AASB.
14	B.Com 5502	AUDITING	CO2	2. Explain the Qualification, Disqualification, Rights and Duties of an Auditor.
			CO3	3. Describe Audit programme ,Audit Note Book ,Audit Working Notes and Audit

				Markings
			CO4	4. Define Internal Audit and internal control, its meaning and objectives, types of Vouchers
			CO5	5. Describe the meaning and role of Audit Committee with reference to Audit Reports.
			CO1	1. Understanding of the Earth -Soils - Environment - Water Resources - Mines - Rivers etc.
16	B.Com	COMMERCIAL	CO2	2. To impart knowledge Major Crops and Food and Non- Food Crops - Importance of Agriculture.
10	5503	GEOGRAPHY	CO3	3. To know about the Indian Forestry and Forest Rights Act, 2006.
			CO4	4. India-Minerals and Mining - Renewable and non Renewable - Uses o Minerals
			CO5	5. Water Resources - Rivers - Experiences of India and Andhra Pradesh.
			CO1	1. Able to information technology and E-commerce CO2 can understand various multimedia applications
		E - COMMERCE	CO2	Would learn the various authentication security issues in E-commerce
17	B.Com 5504		СОЗ	3. Able various forms of the E-commerce applications and its usages and security issues
			CO4	4. Would be able to understand computerized accounting
			CO5	5. to impart knowledge of Payment gateways in E-Commerce Business
			CO1	1. Students can identify the core concepts of rural and urban markets and take different marketing challenges and opportunities
	D.G.		CO2	2. Students can improvise their organization in micro and macro environment
18	B.Com 6501	MARKETING	CO3	3. Students can segment the products as per the market conditions
			CO4	produce products
			CO5	5. It allows the students to apply various strategies in producing the products
19	B.Com	GOODS AND	CO1	1. To learn basic concepts of Goods and

	6502	SERVICE TAX(GST)		Service Tax
			CO2	2. Will gain knowledge of GST planning for Business
			CO3	3. Will understand and equip by the filling tax returns
			CO4	4. Will have some knowledge on establishments and taxes on them
			CO5	5. It allows the students to apply various strategies in producing the products
			CO1	1. Acquire knowledge and techniques of Management Accounting.
		MANAGEMENT ACCOUNTING	CO2	2. Prepare various analytical financial statements.
20			CO3	3. Understand the use of related financial information relevant to the various users
			CO4	4. Identify the operational efficiency and managerial effectiveness.
			CO5	5. Analyze the reasons for change in profitability and financial position of the firm.
			CO1	1. To provide and overviews of various types of Accounting software
21	B.Com	TALLY ERP - 9	CO2	2 To give in-depth knowledge of Tally Accounting Software
	6504		CO3	3. To learn about data entry in the software
			CO4	4. Generation of Reports and Tax Filing
			CO5	5. Exporting and Saving of Reports

	SCIENCES						
	DEPARTMENT OF BIOCHEMISTRY						
S.No.	Paper Code	Paper Title	co	Course Outcomes			
	Bitto: Couc		CO1	Comprehensive knowledge of Cell biology			
			CO2	understand water role in biological processes and measurement of PH			
1	1301	Cell biology, Carbohydrates, Lipids and	CO2	Knowledge on carbohydrates Classification, Biological Importance of carbohydrates			
1	1301	Proteins	CO3	Knowledge on Lipids Classification, Biological Importance of Lipids			
		CO4	Knowledge on Amino acids, Classification , Peptides, Biologically important peptides				
			CO5	Knowledge on Proteins, Classification and Biological Importance of proteins			
			CO1	Knowledge on Structure of Nucleic acids, Types of DNA, RNA			
		Nucleic acids and Biochemical Techniques	CO2	Define and classify Structures of porphyrins			
2	2301		CO3	Understand principles and applications of centrifugation, chromatography techniques like Paper, Thinlayer, Gel filtration, Ion exchange and Affinity. Electrophoresis			
			CO4	Understand the principles and application Colorimetry and Spectrophotometry, Tracer techniques			
				Describe outlines of Intermediary metabolism, methods of investigation			
			CO1	Understand Classification of Enzymes and Structure			
			CO2	Understand Influence of Physical factors and Inhibitors on Enzyme activity			
3	3301	Enzymology and Bioenergetics	CO3	Understand Outline of mechanism of enzyme action, Regulation of enzyme activity			
			CO4	Understand Bioenergetics: Thermodynamic principles			
			CO5	Understand Biological Oxidations in Mito chondria			

			CO1	Understand the Concept of anabolism and catabolism, Carbohydrate Metabolism
	4 4301 Intermediary Metabolism	CO2	Understand the Concept of Lipid Metabolism	
4		Intermediary Metabolism	CO3	Understand the Concept of Amino acid Metabolism
			CO4	Understand the Concept of Nitrogen cycle, Non-biological and biological nitrogen fixation
			CO5	Understand the Concept of Metabolism
			CO1	Understand and analyze the concepts Digestion and absorption of carbohydrates, lipids and proteins. Composition of blood
_	5 5301 Biochemi	Physiology, Clinical	CO2	Understand Endocrinology- organization of endocrine system. Classification of hormones
5		Biochemistry and Immunology	CO3	Understand the Concept of Nutritional Biochemistry
			CO4	Understand the Concept of Clinical Biochemistry
			CO5	Understand the concepts of Innate and Acquired Immunity, Haptens and monoclonal antibodies
			CO1	Understand the concepts of History and Development of Microbiology
			CO2	Able to differentiate between prokaryotic and eukaryotic cells and explain the characteristics of bacteria, virus, fungi, protozoa, algae
6	6 5302 Basic Microbiology	Basic Microbiology	CO3	Understand the viruses Poxvirus and Poliovirus. Bacterial Diseases- Cholera and Typhoid Protozoan Diseases
			CO4	algae
		CO5	Understand and analyze the concepts General characteristics of fungi and Economic Importance of Fungi	
7	6301	Microbiology and Molecular Biology	CO1	Comprehensive knowledge of Micro biology

			CO2	Understand and analyze the concepts of DNA replication and enzymology
			СОЗ	Understand and describe the process of Protein synthesis and regulation of Prokaryotic gene expression
			CO4	Explain Gene regulation through Operon concept, and regulatory elements
			CO5	Understand the concepts of fermentation technology, Applied Biochemistry
			CO1	Understand the concepts Laboratory Preparation in Hematology
	(202		CO2	Understand the concepts Haemoglobin synthesis. Various haemoglobins. Haemopoietic system of the body. Blood cell counts
8	6302 Hematology	СОЗ	Understand the concepts Haemostasis and Haematological Diseases	
		CO4	Understand the concepts Automation in Haematology	
			CO5	Understand the concepts Immunohaematology and Blood banking
			CO1	Understand the concepts Clinical Microbiology
			CO2	Understand the concepts Clinical Bacteriology Laboratory & Staining methods
9	6303	Clinical Microbiology	СОЗ	Understand the concepts Culturing of Microorganisms and Identification of Bacteria
			CO4	Understand the concepts Clinical Mycology and Virology
		CO5	Understand the concepts Diagnostic Serology	
	Biochemical Correlations in	CO1	Understand the concepts Inborn errors of metabolism	
10		Biochemical Correlations in	CO2	Understand the concepts Nutritional Deficiency and Life style diseases
10	6304	Diseases	CO3	Understand the concepts Hormonal Imbalances and Autoimmune diseases
		CO4	Understand the concepts Classification of infectious agents	

	DEPARTMENT OF BIOTECHNOLOGY							
S.No.	Paper Code	Paper Title	СО	Course Outcomes				
		CO1	Comprehensive knowledge of Cell biology  Able to differentiate between prokaryotic and					
1	1 <b>1311</b>	Cell Biology and Microbiology	CO2	eukaryotic cells and explain the characteristics of bacteria, virus, fungi, protozoa, algae				
		Microsiology	СОЗ	Knowledge on control of microorganisms by physical and chemical sterilization methods				
			CO4	Explain about methods of cultivation and preservation of microorganisms				
			CO1	Define and classify carbohydrates, amino acids, lipids and structures				
			CO2	Define and classify proteins and nucleic acids				
2	2311	Macromolecules, Enzymology and Bioenergetics	СОЗ	Define holoenzyme, apoenzyme, coenzyme, cofactor and classify enzymes				
			CO4	Define Biological Oxidations, Reduction potential, Free energy				
			CO5	Describe energy transformations in living systems				
	3 3311	Biophysical Techniques	CO1	Understand principles and applications of centrifuagation, chromatography techniques like Paper, thin layer, Gel filtration, Ion exchange and Affinity.				
3			CO2	Understand the principles and applications of Electrophoresis, Colorimetry, Spectrophotometry				
			CO3	Principles of tracer technique, advantages and limitations, applications of isotopes in biotechnology				
			CO4	Measurement of radioactivity				
		Immunology	CO1	Understand the concepts of Innate and Acquired Immunity, Haptens and monoclonal antibodies				
4	4311		CO2	Describe the immunological reactions like agglutination, Immunoprecipitation and apply the knowledge in Immunodiagnostics				
			CO3	Understand immune cells and organs, antigen- antibody reactions.				

			CO4	Describe MHC complex, Antibody diversity,
			CO5	Hypersensitivity and autoimmunity.  Transplantation Immunology, Cancer and Immune system.
			CO1	Understand and analyze the concepts of DNA replication and enzymology.
5	5311	Molecular Biology	CO2	Understand and describe the process of Protein synthesis and regulation of Prokaryotic gene expression.
			CO3	Explain Gene regulation through Operon concept, and regulatory elements
			CO1	Understand the concepts of cloning, DNA sequencing, Vectors, Hosts and Tools of r-DNA technology and Tools of r-DNA technology
6	5312	Recombinant DNA	CO2	Comprehend cloning, construction of c- DNA library and different types of vectors
		Technology	CO3	Understand and analyze the concepts of PCR, Blotting techniques, c-DNA & Genomic library and apply the knowledge in the production of recombinant products,DNA Fingerprinting
		Plant and Animal Tissue Culture	CO1	Plant tissue culture Introduction to cell and tissue culture laboratory facilities, sterilization methods in tissue culture, Tissue culture media
7	6311		CO2	Protoplast culture, Somatic hybridization, Micro-propagation
			CO3	Invitro fertilization and Embryogenesis
			CO4	Concept of Gene Therapy, Application of transgenic animals
			CO1	Physio- chemical conditions for propagation of plant cells and tissues; Protoplast isolation, fusion, cultivation, cybridization.
8	6312	Plant Tissue Culture	CO2	Direct gene transfer methods, Invitro fertilization – Ovary and ovule culture, clonal propagation, somatic embryogenesis. Invitro production of secondary metabolites
			СОЗ	Role of plant Tissue culture in Indian Agriculture, Production of Transgenic plants
9	6313	Animal Tissue Culture	CO1	Study Animal cell culture media, preservation of cell lines, transgenic animals

			CO2	Describe Stem cells, IVF and Embryo transfer technique
	Biosafety, Bioethics, IPR, Genetic counseling		CO1	Principles, Role of Institutional Biosafety committee; Assessment of pharmaceutical products like drugs/Vaccines.
10		•	CO2	Introduction, Principles, Theories and its applications
			CO3	Protection of Plant varieties and IPR
		CO4	Identify Genetic disorders, Prenatal diagnosis and Gene therapy	

## **DEPARTMENT OF CHEMISTRY**

S.No.	Paper	Paper	CO	Course Outcomes
	Code	Title		
			CO1: p-block	Student acquires understanding over the
			elements –I	preparation, properties and uses of diborane,
				silanes, silicones, hydrazine and
				hydroxylamine.
			CO2: p-block	Students acquire comprehensive knowledge on
		Inorganic & Organic	elements -II	classification of oxides, preparation, properties
1				of interhalogen compounds and organolithium
1		Chemistry		and Grignard compounds.
			CO3: Structural	Student acquires an understanding over the
			theory in Organic	concepts involved in the mechanism of organic
			Chemistry	reaction.
			CO4: Acyclic	Student acquires understanding over the
			Hydrocarbons &	preparation, properties and uses of alkenes and
			Alicyclic hydrocarbons	alkynes.
			(Cycloalkanes)	
			CO5: Benzene and	Students gain understanding over molecular
			its reactivity	structure of benzene its chemical reaction and
				mechanism.
			CO1: Solidstate	Students gain knowledge on symmetry
				elements of crystals, Braggs law and crystal
		Physical		defects.
		& General	CO2: Gaseous state	Students gain knowledge on vanderwaals
		Chemistry	& Liquid state	equation, Joule Thomson effect, Liquid
			GO2 G 1 4	crystals and their applications.
2			CO3: Solutions	Students gain understanding on Raoults law, types of solutions, Nernst distribution law
2			CO4: Surface	Students understand the concept of adsorption,
			chemistry &	types, properties and uses of colloids and
			Chemical Bonding	knowledge over theories of chemical bonding.
			CO5:	Students understand the concepts of
			Stereochemistry of	Stereochemistry.
			carbon compounds	·
			G01 C1 : :	
			CO1: Chemistry of	Students gain knowledge on the electronic
			d-block elements & Theories of	configuration and properties of d-block
			bonding in metals	elements and various theories of bonding in metals.
			CO2: Metal	Student's gains knowledge on the electronic
3			carbonyls &	configuration and properties of f-block
		L	caroony is a	comigatation and properties of 1 block

	T	• 1	C1 '	1 1 1 1 2 6 1
	Inorg	-	Chemistry of f-	elements and structural properties of metal
	& Or	_	block elements	carbonyls.
	Chen	nistry	CO3: Halogen	Students will know about the preparation,
			compounds &	properties and uses of halogen and hydroxyl
			hydroxy compounds	compounds.
			CO4: Carbonyl	Students will know about the preparation,
			compounds	properties and uses aldehydes and ketones.
			CO5: Carboxylic	Students will know about the preparation,
			acids and derivatives	properties of carboxylic acids and their
			& Active methylene	derivatives and active methylene compounds –
		Ι'	compounds	AAE, ME.
			compounds	MAL, IVIL.
	Spec	trosc	CO1: General	Student gain knowledge on principles of
	opy		features of	absorption and electronic spectroscopic
	Phys		absorption &	techniques.
4		nistry	Electronic	1
		<i>J</i>	spectroscopy	
			CO2: Infra red	Student gain knowledge on principles of Infra
			spectroscopy &	red y & Proton magnetic resonance ( <sup>1</sup> H-NMR)
			Proton magnetic	spectroscopic techniques.
			resonance	special oscopie teeminques.
			spectroscopy ( <sup>1</sup> H-	
			NMR)	
			T (TVIIC)	Students gain knowledge on various colligative
			CO3: Dilute	properties and their experimental
			solutions	determination.
		<b>-</b>	CO4:Electrochemist	Students acquire an understanding of the
			ry-I	concepts of electrochemistry –Transport
		,	1 y - 1	number, Conductance etc.,
		<u> </u>	CO5:	Students acquire an understanding of the
			Electrochemistry-II	concepts of electrochemistry – types of
			& Phase rule	electrodes, potentiometric titrations and
		'	ex I mase full	principles and applications of phase rule.
			CO1:	Students acquire knowledge over concepts of
	Inorg	anic	Coordination	co-ordination compounds, their nomenclature
	Phys		Chemistry	and isomerism.
		ganic		
		_	CO2: Magnetic	Students acquire knowledge over concepts of
	Chen	пъц у	properties of metal	magnetic properties and stabilities of metal
_			complexes &	complexes.
5			Stability of metal	
			complexes	
			CO3: Nitro	Students gain understanding on preparation,
			hydrocarbons	properties and uses of nitro alkanes, NEF,
				Mannich and Michael addition reactions.
			CO4: Nitrogen	Students gain knowledge on the types of

		compounds	amines, the preparation properties and uses of aromatic amines.
		CO5: Thermodynamics	Students gain understanding over the concepts of thermodynamics, carnots cycle, adiabatic and isothermal processes, entropy and its significance.
	Inorganic, Organic &	CO1: Reactivity of metal complexes & Bioinorganic chemistry	Student acquire knowledge about various biological importance various inorganic elements.
6	Physical Chemistry	CO2: Chemical kinetics & Photochemistry	Students gain understanding the concepts of chemical kinetics and reaction mechanism of photo chemical reactions.
		CO3: Heterocyclic Compounds	Students gain knowledge on synthesis and properties of Pyrrole, Pyridine, Furan and Pyridine.
		CO4: Carbohydrates	Students gain understanding on the structure of glucose, fructose and mechanisms of interconversions.
		CO5: Amino acids and proteins	Students acquire knowledge on synthesis, properties of amino acids and classification, structure of proteins.
	Analytical	CO1: Quantitative analysis	Students gain knowledge on principles of volumetric and gravimetric analysis.
7	methods in Chemistry	CO2: Treatment of analytical data	its understand the concepts of errors, significant figures, Precision, accuracy standard deviation and confidence limit.
		CO3: Separation Techniques In Chemical Analysis	Students gain knowledge on the principles of Solvent extraction and Ion exchange.
		CO4: Chromatography	Students acquire knowledge on the classification, instrumentation of Paper chromatography.
		CO5: Chromatography	Students acquire knowledge on the classification, instrumentation of Column and Thin layer chromatography.
	Organic	CO1: General features of absorption	Students gain knowledge on the concepts of Beer's law and the quantitative determination of Metal ions.
8	Spectrosc opic	CO2: UV & Visible Spectroscopy	Students gain knowledge on concepts of UV-Visible spectroscopy.
	Technique s	CO3: Nuclear Magnetic Resonance	Students gain knowledge on concepts of nuclear magnetic resonance spectroscopy.

		Spectroscopy - I	
		CO4: Nuclear	Students gain knowledge on concepts of
		Magnetic Resonance Spectroscopy – II	nuclear magnetic resonance spectroscopy.
		CO5: Mass Spectrometry	Students gain knowledge on concepts of Mass spectrometry.
9	Advanced Organic	CO1: Organic Photochemistry- I	Students gain knowledge on principles of Organic photochemistry and photoreduction reaction.
	Reactions	CO2: Organic Photochemistry- II	Students acquire knowledge on Norrish, photo fries rearrangement, Di-pimethane rearrangement reactions.
		CO3: Protecting Groups And Organic Reactions	Students gain knowledge on the protection of different functional groups.
		CO4: Synthetic reactions	Students acquire knowledge on Mannich, Shapiro, stark-enamine, wittig reactions and umpolung.
		CO5: New Synthetic Reactions	Students acquire knowledge on new synthetic reactions.
10	Pharmace utical and Medicinal	CO1: Pharmaceutical chemistry Terminology	Students gain understanding of basic terminology of pharmacy.
	Chemistry	CO2: Drugs	Students gain knowledge on the nomenclature and classification of drugs.
		CO3: Structure, therapeutic use, activity, dosage and adverse effects of the drugs	Students gain understanding of antibiotics, cardiovascular drugs and antimicrobials.
		CO4: Structure, therapeutic use, activity, dosage and adverse effects of Commonly Used drugs	Students acquire knowledge about Antipyretics, analgesics, diuretics, anti- inflammatory drugs and antidiabetics.
		CO5: HIV-AIDS	Student's gains awareness on HIV-AIDs, causes, prevention, tests, treatment and antiretroviral drugs.

DEPARTMENT OF HOME SCIENCE							
S.No.	Paper Code	Paper Title	CO	Course Outcomes			
1	1341	HSC 101- PSYCHOLOGY & PERSONALITY DEVELOPMENT	CO1	Understanding of various psychological processes underlying human behavior and its core concepts.			
			CO2	Understanding of basic cognitive process of learning, memory and forgetting			
			СОЗ	Grasp the importance of emotions, motivation, emotional intelligence in shaping personality			
			CO4	Stimulate the student to think, introspect and work on to develop their Personality			
2	1342	HSC 102 - HUMAN PHYSIOLOGY	CO1	Learn about the structure ,functions of cell, classification of bones and joints, function of nervous system			
			CO2	Get awareness about functions of various organs in digestive system, kidneys, and mechanism of urine formations.			
			CO3	Understanding of structure and functions of heart, composition and functions of blood,			
			CO4	Understanding reproductive systems, endocrine glands, and role of hormones			
3	1343	HSC 103 - HEALTH HYGIENE & MICROBIOLOGY	CO1	Acquire knowledge about Dimensions, Determinations &Indicators of Health			
			CO2	Learn classification ,growth, nutrition and reproduction of various microorganism			
			СОЗ	Know about Hygiene &its importance in daily life methods of sterilization &disinfections			
			CO4	Will gain basic understanding of Injection, Immunity &Immunization Schedule			
4	2341	HSC 201- INTRODUCTION TO HUMAN DEVELOPMENT	CO1	Gain the Knowledge of Definitions and interdisciplinary nature, Scope, Domains and stages Human of development.			
			CO2	Understand Concepts and Principles of growth Role of Heredity and Environment in Human development, Stages of Life span – Developmental tasks are learned.			

			CO3	Will gain knowledge about Prenatal development – stages, Pregnancy - signs and symptoms, Care during pregnancy
			CO4	To get awareness about Stages of delivery & types of birth, Care of new born baby, Reflexes and Stimulation.
5	2342	HSC 202 BIOCHEMISTRY	CO1	Understand the importance of biochemistry as the basis for nutrition.
			CO2	Understand chemistry of major nutrients and physiologically important biomolecules.
			СОЗ	Learn about macro nutrients in terms of their composition, properties, classification, and metabolism
			CO4	Comprehend on properties, classification, nature and mode of action, and factors affecting enzyme activity.
6	2343	HSC 203 BASIC NUTRITION	CO1	Understanding of role of macro nutrients, sources, and functions deficiency disorders &clinical manifestation
			CO2	Learn the role of Vitamins their food sources ,function & deficiency diseases
			CO3	Students will learn minerals-series, function & deficiency diseases of them.
			CO4	Learn knowledge about energy value of food, energy requirements of the body
			CO5	Understand the interrelationship between of food, nutrition and health
7	3341	HSC 301 FOOD SCIENCE	CO1	Understand the basic concepts of food science its applications in processing of food.
			CO2	Learn the importance of the food groups its classification, food pyramid and phytonutrients.
			CO3	Comprehend the details of structure, composition, nutritive value and processing of various food groups- cereals, pulses, fruits, vegetables etc.

			CO4	Understand the methods of food preparation in terms nutrient retention and losses and ways to improve the nutritional value of food
			CO1	To gain knowledge about importance, types and function of house.
			CO2	Understand the principles, orientation site and factor to be considered in planning a house.
8	3342	HSC 302 HOUSING FOR BETTER LIVING	CO3	Awareness in designing space, practical considerations about water supply, electricity, plumbers and drainage facilities.
			CO4	Understanding about financial -bank schemes of state &central government.
			CO5	Get awareness of safety measures to be taken in home.
		303- TEXTILE FIBERS AND FABRIC	CO1	Understand the importance of textile fibers Classification, general properties of various fibers.
9	3343		CO2	Learn about composition, manufacturing process, properties and uses of Natural fibers and artificial fibers in detail.
		CO3	Understanding the process of yarn construction, spinning and its classification.	
			CO1	Learn about causes and factors affecting food spoilage a
		HSC 401 FOOD PRESERVATION AND PROTECTION	CO2	Understand basic principles and methods of food preservation
10	4341		СОЗ	Comprehend on Food Adulteration its types, harmful effects and ways to identify
			CO4	Learn about food laws and standard and general principles in the use of food additives.
		Wa a 100 Pre	CO1	understanding about importance of elements in Interior Design
11	4342	HSC 402 INTERIOR DECORATION	CO2	Learn about elements of art, colours schemes, principles of design and their application in home.

			СОЗ	Learn about arrangement, care and maintenance of accessories and furniture
			CO4	Learn about types of flower arrangement, selections and preservation of flowers by different methods
			CO1	Learn about the introduction, different methods of fabric construction- weaving, Knitting and felting.
12	4343	403-CLOTHING CONSTRUCTION	CO2	Understand about Aims, kinds and classification of different finishes.
			CO3	Gain the Knowledge and skill in garment construction.
			CO1	Learn about importance of family and its types
			CO2	Understands the importance of stages of family life cycle
13	5341	HSC 501 FAMILY DYNAMICS	СОЗ	Learn about problem and adjustments' in marriage, sex, finance and in laws in family life
			CO4	Understand the importance functions, factors to be considered in different types of marriage.
			CO5	Understanding of legal aspects of marriage and family
		HSC 502 - LIFE SPAN DEVELOPMENT	CO1	Understanding basic concepts, stages of human life
			CO2	Learn about different areas of development from infancy to adolescence.
14	5342		СОЗ	Understand the importance, characteristics, Identity development and problems of Adolescence.
			CO4	Comprehend the role of Family, School and Peer on overall development of children
		503-TEXTILE FINISHES	CO1	Develop knowledge and skill in finishing of fabrics in Dyeing and Printing.
15	5343		CO2	Gain knowledge of Traditional Textiles of India and Indian embroidery
13			СОЗ	Understand about selection of clothing for different age groups
			CO4	Learn principles of laundering, reagents, stain removal and dry cleaning

		HSC 504.CONSUMER	CO1	Gain knowledge about basic terminology, concepts, human wants and standard of living.  Get awareness on sources, types, functions, supplementing its family income
16	5344	BEHAVIOUR AND ECONOMIC	CO3	Awareness on money management in the home
			CO4	Student will learn the importance, types of savings and investment.
			CO1	understand the importance and planning of balanced diet for family and community
		HCC505 EAMH V	CO2	Learn about nutritional requirement during pregnancy and lactation
17	5345	HSC505 FAMILY AND COMMUNITY NUTRITION	СОЗ	Gain knowledge about nutritional requirement during childhood, adolescence and old age.
			CO4	Learn about methods of nutritional assessment and role of national and international organization in developing nutritional status of the community
		506-HOME SCIENCE EXTENSION	CO1	To understand the concept of extension and communication its relevance for self & national development.
18	5346		CO2	Learn the importance of Teaching and Learning Process, Steps and Principles of Extension teaching, formal and informal education.
			СОЗ	To gain knowledge about Classification, Factors affecting selection and use of different Extension teaching methods
			CO4	Will gain Concept, Elements and functions principles and barriers of Communication.
19	6341	HSC 601 THERAPEUTIC NUTRITION	CO1	Understand principles of therapeutic nutrition, Modify the normal diet for therapeutic purposes and special feeding method.
			CO2	Learn the nutritional requirement and intervention in under and over nutrition
			CO3	Understand the etiology, clinical features and dietary management in common disorders and diseases like GI, CVD, Kidney and liver etc.

			CO4	Understand the role and responsibilities of dietitian and significance of dietary counseling.
			CO1	To get awareness on Fashion terminology, Factors influencing fashion, Fashion cycles and Fashion adaption theories
		HSC 602-FASHION	CO2	Fashion adoption theories Understand the principles and elements of design and croqui.
7	6342	DESIGN AND MERCHANDISE	CO3	Role and responsibility of the merchandiser principles and factors influencing merchandising practices are learned.
			CO4	Understand the importance of merits and demerits of readymade clothing, care and storage of clothes.
			CO1	Learn the importance characteristics, role and types of enterpreneurship
	HSC 603. Entrepreneurship Management	CO2	Learn about stages of entrepreneurship development	
		1	CO3	Learn about idea generation and opportunities Assessment
			CO4	Understand the steps in setting up a new enterprise
			CO1	Enlighten students about need, importance and objectives of early childhood education
		HSC 604 A EARLY	CO2	Learn about various types of preschools- Nursery, Kindergarten and need and requirement for establishing preschool
	6344 CHILDHOOD EDUCATION	СОЗ	Learn about types of curriculum and plan theme based curriculum planning for preschool.	
			CO4	Understand about play way method and types play equipments in ECE center. Learn importance of home school relation in child's development
	6345 HSC 604 B	CO1	To gain the concept of sociology its importance with other social sciences, society and culture	
		SOCIOLOGY	CO2	Understanding the types, agents, agencies and stages of socialization

			СОЗ	Learn about classification, characteristics of different social groups
			CO4	Understanding different features, characteristics of village and urban community
			CO5	Get awareness about problems of women in modern India.
			CO1	Get awareness about definitions, principles of community development.
	HSC 604C-	CO2	Gain knowledge about the role of leader, leadership styles, types and methods.	
8	6346	COMMUNITY DEVELOPMENT	СОЗ	Understand the elements of diffusion, adoption and participatory rural appraisal techniques.
			CO4	Get awareness about the developmental programmes in India.

## **DEPARTMENT OF MATHEMATICS**

S.NO.	Paper Code	Paper Title	СО	Course Outcomes	
			CO1	Understand how to differentiate linear and non-linear Differential Equations	
				CO2	understand some basic definitions, Find the envelopes and orthogonal trajectories of the family of different surfaces
1	1221	Differential Equations	CO3	Understand How to resolve the differential equations into rational and solve it.	
		CO4	Solve equations for p, x and y, explain Clairaut's equation		
		CO5	To find solution of higher-order linear differential equations with variable coefficients, Solves the Cauchy-Euler equations		

			CO1	Understand geometrical terminology for angles, triangles, quadrilaterals and circles, measure angles using a protractor, use geometrical results to determine unknown angles
2	2221	Three Dimensional Geometry	CO2	Define parallel lines, Recognize and create parallel lines on graphs and with equations, define perpendicular lines, Recognize and create graphs and equations of perpendicular lines
			CO3	Understand the equation of the tangent plane and use the tangent plane as a local linear approximation to the surface
			CO4	Understand how to use cylinder and cone, Identify the shape of the surface of a cylinder and cone, Measure the surface area of a cylinder and a cone, finding volume of a cylinder and cone
		CO1	Trained in the Basic concepts of Groups, Subgroups	
3	3221	Abstract Algebra	CO2	Apply the learned concepts to Normal subgroups, Homomorphism and Cyclic groups
			СОЗ	Attain knowledge in Rings, Sub rings, Ideals
				Further learn Isomorphism and polynomial rings
			CO1	Understand the concepts of limits, Continuity, Discontinuity, Uniform Continuity
			CO2	Analyze Derivatives and apply Mean value Theorems
4	4221	Real Analysis	CO3	Understand the Concept of Sequences and Series and interpret series Tests
			CO4	Identify Riemann Integral functions
			CO5	Applicable for our professional, social and intellectual lives.

			CO1	Vector Spaces, Sub Spaces, Linear Combination, Dimension of Vector Space and Subspace. Definitions, Operations on vectors and scalars
5	5221	Linear Algebra and Vector Calculus	CO2	Rank and Nullity of Linear Transformations, Invertible Linear Transformations. Ordinary derivatives of vectors, Continuity, Gradient, Divergence, Curl
			CO3	Sylvester's Law of Nullity and Cayley Hamilton Theorem. Vector Integration
			CO4	Inner Product Spaces.
			CO1	Understand the concepts of vectors and scalars and will be able to perform the calculations on dot, cross and triple products
	6 5222 Ring Theory and Vector Calculus		CO2	Understand space curves and partial derivatives of vectors as well perform calculations on gradient t, divergence and curl operators.
6		CO3	Analyze line, surface and volume integrals and estimate the change of order of integration as well as the change of variable in double integration Green's Theorem in a plane, Gauss Divergence theorem, Stokes theorem & Applications of these theorems.	
				Understand the application of Green's Gauss and Stokes theorems
7	7 6221 Numerical Analysis		CO1	Analyze and detect different form of errors and also will be able to solve Algebraic and Transcendental equations using different methods
			CO2	Interpolate the functions within the range using equally and un equally spaced points

			CO3	Upon completion of this module the student should:  1.Understand the Least Squares Method  2.Be able to curve fit data using several types of curves(straight line, second degree parabola, power curve, exponential curve)  3.Obtain numerical approximations to the first and second derivatives of certain functions  4.Calculate a definite integral using an appropriate numerical method
			CO4	To solve the solution of a linear system of equations using direct or iterative methods
			CO5	To solve the selected class of differential equations using Taylor, Picards, Euler's, Runge Kutta, Adams and Milne's
			CO1	Applications of Laplace transforms to Differential Equations
	<b></b>		CO2	Applications of Laplace transforms to Integral Equations
8	6222	Integral Transforms	СОЗ	Applications of Fourier Transforms
			CO4	Applications of Finite Fourier Transforms.
			CO1	Curve Fitting
			CO2	Numerical Differentiation
	(222	Advanced Numerical	CO3	Numerical Integration
9	6223	Analysis	CO4	Solution of simultaneous Linear system of Equations
			CO5	Numerical solution of ordinary differential equations
			CO1	Communicate mathematics effectively.
10	6224	Project work	CO2	Demonstrate a computational ability in solving a wide array of mathematical problems

CO3	Differentiate between valid and invalid mathematical reasoning
CO4	Develop mathematical ideas from basic axioms, Utilize mathematics to solve theoretical and applied problems
CO5	Identify applications of mathematics in other disciplines and in society

## **DEPARTMENT OF PHYSICS**

COURSE OUTCOMES (MATHEMATICS COMBINATION)

S.No.	Paper	Paper Title	СО	CS COMBINATION)  Course Outcomes
D11 101	Code	I upor Titic		Course Outcomes
	Couc		CO1	Understand the physical significance of gradient of scalar field, divergence and curl of vector field. Applications of Gauss's & Green's theorems.
			CO2	Understand the working of multi stage rockets, collisions in 2D & 3D.Concept of Rutherford's scattering experiment and its importance.
1	1231	Mechanics & Properties of matter	CO3	Knowing and applying Euler equations. Analysis of processional velocity of symmetric top.
			CO4	Basic understanding of central force with examples. Verification of Kepler's laws, application to Planetary system.
			CO5	Understanding the concepts of relativity, frame of reference, Lorentz transformations, length contraction and time dilation.
			CO1	Analyzing the Simple Harmonic Motion, characteristics. Determination of acceleration due to gravity "g" by Compound pendulum & rigidity modulus by Torsion pendulum.
2	2231	Waves & Oscillations	CO2	Apply the concept of damping to determine logarithmic decrement & quality factor.  Differential equation of forced harmonic oscillator and its equation and applied in daily life.
			CO3	Analyze the periodic functions like square wave, Saw tooth wave by using Fourier's theorem.
			CO4	Basic understanding of Ultrasonics, different production methods and applications
			CO1	Understanding the basic concepts of Thermodynamics and the kinetic theory of gases, transport phenomenon.
3	3231	Thermodynamics &	CO2	Knowing the thermodynamic potentials and deriving the Maxwell's equations, and their application to different thermodynamic systems.
		Wave optics	CO3	Knowledge of interference and its applications.
			CO4	By the end of this course the students will be able to understand the concept of aberrations, their importance in camera and other lens systems.

A 4231 Radiation Physics & optics  Rowledge of diffraction and basic understanding of Holography.  CO4 Understanding the polarization and different methods of conversion of unpolarized light. Basics of Fiber optics.  CO5 Understand the Gauss's law and its applications of electrostatics & basics of dielectrics.  CO6 Analyze the electric & magnetic fields and understand the Biot savart's law and apply it to long straight wire & solenoid.  CO7 Review the basic laws of electricity and magnetism, derivation of Maxwell equations and analyze the production of electromagnetic waves.  CO6 Understand the basic concepts of electronics, working of p-n junction diodes and analysis of transistor configurations.  CO7 Understand the evolution of atomic models spectra of different elements, the effect of electric and magnetic field on the spectra.  CO8 Understand the properties of the nucleus and the models associated with it.  CO9 Understand the properties of the nucleus and the models associated with it.  CO9 Understanding of the crystal structure and also experimental study of it.  CO9 Understanding of the crystal structure and also experimental study of it.  CO9 Understanding the basic theories of superconductivity.  Renewable energy  Renewable energy  CO1 Study of the effects of environmental degradation, global warming, nuclear power generation.  CO3 Knowledge on Solar, Wind, Ocean, Hydrogen energy conversions.				CO1	Understand the concept of low temperature Physics and its applications.
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5 5231 Magnetism & Electronics.    Magnetism & Electronics.   Magnetism, derivation of Maxwell equations and analyze the production of electromagnetic waves.					·
Electronics.  Electronics.  CO4 Understand the basic concepts of electronics, working of p-n junction diodes and analysis of transistor configurations.  CO5 Understand the evolution of atomic models spectra of different elements, the effect of electric and magnetic field on the spectra.  CO6 Understand the properties of the nucleus and the models associated with it.  CO7 The theories behind the alpha and beta decays. Different detectors used to detect alpha, beta & gama radiations.  CO8 Basic understanding of the crystal structure and also experimental study of it.  CO9 Understanding the basic theories of superconductivity.  CO9 Study of the effects of environmental degradation, global warming, nuclear power generation.  CO9 Knowledge on Solar, Wind, Ocean, Hydrogen energy conversions.	_	5001		CO3	
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CO4 Basic understanding of the crystal structure and also experimental study of it.  CO5 Understanding the basic theories of superconductivity.  CO1 Basic knowledge of different forms of energy resources and its role in economic development.  CO2 Study of the effects of environmental degradation, global warming, nuclear power generation.  CO3 Knowledge on Solar, Wind, Ocean, Hydrogen energy conversions.					Different detectors used to detect alpha, beta &
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7 Renewable energy  CO2 Study of the effects of environmental degradation, global warming, nuclear power generation.  CO3 Knowledge on Solar, Wind, Ocean, Hydrogen energy conversions.				COI	= -
7 6231 Renewable energy degradation, global warming, nuclear power generation.  CO3 Knowledge on Solar, Wind, Ocean, Hydrogen energy conversions.				002	-
generation.  CO3 Knowledge on Solar, Wind, Ocean, Hydrogen energy conversions.	7	6231	Renewable energy	CO2	•
CO3 Knowledge on Solar, Wind, Ocean, Hydrogen energy conversions.	,	0201	Trong waste energy		
energy conversions.				CO3	
CO4   Analysis of conversion of bio mass into fuels.				CO4	Analysis of conversion of bio mass into fuels,
biomass plants types and design.					

			CO1	Study the basics of solar radiations and solar
			COI	¥
				intensity measurements.
		Solar Thermal and	CO2	Understanding the classification, design and
8	6232	Photovoltaic aspects		performance parameters of concentrating
				collectors.
			CO3	Analyze the fabrication of different types of solar
				cells.
			CO1	Introductory knowledge of wind generation,
		Wind, Hydro &	COI	meteorology of wind. Types and classification of
9	6233	Ocean energies		wind energy convertors.
9	0233	Ocean energies	CO2	
			CO2	Understand the construction and working of wind
				turbine and its characteristics.
			CO3	Understand the technology process of Ocean,
				thermal and tidal energy conversion.
			CO1	A thorough understanding of different modes of
				energy storage.
10	6234	Energy Storage	CO2	Analyze different types of electro chemical
		devices		energy storage systems.
			CO3	Understanding of difference between and fuel cell
			COS	
				components, principle and it's working.
			CO4	Knowledge of different types of fuel cells and the
				problems with fuel cells and their applications.

# DEPARTMENT OF PHYSICS COURSE OUTCOME(NON-MATHEMATICS)

S.No.	Paper		CO	
	Code	Paper Title		Course Outcomes
		•	CO1	Physical significance of gradient of scalar field, divergence and curl of vector field. Applications of Gauss's & Green's theorems.
1	1232	Mechanics, Waves	CO2	Understand the principle of rockets propulsion, collisions in 2D & 3D.Concept of Rutherford's scattering experiment and its importance
		& Oscillations	CO3	Analyzing the Simple Harmonic Motion, characteristics. Determination of acceleration due to gravity "g" by Compound pendulum & rigidity modulus by Torsion pendulum
			CO4	Apply the concept of damping to determine logarithmic decrement, quality factor. Differential equation of forced harmonic oscillator and its equation.
			CO1	Basic understanding of central force with examples. Explanation of Planetary motion-Kepler laws, application to Planetary system.
2	2232	Mechanics, Waves & Oscillations	CO2	Understanding the concepts of relativity, frame of reference, Lorentz transformations, length contraction and time dilation.
			CO3	Knowledge of acoustics, classification of sounds and characteristics of musical sound.
3	3232	Thermodynamics &	CO1	Understanding the basic concepts of Thermodynamics and the kinetic theory of gases.
		Wave optics	CO2	Knowledge of interference, determination of wavelength of light-Newton rings.
			CO3	By the end of this course the students will be able to understand the concept of aberrations, their importance in various lens systems.
			CO4	Understand the different thermoelectric effects in thermoelectricity.
			CO1	Understand the concept of low temperature Physics and its applications.
4	4232	Radiation Physics &	CO2	Knowledge of diffraction and basic understanding of Holography.
		optics	CO3	Understanding the polarization and different methods of conversion of Unpolarized light into polarized light. Basics of Fiber optics.

			CO1	Understand the Gauss's law and its applications of electrostatics, basics of dielectrics & capacitors.
5	5231A	Electricity, Magnetism &	CO2	Analyze the electric & magnetic fields and understand the Biot savart's law and apply it to long straight wire & solenoid with no derivation.
		Electronics.	CO3	Understand the basic concepts of electronics, working of p-n junction diode, transistor configurations and logic gates.
			CO1	Understand the basic concepts of spectroscopy-Raman effect.
6	5232A	Modern Physics & Medical Physics	CO2	Knowledge of fundamentals of Quantum mechanics-Photoelectric effect, Compton effect and its applications.
			CO3	Basic understanding of the radioactive emission, carbon and uranium grating, applications of isotopes.
			CO4	Analyze the crystalline materials, diffraction of X-rays and superconductors.
			CO1	Basic knowledge of different forms of energy resources and its role in economic development.
7	6231A	Renewable energy	CO2	Study of the effects of environmental degradation, global warming, nuclear power generation.
			CO3	Knowledge on Solar, Wind, Ocean, Hydrogen energy conversions.
			CO4	Analysis of conversion of bio mass into fuels, biomass plants types and design.
			CO1	Study the basics of solar radiations and solar intensity measurements.
8	6232A	Solar Thermal and Photovoltaic aspects	CO2	Understanding the classification, design and performance parameters of concentrating collectors.
		_	CO3	Analyze the fabrication of different types of solar cell.
9	6233A	Wind, Hydro & Ocean energies	CO1	Introductory knowledge of wind generation, meteorology of wind. Types and classification of wind energy convertors.
	023311	o count onergree	CO2	Understanding the construction and working of wind turbine and its characteristics.
			CO3	Understand the technology process of Ocean, thermal and tidal energy conversion.

DEPARTMENT OF ZOOLOGY						
S.No.	Paper code	Paper Title	СО	Course out comes		
1	1311	ANIMAL DIVERSITY OF INVERTEBRATES	CO1	Identify and classify invertebrate organisms from Protozoa to echinodermata.		
			CO2	Students will gain Dissection skills		
			CO3	Compare different systems in invertebrates.		
2	2331	ANIMAL DIVERSITY OF VERTEBRATES	CO1	Students will be able to classify the different vertebrate organisms		
			CO2	Compare different systems in vertebrates.		
			CO3	Students will gain Dissection skills in vertebrates		
3	3331	CYTOLOGY, GENETICS AND EVOLUTION	CO1	Identify various cellular organelles and describe their structure and function. Explain the structure and Functions of cell wall		
			CO2	Understanding basic principles of inheritance and Analysis of Mendelian inheritance in man		
			CO3	Mechanism of cell division and chromosomal segregation and slide		
			CO4	Understanding about the concept of Evolution.		
4	4331	EMRYOLOGY PHYSIOLOGY AND ECOLOGY	CO1	Understand about the various stages in development starting from zygote to an adult.		
			CO2	Identify stages of development in an embryo		
			CO3	Describe the physiology of basic processes in human body		
			CO4	Advanced degree programs in Ecology can lead to a career as a veterinarian, zoologist, university professor or independent research		
5	5331	ANIMAL BIOTECHNOLOG Y	CO1	Explain the importance of Biotechnology in daily life		
			CO2	Students can get knowledge on various methods developed for trangenic organisms.		
			CO3	Can gain interest in forensic science, as they can get good knowledge on various blotting techniques.		
6	5332	ANIMAL HUSBANDRY	CO1	Understand about the various stages in development of chicks and animals.		

			CO2	Gain knowledge about various diseases in poultry and animal husbandry, their control measures.
			CO3	Can get knowledge in management of poultry farm and a animal husbandry unit
7	6331	IMMUNOLOGY	CO1	Have an awareness of current research in the field and possible applications of their knowledge in Immunology
				Basic understanding on key components of the innate and adaptive immune responses and insight into which cell types and organs are involved in an immune response.
				Explain the Role of Antigens & Antibodies in Immunity & understand Significance of antigen antibody reactions
			CO4	Differentiate between different Hypersensitivity states
8	6332	PRINCIPLES OF AQUACULTURE	CO1	Students can demonstrate the basic technical skills necessary for work in aquaculture and fisheries.
			CO2	Can gain good knowledge on various types of fishes and fish culture systems.
			CO3	Have awareness in construction of fish pond and can start their own fish pond.
9	6333	AQUACULTURE MANAGEMENT	CO1	Create local and global solutions to complex challenges in aquaculture and fisheries
			CO2	Can gain good feeding techniques and have knowledge on various feeding methods.
10	6334	POST HARVEST TECHNOLOGY	CO1	Have knowledge of impact of aquaculture and fisheries on society, the economy and natural environment
			CO2	Have awareness on various fish preservation and marketing methods

## DEPARTMENT OF COMPUTER SCIENCE & APPLICATIONS

### COURSE OUTCOMES

S.No.	Paper Code	Paper Title	CO	Course Outcomes
			CO1	Understand the computer, its characteristic, limitations and its usage.
		Computer	CO2	Analyze number system.
1	1211	Computer Fundamentals and	CO3	Work with different input and output devices.
		Photoshop	CO4	Image edit, modify, background and saving using Photoshop.
			CO5	Work with tool box, layers and filters.
			CO1	Develop programs using the basic elements like control statements, Arrays and Strings. Solve the memory access problems by using pointers.
			CO2	Understand dynamic memory allocation using pointers which is essential for utilizing memory.
			CO3	Understand code reusability with the help of user defined functions and pointers.
2	2211	Programming in C	CO4	Develop programs using enumerated data types, function pointers and nested structures.
			CO5	Understanding the concept of files and implement the basics file handling mechanisms.
			CO1	Develop programming abilities in R.
			CO2	Demonstrate proficiency in statistical analysis of data.
		Introduction To Data	CO3	Develop the ability to build and assess data based models.
3	2212	Science With 'R'	CO4	Execute statistical analysis with professional statistical software.
			CO5	Demonstrate skill in data management.
			CO1	To implement Object oriented programming paradigms using Java language.
			CO2	To implement multiple classes using Inheritance and how to access arrays and Strings in Java.
			CO3	Understand thread concept and use different methods to create threads.
4	3211	Object oriented	CO4	Understand exception handling concept and to create user defined exceptions.
7	5211	programming using java	CO5	Analyze platform independent application runtime environment and choose appropriate runtime environment to create GUI and Web applications using Java language.

5	2531	Office Automation Tools	CO1	Office automation refers to the varied computer machinery and software_used to digitally create, collect, store, manipulate, and relay office information needed for accomplishing basic tasks.
			CO2	Office automation can get many tasks accomplished faster.
			CO3	It eliminates the need for a large staff. Less storage is required to store data.
			CO4	Multiple people can update data simultaneously in the event of changes in schedule.
			CO1	Understand the fundamental concepts of a database system.
		Data Base	CO2	Analyze database requirements and determine the entities involved in the system and their relationship to one another.
6	5211	1 Management Systems (B. Sc)	CO3	Develop the logical design of the database using data modeling concepts such as entity-relationship diagrams.
			CO4	Create relational tables from entity-relationship diagrams. Manipulate a database using SQL and develop programming skills in SQL and PL/SQL.
	5531	Data Base Management Systems (BA)	CO1	Understand the fundamental concepts of a database system.
7			CO2	Analyze database requirements and determine the entities involved in the system and their relationship to one another.
			CO3	Develop the logical design of the database using data modeling concepts such as entity-relationship diagrams.
			CO4	Create relational tables from entity-relationship diagrams.
			CO5	Manipulate a database using SQL and develop programming skills in SQL and PL/SQL.
			CO1	Basic knowledge, understands, analyze and design of complex systems.
8	5212	Software Engineering	CO2	Ability to apply software engineering principles and techniques.
			CO3	To produce efficient, reliable, robust and cost-effective software solutions.
			CO4	Ability to understand and meet ethical standards and legal responsibilities.

			CO1	Use fundamental skills to maintain web server services
			COI	required to host a website.
			CO2	Select and apply mark-up languages for processing,
			CO2	identifying, and presenting of information in web
				pages.
			CO3	Use scripting languages and web services to transfer
			003	data and add interactive components to web pages.
9	6211	Web Technologies		
			CO4	Incorporate best practices in navigation, usability and
				written content to design websites that give users easy
				access to the information they seek.
			CO1	Develop programming abilities in R.
			CO2	Demonstrate proficiency in statistical analysis of data.
			CO3	Develop the ability to build and assess data based
10	6212	Foundation Of Data		models.
		Science	CO4	Execute statistical analysis with professional statistical
				software.
			CO5	Demonstrate skill in data management.
			CO1	Big data helps an organization understand its customers
				better, and helps it narrow down the target audience,
			004	thus improving their marketing campaign.
1.1	6212		CO2	Hadoop provides massive storage for any kind of data,
11	6213	Big Data		enormous processing power and the ability to handle
			000	concurrent tasks or jobs.
			CO3	It provides high throughput access to application data
				and Hadoop Map Reduce provides YARN based
			004	parallel processing of large data sets.
			CO4	Map Reduce or YARN, are used for scheduling and
				processing. Hadoop Map Reduce executes a sequence
			CO1	of jobs and used for data warehousing.
			CO1	Help mitigate risks from fraud for clients and
				organizations and also to make better decisions.
			CO2	Understand probability distribution, which provides
12	6214	Doto Analytics		the probabilities of occurrence of different possible
12	0214	Data Analytics	000	outcomes in an experiment.
			CO3	It is the practice of extracting information from
				existing data sets in order to determine patterns and
			004	predict future outcomes and trends.
			CO4	This technology helps to manage the time with
				continuous innovations taking place in all aspects of
				lives.
12	6521	DUD % MV COI	CO1	Working with MyCOL databases and was DID to
13	6531	PHP & MY SQL	CO1	Working with MySQL databases and use PHP to
				Create, modify, and delete MySQL tables, manipulate
			CO2	MySQL records, retrieve database records.
L			CO2	Use arrays over objects and array handling functions

	CO3	Use Hidden Fields to save state, Redirecting the user,
		Sending Mails, Working with File Uploads.
	CO4	Cookies enable to store the session information on the
		client side.
	CO5	Understanding the Image-Creation Process, Necessary
		Modifications to PHP, Drawing a New Image, Getting
		Fancy with Pie Charts, Modifying Existing Images.