GOVERNMENT COLLEGE ROPAR

(Affiliated To Punjabi University, Patiala)



PROGRAMME OUTCOMES & COURSE OUTCOMES

Graduate Programme Outcomes-BA/B.Com/B.Sc

Graduate programmes at Government College Ropar are outcome-based, with the following expected outcomes:

	Apected outcomes.
PO1	Critical Thinking and Problem-Solving Skills: Learners will
	gain advanced critical thinking and problem-solving abilities. They
	will be able to analyze complicated topics, assess evidence,
	examine many points of view, and develop novel solutions.
PO2	Advanced Knowledge and Expertise: Graduate programs aim to
	provide students with a deep understanding of their chosen field or
	specialization. Graduates will have acquired advanced knowledge,
	theories, methodologies, and skills specific to their area of study.
PO3	Research and Scholarly Abilities:
	Graduates will have the ability to design and conduct independent
	research, critically analyze existing literature, and contribute to the
	advancement of knowledge in their field.
PO4	Effective Communication: Focusing on developing strong
	communication skills. Students will be able to articulate complex
	ideas and research findings clearly and effectively, both in written
	and oral forms, to both specialized and non-specialized audiences.
PO5	Cross-Disciplinary Knowledge: Depending on the program,
	graduates may acquire cross-disciplinary knowledge, enabling
	them to integrate and apply concepts and methodologies from
	multiple fields to address complex problems and contribute to
	interdisciplinary collaboration.
PO6	Professional Ethics and Responsibility: emphasizing
	professional ethics, integrity, and social responsibility. Graduates
	will be equipped with ethical decision-making skills and an
	understanding of the social and ethical implications of their work.
PO7	Professional and Career Development: Providing students with
	opportunities for professional development, including internships,
	industry collaborations, and networking events.
PO8	Adaptability and Lifelong Learning: Programs aim to cultivate a
	growth mindset and a commitment to lifelong learning. Graduates
	will be prepared to adapt to new challenges, acquire new
	knowledge, and continuously develop their skills throughout their
	careers.

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PROGRAMME SPECIFIC OUTCOMES

Bachelor of Arts

The Bachelor of Arts Programme at Government College Ropar is outcome-based, with the following PSOs required.

PSO1	Subject Knowledge: Graduates will demonstrate a deep understanding of the theories, concepts, methodologies, and historical developments relevant to
	their chosen field of study within the arts.
PSO2	Critical Thinking: Graduates will be able to think critically and analytically, evaluating information, arguments, and evidence to formulate well-reasoned and evidence-based judgments and conclusions.
PSO3	Communication Skills: Graduates will possess strong oral and written communication skills, allowing them to articulate ideas effectively and convey complex information to diverse audiences.
PSO4	Research Skills: Graduates will have acquired research skills, including the ability to locate, evaluate, and synthesize information from various sources, as well as to design and conduct independent research projects.
PSO5	Creative and Aesthetic Sensibility: Graduates will demonstrate a creative and aesthetic sensibility, applying imaginative and innovative thinking to their artistic or creative work.
PSO6	Ethical and Cultural Awareness: Graduates will develop an understanding of ethical and cultural dimensions relevant to their field, demonstrating awareness of diverse perspectives, social responsibility, and ethical decision-making.
PSO7	Collaboration and Teamwork: Graduates will be able to collaborate effectively with others, working in teams to achieve common goals and contribute positively to group dynamics.
PSO8	Adaptability and Lifelong Learning: Graduates will exhibit the ability to adapt to new challenges, continue to learn and acquire new knowledge and skills, and engage in lifelong learning to remain current in their field of study.
PSO9	Global and Interdisciplinary Perspectives: Graduates will understand the global nature of their chosen field and possess interdisciplinary knowledge, recognizing the interconnectedness of various disciplines and applying diverse perspectives to problem-solving.
PSO10	Professional and Career Readiness: Graduates will have acquired transferable skills such as time management, organizational skills, and professional conduct, positioning them for success in their chosen career paths or further academic pursuits.
PSO11	Specialized Expertise: Graduates with honors will have developed a specialized expertise within their chosen field of study, demonstrating a deep understanding of a particular subfield or area of research.
PSO12	Academic and Career Advancement: Graduates will have developed a strong foundation for further academic study at the postgraduate level, such as pursuing a Master's or Ph.D. degree. Additionally, they will be well- prepared for careers that require specialized knowledge and critical thinking.

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COURSE OUTCOMES

Bachelor of Arts

	B.A. A	II Semesters
LANGUAGES		
Course Name	1	Course Outcomes
English	CO1	Students will develop advanced proficiency in written and oral communication skills.
	CO2	Students will learn to analyze and interpret literary texts from different periods and genres.
	CO3	Students will apply critical theories and methods to literary analysis.
	CO4	To familiarize students with excellent pieces of PROSE and FICTION in English so that they realize the beauty and communicative power of English
	CO5	To develop students' interest in reading literary pieces
	CO6	To introduce the basic units of language so that they become aware of the technical aspects and their practical usage
Punjabi	CO1	Students will attain proficiency in spoken and written Punjabi.
	CO2	Students will be able to study Punjabi literature and learn its culture and history.
	CO3	Students will analyze Punjabi linguistic structures and dialects.
	CO4	Students will understand the role of Punjabi language in regional and global contexts.
Hindi	CO1	Students will gain proficiency in spoken and written Hindi.
45	CO2	Students will analyze Hindi language and its cultural significance.
	CO3	Students will understand the role of Hindi in literature and mass communication.
	CO4	They will Study Hindi literature, grammar, and linguistic structures.

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The Bachelor of Arts Programme at Government College Ropar is outcome-based, with the following COs required.

SOCIAL SCIENCES			
ECONOMICS			
Course Name		Course Outcomes	
Semester-1 (Micro Economics and Indian Economy-I)	CO1	Study of Indian Economy: Acquire knowledge about the structure, functioning, and challenges of the Indian economy. Explore topics such as economic development, economic reforms, poverty, inequality, agricultural economics, industrialization, and the role of government in the Indian context.	
	CO2	Understanding Microeconomic Principles: Gain a solid understanding of fundamental microeconomic principles, including supply and demand, consumer behavior, production theory, cost analysis, market structures, and market failures.	
	CO3	Understanding the Indian Economy: Develop a comprehensive understanding of the structure, functioning, and key features of the Indian economy, including its sectors (agriculture, industry, and services), economic indicators, and major economic policies.	
Semester-II (Micro Economics And Indian Economy-II)	CO1	Analysis of Market Behavior: Microeconomics enables the analysis of market behavior, including supply and demand dynamics, price determination, and market efficiency.	
	CO2	Understanding of Macroeconomic Concepts: Students will develop a solid understanding of macroeconomic concepts such as aggregate demand and supply, national income, inflation, unemployment, fiscal policy, monetary policy, and economic growth.	
4	CO3	Understanding of Indian Economic Structure: Students will develop a comprehensive understanding of the structure and composition of the Indian economy such as agriculture, industry, services, etc.	
Semester-3 (Macro Economics And Public Finance)	CO1	Understanding of Macroeconomic Concepts: Students will develop a solid understanding of macroeconomic concepts such as aggregate demand and supply, national income, inflation, unemployment etc.	
	CO2	Macroeconomic Forecasting: Students will develop skills in macroeconomic forecasting, using historical data and econometric	

		techniques
	CO3	Knowledge of Taxation Policies: Students will gain knowledge of different tax systems and policies, including direct and indirect taxes, tax administration, tax incentives, and tax reforms.
Semester-4	CO1	Analysis of International Trade: Students will
(Macro Economics And		gain knowledge of the theories and patterns of
International Economics)	GOD	international trade.
	CO2	Evaluation of Trade Policies: Students will develop skills in evaluating trade policies and their impact on domestic and international economies.
	CO3	Policy Analysis and Evaluation: Students will
	1	be equipped with tools to analyze and evaluate macroeconomic policies, such as fiscal and monetary policies
Semester-5	CO1	Understanding of Economic Development
(Development of Economics)	1	Theories: Students will develop a comprehensive understanding of economic development theories, including classical, neoclassical, and modern theories.
	CO2	Analysis of Development Indicators: Students will learn to analyze and interpret key development indicators, such as gross domestic product (GDP) per capita, poverty rates, income inequality, human development index (HDI), and other socio-economic indicators.
	CO3	Understanding of Global Development Challenges: Students will gain an understanding of global development challenges, including issues such as climate change, environmental sustainability, global poverty, and inequality
Semster-6	CO1	Understanding of Mathematical Foundations:
(Quantitative Methods)	12	Students will develop a solid understanding of the mathematical foundations that underpin quantitative methods
	CO2	Application of Quantitative Techniques: Students will learn to apply quantitative techniques in various domains such as business, economics, finance, social sciences, and research.
	CO3	Proficiency in Data Analysis: Students will acquire proficiency in data analysis techniques. They will learn how to collect, organize, and summarize data using descriptive statistics.

HISTORY		
Course Name		Course Outcomes
Semester-1 Ancient India (Up to 1000 A.D.)	CO1	Knowledge of Prehistoric India: Students should be familiar with the archaeological evidence and theories related to the prehistoric period in the Indian subcontinent, including the Indus Valley Civilization and the Vedic period.
	CO2	Understanding of Early Indian Empires: Students should gain an understanding of the major early Indian empires, such as the Mauryan Empire, the Gupta Empire, and the Kushan Empire, including their political, social, and economic structures.
	CO3	Familiarity with Religious and Philosophical Movements: Students should be acquainted with the religious and philosophical movements that emerged during ancient India, including Hinduism, Buddhism, Jainism, and their key tenets and practices.
	CO4	Understanding of Political and Social Structures: Students should have an understanding of the political and social structures that existed in ancient India, including the varna(caste) system, the role of kings and rulers, and the social hierarchy.
	CO5	Awareness of Gender and Women's Roles: Students should be aware of the roles and status of women in ancient Indian society, including the position of women in family and society, their participation in religious and political spheres, and the evolution of gender roles over time.
2	CO6	Appreciation of Historical Continuities and Changes: Students should be able to identify and analyze the continuities and changes in various aspects of ancient Indian history, such as political structures, religious beliefs, and social practices, over a span of several centuries.
Semester-2 Medieval India (1000-1707 A.D.)	CO1	Knowledge of Historical Context: Understand the political, social, cultural, and economic context of medieval India between 1000 and 1707 AD, including the major dynasties, kingdoms, and empires that existed during this period.
	CO2	FamiliaritywithMajorEvents:Gainknowledgeofthesignificanteventsand

		developments that took place in medieval Indian history, such as the Delhi Sultanate, the Vijayanagara Empire, the Mughal Empire, and regional kingdoms.
	CO3	Understanding of Religious and Cultural Interactions: Students will explore the interactions between different religious and cultural groups in medieval India, including the influence of Islam, Hinduism, and regional traditions on society, art, architecture, and literature.
	CO4	Examination of Social Structures: Students will be able to explore the social structures and hierarchies prevalent in medieval Indian society, including the caste system, gender roles, and the position of different social groups.
Semester-3 History of India (1707-1950)	CO1	Understanding of political and social transformations: Students will gain insights into the political and social transformations that occurred during this period, such as the rise of regional powers, the British expansion and consolidation of control, and the emergence of nationalist movements.
	CO2	Familiarity with key historical figures and ideas: This includes figures like Aurangzeb, Robert Clive, Raja Ram Mohan Roy, Mahatma Gandhi, and Jawaharlal Nehru.
	CO3	Awareness of cultural and intellectual developments: This includes studying the impact of British education, the rise of Indian nationalism, the social reform movements, and the emergence of modern Indian literature, art, and music.
	CO4	Ability to analyze historical change and continuity: Students should understand how historical processes and events have shaped India's political, social, and cultural landscape and evaluate the factors that led to significant transformations or the persistence of certain structures or ideas.
Semester-4 History of Punjab- (1469-1799 A.D)	CO1	Knowledge of Punjab's historical context and Familiarity with key historical figures of Punjab
(CO2	Understanding of religious, cultural and political developments: Students will acquire knowledge of the growth and evolution of religious movements in Punjab during this era,

		particularly Sikhism, and its impact on the
		region's social and cultural fabric.
	CO3	Evaluation of socio-economic conditions:
		including agricultural practices, trade networks,
		and the impact of Mughal policies on the region.
Semester-5	CO1	Develop a chronological understanding:
World History	0	Students will be able to identify and analyze key
(1500-1950 A.D)	Party and the second se	events, individuals, and historical developments
		that occurred between 1500 and 1950 A.D.
	CO2	Understand political transformations: such as
	1100	the Enlightenment, the American Revolution,
	100	the French Revolution, the Industrial
	1. 1.	Revolution, and the rise of nationalism.
	CO3	Evaluate the impact of imperialism and
		colonialism: Students should examine the
		causes, motivations, and consequences of
		European imperialism and colonialism during
		this period.
Semester-6	CO1	Understand the political and cultural
History of Punjab	-80	landscape of Punjab: Students should gain a
(1500-1950 A.D)		comprehensive understanding of the political
		and cultural dynamics of Punjab during the
	M	specified time period.
	CO2	Examine the impact of Mughal rule on
	i finalista	Punjab: and analyze its impact on the region's
	1.1	political, social, and cultural landscape.
	CO3	Evaluate the Sikh Empire: Students should
	M	analyze the rise and fall of the Sikh Empire
	1.1.1	under Maharaja Ranjit Singh and examine the
	1.70	political, military, and cultural achievements of
	1.2	the Sikh Empire and its impact on the history of
	100	Punjab.
	CO4	Study the impact of colonialism: This includes
	1 V V	analyzing the British annexation of Punjab, the
	NB	effects of British policies on agriculture, land
6.	1 1.2	tenure, and economy, and the emergence of
	16.3	social and political movements during this
	1.2.2.1	period.
	CO5	Analyze the partition of Punjab: They should
	1.1	understand the political, social, and cultural
	1111	consequences of partition, including the mass
	- V-	migrations, violence, and the division of Punjab
		between the two countries.

PHILOSOPHY			
Course Name		Course Outcomes	
Semester-1 Elementary Philosophy	CO1	Knowledge of Major Philosophical Ideas: Students should gain a basic understanding of key concepts and ideas in philosophy, such as	
1.7	1	ethics, epistemology, metaphysics, and logic.	
	CO2	Understanding of Different Philosophical Perspectives: Philosophy encompasses a wide range of perspectives and theories. Students should be exposed to different philosophical traditions and be able to recognize and understand various viewpoints	
	CO3	Appreciation of Philosophy's Relevance: Students should understand the practical applications of philosophy and its relevance to various disciplines and aspects of life. They should recognize how philosophical thinking can contribute to areas such as science, politics, ethics, and personal development.	
	CO4	Intellectual Curiosity and Open-mindedness: Philosophy encourages questioning assumptions and exploring new ideas. Students should cultivate intellectual curiosity and open- mindedness, demonstrating a willingness to engage with challenging and controversial topics and to consider different perspectives.	
	CO5	Clarity of Communication: Philosophy involves expressing complex ideas and arguments in a clear and concise manner. Students should improve their ability to articulate their thoughts effectively, both in writing and in oral presentations, using philosophical terminology and logical structures.	
Semester-2 Elementary Ethics	CO1	Develop Moral Awareness: Students will develop an understanding of moral principles, values, and ethical decision-making processes.	
	CO2	Cultivate Ethical Decision-Making Skills: Students will learn practical skills to make ethical decisions in different contexts. They will explore strategies for resolving ethical conflicts, considering ethical principles, empathizing with others, and reflecting on personal values.	
	CO3	Foster Ethical Awareness in Society: Students will develop an awareness of the impact of ethical choices on individuals, communities, and the broader society. They will explore social	

		instica issues cultural diversity and the othical
		justice issues, cultural diversity, and the ethical responsibilities of individuals as members of a
		larger community.
Semester-3	CO1	Understanding Logical Systems: Students will
Logic (Western and Indian)	COI	develop an understanding of different logical systems, both in Western and Indian philosophical traditions. They will learn about the foundational principles, concepts, and techniques used in formal and informal logic.
	CO2	Analyzing Arguments: Students will learn how
		to analyze and evaluate arguments using logical principles. They will be able to identify and distinguish between valid and invalid arguments, identify logical fallacies, and critically assess the soundness of reasoning.
	CO3	Comparative Analysis: Students will compare
		and contrast Western and Indian approaches to logic. They will examine similarities and differences in the underlying assumptions, methodologies, and conceptual frameworks employed in logical reasoning within these traditions.
Semester-4	CO1	Ethical Reasoning: Students will develop the
Applied Ethics		ability to apply ethical reasoning to real-life situations and dilemmas. They will learn to analyze complex ethical problems, consider multiple perspectives, and evaluate the moral implications of different choices.
	CO2	Understanding Contemporary Ethical Issues:
	~~~	Students will explore and understand contemporary ethical issues and debates relevant to their field of study or professional interests. These may include topics such as artificial intelligence, genetic engineering, environmental sustainability, privacy and data ethics, social inequality, or global justice.
	CO3	Ethical Leadership and Professional
		<b>Responsibility:</b> Students will understand the ethical responsibilities of professionals and leaders in various fields. They will explore concepts such as professional ethics, integrity, and the role of ethics in leadership and decision-making.
Semester-5	CO1	Familiarity with Key Thinkers: Students will
Western Philosophy	COI	become familiar with the works and ideas of prominent Western philosophers throughout history. They will study the contributions of

	1	
		philosophers such as Socrates, Plato, Aristotle,
		and others, and gain an understanding of their
		major philosophical theories and arguments.
	CO2	Understanding of Philosophical Movements:
		Students will explore different philosophical
		movements that have shaped Western thought.
		They will learn about movements such as
		Rationalism, Empiricism, Existentialism, and
		others, and understand the central tenets,
		debates, and historical contexts associated with
		these movements.
	CO3	Critical Thinking Skills: Through the study of
		Western Philosophy, students will develop
		critical thinking skills. They will learn to
		analyze philosophical arguments, evaluate the
		strength of reasoning, identify underlying
		assumptions, and construct well-reasoned
		responses.
Semester-6	CO1	Familiarity with Major Schools of Thought:
Indian Philosophy		Students will become familiar with the major
1.		schools of thought in Indian philosophy, such as
		Vedanta, Nyaya, Samkhya, Yoga, Vaisheshika,
		and Mimamsa. They will study the foundational
		texts, key concepts, and distinctive features of
		these schools.
	CO2	Understanding of Indian Philosophical
		Traditions: Students will gain an understanding
		of the historical and cultural contexts in which
		Indian philosophical traditions developed. They
		will explore the influences of Hinduism,
		Buddhism, Jainism, and other religious and
		philosophical systems on Indian philosophy.
	CO3	Metaphysics and Ontology: Students will delve
		into metaphysical and ontological questions
		within Indian philosophy. They will explore
		concepts such as Atman (self), Brahman
		(ultimate reality), Maya (illusion), karma,
		rebirth, and the nature of existence.

PUBLIC ADMINISTRATION		
Course Name		Course Outcomes
Semester-1 Administrative Theory	CO1	Knowledge of concepts of Public Administration: Students will develop a strong understanding of the principles, theories, and concepts of public administration, including its historical development, administrative theories, and public policy.
	CO2	<b>Understanding of Governance and Public</b> <b>Policy</b> : Students will gain knowledge about the functioning of government institutions, the policy-making process, and the role of public administration in implementing and evaluating public policies.
	CO3	Administrative Skills: Students will acquire practical skills in areas such as leadership, decision-making, problem-solving, public financial management, personnel administration, and organizational behavior, which are essential for effective public administration.
	CO4	<b>Policy Analysis and Evaluation</b> : Students will acquire the skills to critically evaluate public policies, assess their impact on society, and propose improvements or alternative approaches to address emerging challenges.
	CO5	<b>Public Sector Management</b> : Students will learn about the principles of public sector management, including human resource management, performance evaluation, strategic planning, and change management in government organizations.
1	CO6	<b>Ethical and Legal Understanding</b> : Students will learn about the ethical principles and values that guide public administration, as well as the legal frameworks and regulations governing administrative practices in India.
Semester-2 Indian Administration	CO1	<b>Understanding the Indian Administrative</b> <b>System:</b> Students will gain a comprehensive understanding of the structure, functions, and processes of the Indian administrative system, including the roles and responsibilities of different levels of government.
	CO2	Knowledge of Indian Constitution and Governance: Students will acquire knowledge about the Indian Constitution, its features, and the principles of governance enshrined in it.

	They will also learn about the separation of
	powers, fundamental rights, and the role of
	different institutions in the governance of India.
CO	<b>Public Policy Analysis:</b> Students will develop
12-1	skills to analyze public policies and evaluate
	their effectiveness in addressing societal issues.
Q	They will learn about policy formulation,
	implementation, and evaluation, with a focus on
	the Indian context.
Semester-3 CC	
Personnel Administration in	Students will learn about the process of recruiting and selecting employees in the public
India	sector. They will understand the specific
	regulations, policies, and procedures governing
	recruitment and selection in government
6	organizations, including the role of public
	service commissions and reservation policies.
CO	
	knowledge about the structure and functioning
	of civil service systems in India. They will
	understand the classification of civil services,
	the roles and responsibilities of different cadres,
	and the recruitment, training, and career progression of civil servants.
CC	
	Administration: Students will acquire
	knowledge about the training and development
	initiatives in the public sector. They will learn
	about the specific training programs, capacity-
	building efforts, and leadership development
	initiatives undertaken by government
	organizations to enhance the skills and
	competencies of public servants.
Semester-4 CC	<b>Budgeting and Fiscal Planning:</b> Financial Administration in India involves the preparation
Financial Administration in	and execution of the national budget, as well as
India	budgets at the state and local levels. This
	includes estimating revenue, allocating resources
	to various sectors and departments, and
	formulating fiscal policies to achieve economic
	stability and development goals.
CO	
	Financial Administration in India involves
	managing relationships with financial
	institutions such as the Reserve Bank of India (BBI). Securities and Exchange Board of India
	(RBI), Securities and Exchange Board of India (SEBI), and other regulatory bodies. It includes
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	CO3	<ul> <li>implementing financial regulations, monitoring financial markets, and ensuring stability in the financial sector.</li> <li><b>Revenue Generation:</b> Financial Administration includes strategies and measures to generate revenue for the government. This includes taxation policies, fee collection, user charges, and other revenue streams. It also involves implementing measures to improve tax administration, enhance compliance, and prevent tax evasion.</li> </ul>
Semester-5 Local Administration in India (With special reference to Punjab)	CO1	<b>Decentralization of Power:</b> Students will learn about Local government in India which decentralize power by transferring certain functions and responsibilities from the state or central government to the local level. This outcome promotes greater citizen participation and decision-making at the grassroots level.
	CO2 CO3	Students will learn about the structure and functions of Municipal Corporations. Students will be able to understand the working of Panchayats.
Semester-6 Development Administration in India (With special reference to India)	CO1 CO2	Students will learn about Public enterprise meaning and forms. And will be able to understand development administration in developed and developing countries. Students will learn about the welfare policies for Scheduled castes and Backward class.

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POLICE ADMINISTRATION		
Course Name		Course Outcomes
Semester-1 Police Administration in India	CO1 CO2 CO3	Demonstrate critical thinking and analytical skills in evaluating and addressing issues related to police administration in India. Understand the historical, social, and cultural factors shaping police administration in India Analyze the organizational structure and functions of law enforcement agencies in India,
Semester-2 Indian Constitution	CO1 CO2	<ul> <li>including centre and state.</li> <li>Understand the fundamental principles and values enshrined in the Indian Constitution</li> <li>Gain knowledge of the historical context and the process of constitution-making in India</li> </ul>
	CO3	Comprehend the provisions and implications of Fundamental Rights and Directive Principles of State Policy
	CO4	Examine the structure and functioning of the government at the Union and State levels
Semester-3 Police Personnel Administration	CO1	Synthesize knowledge acquired throughout the course to propose innovative approaches for effective personnel administration in law enforcement
	CO2	Discuss the use of technology in police administration in India, including crime mapping, surveillance systems, and digitization of records
Semester-4 Law and Order Administration	CO1	Synthesize knowledge acquired throughout the course to propose strategies for effective and equitable law and order administration
Semester-5 Organization Behaviour	CO1	Understand the foundational concepts and theories of Organizational Behavior
(with Special Reference to Police Administration)	CO2	Understand the impact of organizational structure and design on police behavior and performance
	CO3	Understand the dynamics of groups and teams within police organizations
Semester-6 Law And Police Administration	CO1	Identify and explain the key concepts related to police administration, including organizational structure, management principles, and resource allocation.
	CO2	Analyze the legal framework governing law enforcement operations and the rights and responsibilities of police officers.

	POLITICA	AL SCIENCE
Course Name	Course Outcomes	
Semester-1 & 2 Political Science	CO1	<b>Understanding of political theories and</b> <b>concepts</b> : Graduates should be familiar with major political theories and concepts, including liberalism, conservatism, socialism, democracy, power justice equality and rights
	CO2	power, justice, equality, and rightsKnowledge of political systems andinstitutions: Students will gain a comprehensiveunderstanding of various political systems,including democracies,authoritarian regimes,and different forms of governance.
	CO3	Knowledge of comparative politics: Students will study comparative politics, which involves analyzing political systems, institutions, and processes across different countries.
	CO4	<b>Understanding of international relations:</b> The program may include coursework on international relations, enabling students to understand and analyze global political dynamics, including topics such as diplomacy,
	6	international organizations, conflict resolution, and global governance.
	CO5	<b>Effective communication skills:</b> Graduates will be able to articulate their ideas and arguments effectively, both orally and in writing.
	CO6	The program may emphasize the importance of <b>ethical behavior</b> in political science, including respecting diverse perspectives, maintaining integrity, and adhering to professional standards.
Semester-3 Indian Polity	CO1	<b>Knowledge of Indian Political System:</b> Students will develop a thorough understanding of the political framework of India, including the Constitution, political parties, electoral system, and various levels of government.
	CO2	<b>Analysis of Public Policy</b> : Students will learn to analyze and evaluate public policies implemented in India, such as economic policies, social welfare schemes, and developmental initiative.
	CO3	<b>Communication and Writing Skills</b> : Students will enhance their ability to effectively communicate and articulate their ideas, both verbally and in writing, regarding Indian polity

		and political issues.
Semester-4 Indian Political System	CO1	Understanding of the Indian Constitution: Students will gain knowledge of the Indian Constitution, including its history, key features, and provisions.
	CO2	<b>Familiarity with political parties and electoral</b> <b>processes:</b> Students will learn about the major political parties in India, their ideologies, and electoral strategies.
	CO3	<b>Knowledge of political economy:</b> The program may cover the intersection of politics and the economy in India
Semester-5 Comparative Political System (U.K&U.S.A)	CO1	<b>Comparative Analysis:</b> Students will develop the ability to compare and contrast political systems, including democratic, authoritarian, and hybrid systems, across various countries and regions.
	CO2	Understanding of Political Institutions: Students will gain knowledge about the structures and functions of political institutions, including legislatures, executives, judiciaries, and bureaucracies.
Semester-6 International Politics (Theory & Practice)	CO1	KnowledgeofInternationalRelations:Students will develop a strong foundation in the theories and concepts of international relations.
	CO2	<b>Analytical Skills:</b> Students will acquire the ability to critically analyze complex political issues on a global scale.
	CO3	<b>Understanding of Political Systems:</b> Students will gain a deep understanding of different political systems and ideologies across the world.

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EDUCATION		
PHYSICAL EDUCATION		
Course Name	Course Outcomes	
Semester-1 Physical Education	CO1	Knowledge of Anatomy and Physiology: Students will acquire a solid understanding of the human body's structure, systems, and functions related to physical activity and exercise.
	CO2	<b>Motor Skills Development:</b> Students will develop proficiency in a wide range of motor skills, including fundamental movement patterns, specialized techniques, and sport- specific skills.
	CO3	Health and Fitness Education: Students will gain knowledge about various aspects of health and wellness, including nutrition, fitness assessment, exercise prescription, and lifestyle management.
Semester-2 Physical Education	CO1	<b>Sport and Exercise Science:</b> Students will explore the principles and theories of sports science, exercise physiology, biomechanics, sports psychology, and other related disciplines.
	CO2	<b>Teaching and Coaching Competencies:</b> Students will learn effective teaching and coaching methodologies, including lesson planning, instructional strategies, communication techniques, and leadership skill.
1	CO3	<b>Sports Management and Administration:</b> Students will understand the principles of sports management, organization, and administration, including facility management, event planning, and sports marketing.
Semester-3 Physical Education	CO1	Adapted Physical Education: Students will be introduced to the principles and practices of providing physical education opportunities for individuals with disabilities or special needs.
	CO2	<b>Professional Ethics and Standards</b> : Students will be familiarized with ethical considerations, professional standards, and legal issues relevant to the field of physical education.

	CO3	Lifelong Physical Activity and Wellness: Students will be encouraged to adopt and
Semester-4 Physical Education	CO1	promote a physically active and healthy lifestyle, <b>Research and Critical Thinking Skills</b> : Students will develop the ability to critically analyze and evaluate research in the field of physical education, and may be required to conduct their own research projects.
	CO2 CO3	<ul> <li>Proficiency in Teaching Physical Education: Students will demonstrate the ability to plan, implement, and evaluate physical education lessons for different age groups and skill levels, incorporating appropriate teaching strategies and instructional technologies.</li> <li>Knowledge of Physical Education Pedagogy: Students will acquire an understanding of the principles.</li> </ul>
Semester-5 Physical Education	CO1	<b>Theories of teaching physical education</b> , including curriculum development, assessment methods, and classroom management techniques.
	CO2	<b>Effective Communication and Leadership</b> <b>Skills:</b> Students will develop effective communication skills to instruct and motivate individuals and groups in physical education settings.
	CO3	Assessment and Evaluation: Students will learn various assessment techniques and tools to measure physical fitness levels, motor skills, and overall performance in physical education.
Semester-6 Physical Education	CO1	Adapted Physical Education: Students will gain knowledge and skills to adapt physical education programs and activities for individuals with disabilities or special needs.
	CO2	<b>Sports Coaching:</b> Students interested in coaching will develop competencies in sports-specific coaching, including game strategies, skill development, team management, and sports psychology.
	CO3	<b>Fitness Training and Conditioning:</b> Students will learn principles and techniques of fitness training and conditioning, including exercise programming and strength training.

PHYSICAL SCIENCES		
GEOGRAPHY		
Course Name		Course Outcomes
Semester-1 Physical Geography-I (Geomorphology)	CO1 CO2	Understanding of Geomorphic Processes: Students should gain a comprehensive understanding of the various processes that shape the Earth's surface, such as weathering, erosion, mass wasting, and deposition. They should be able to explain how these processes interact and contribute to landscape formation. Knowledge of Landforms: including mountains, valleys, plains, plateaus, river
		systems, glaciers, deserts, and coastal features. They should be able to identify and describe these landforms, and understand the processes responsible for their formation.
	CO3	<b>Application of Geomorphological Concepts:</b> This may involve studying the impact of human activities on landforms, analyzing natural hazards such as landslides and floods, assessing the suitability of land for various purposes (e.g.,
~ ~		agriculture, urban development), and contributing to environmental management and conservation efforts.
Semester-2 Physical Geography-II (Climatology and Oceanography)	CO1	<b>Understanding of Climate System:</b> Students should develop a thorough understanding of the Earth's weather and climate system, including the components of the system (atmosphere, hydrosphere,), elements and their controls.
2	CO2	<b>Knowledge of Climate Processes:</b> Students should gain knowledge of the fundamental processes that drive climate, such as solar radiation, atmospheric circulation, ocean currents, and the hydrological cycle. They should understand how these processes shape regional and global climate patterns.
	CO3	<b>Climate Data Analysis:</b> Students should acquire skills in analyzing climate data, including temperature, precipitation, wind patterns, and atmospheric composition. They should be able to interpret climate graphs, maps, and statistical analyses.
	CO4	Climate Change and Variability: Students should develop an understanding of climate

		change and its drivers including natural and
		change and its drivers, including natural and human-induced factors. They should be able to assess the impacts of climate change on various aspects, such as ecosystems, agriculture, water
		resources, and human societies.
2	CO5	<b>Understanding of Oceanic topography and</b> <b>Processes:</b> Students should gain a
	N.	comprehensive understanding of the physical, chemical, biological, and geological processes occurring in the oceans. They should learn about ocean currents, waves, tides, ocean-atmosphere interactions, marine ecosystems, and the formation of oceanic features.
	CO6	<b>Oceanic Circulation and Climate:</b> Students should develop knowledge of the global and regional patterns of oceanic circulation and their influence on climate.
	CO7	<b>Coastal Processes and Hazards:</b> Students should learn about coastal processes, including wave action, sediment transport, erosion, and deposition. They should understand the formation and evolution of coastal landforms and the hazards associated with coastal erosion,
	10	sea-level rise, storms, and tsunamis.
	CO8	Marine Resources and Conservation: Students should develop an understanding of the importance of marine resources and the need for their sustainable management and conservation. They should be able to evaluate the impacts of human activities, such as overfishing, pollution, and habitat destruction, on marine ecosystems and propose strategies for conservation and
Semester-3	CO1	responsible resource use. Understanding of Resource Distribution:
Geography of Resources and Environment		Students will gain knowledge about the distribution of natural resources across the globe, including minerals, energy sources, water, land, and biological resources.
	CO2	Environmental Awareness: Students will
	N. 1	develop an understanding of environmental
	1	issues and challenges, including pollution,
		deforestation, climate change, and biodiversity loss. They will explore the interrelationships between human activities and the environment.
	CO3	Resource Management: Students will learn
		about different approaches to resource management, including sustainable resource use,

		conservation strategies, and the concept of carrying capacity.
<b>C ( 1</b>	001	
Semester-4 Geography of Punjab	CO1	<b>Understanding of Punjab's Physical</b> <b>Geography:</b> Students will gain knowledge about the physical features of Punjab, including its location, climate, topography, rivers, and natural resources.
	CO2	<b>Socio-Economic Analysis:</b> Students will learn about the socio-economic aspects of Punjab, including population dynamics, urbanization, agriculture, industry, trade, and infrastructure.
	CO3	<b>Environmental Issues and Conservation:</b> Students will explore environmental issues specific to Punjab, such as water scarcity, pollution, deforestation, and land degradation.
	CO4	Knowledge of Punjab's Cultural Geography: Students will develop an understanding of Punjab's cultural diversity, including its language, religion, customs, traditions, and arts.
Semester-5	CO1	Knowledge of regional geography: Students
World Regional Geography-1		should acquire a comprehensive understanding of the physical, cultural, economic, and political characteristics of North America, South
	6	America, and Europe. This includes studying their landforms, climate patterns, natural resources, population distribution, economic activities, trade and transport systems.
	CO2	<b>Spatial thinking and map skills:</b> Students should develop spatial thinking skills and the ability to read and interpret maps. They should understand how to analyze and represent geographic information using maps and other spatial tools.
5	CO3	<b>Global connections and interdependencies:</b> Students should recognize the interconnectedness and interdependencies between North America, South America, and Europe, as well as their relationships with other
	V-4-VI	regions of the world.
Semester-6 World Regional Geography-2	CO1	<b>Comprehensive understanding:</b> Students should acquire a comprehensive understanding of the physical, cultural, economic, and political characteristics of Africa, Asia, and Australia. This includes studying their landforms, climate patterns, natural resources, population distribution, languages, religions, economic activities, and political systems.

	CO2	Awareness of regional challenges: Students should gain an understanding of the challenges and issues faced by the regions studied. This may include topics such as population growth, urbanization, migration, environmental concerns, economic inequality, political conflicts, and social issues. Students should be able to analyze the causes, impacts, and potential solutions for these challenges. <b>Cultural appreciation and diversity:</b> Students should develop an appreciation for the diverse cultures, traditions, and perspectives found within Africa, Asia, and Australia. They should demonstrate respect for different cultural practices and be able to analyze the impact of cultural diversity on regional development.
	PRACTICAL	GEOGRAPHY
Semester 1 & 2 CARTOGRAPHY	CO1	Students will understand the evolution of cartography from ancient times to the modern era, including key advancements, influential cartographers, and significant milestones in the field.
	CO2	Students will learn about various types of maps used in cartography, such as topographic maps, thematic maps, choropleth maps, physical maps, political maps, and navigational charts. They will understand the characteristics, purposes, and applications of each map type.
	CO3	Students will grasp the concept of scale in cartography and its importance in representing the relationship between the map and the real world. They will learn about different types of scales, including verbal, graphic, and representative fractions, and how to interpret scale on a map.
	CO4	Students will study the shape, size, and curvature of the Earth. They will explore concepts like latitude and longitude, geodetic datums, and coordinate systems.
	CO5	Students will learn techniques for representing relief, or the three-dimensional features of the Earth's surface, on a two-dimensional map. They will study methods such as contour lines, shading and hachures. They will gain practical skills in interpreting and creating relief representations on maps.

	CO6	Students will learn about the enlargement and reduction of maps through various techniques and will also learn about weather maps preparation and interpretation.
Semester 3 & 4 CARTOGRAPHY	CO1	<b>Understanding Map Design Principles:</b> Students will learn the fundamental principles of map design, including the selection and representation of appropriate data, use of color, symbols, and typography, and effective layout techniques to create clear and informative maps.
	CO2	<b>Proficiency in Cartographic Techniques:</b> Students will acquire practical skills in representing data on maps using various techniques, such as choropleth maps, dot density maps, proportional symbol maps, and flow maps. They will learn how to effectively communicate spatial patterns and relationships through cartographic representations.
	CO3	Knowledge of Statistical Diagrams and Graphs: Students will learn how to create statistical diagrams and graphs specifically designed for spatial data, such as histograms, pie charts, bar graphs and thematic graphs. They will understand how to interpret and analyze spatial data using these graphical representations.
	CO4	<b>Competence in Topographical Map</b> <b>Interpretation:</b> Students will develop the ability to read and interpret topographical maps, which provide detailed information about the physical features of an area. They will learn to identify contour lines, recognize landforms, understand map scale, and interpret map symbols and legends.
	CO5	<b>Proficiency in Plane Table Survey</b> <b>Techniques:</b> Students will be introduced to plane table surveying, a traditional method for mapping small areas. They will learn about the equipment used, such as a plane table, alidade, and measuring chains, and understand the basic principles of plane table surveying, including orientation, measurement, and sketching.
Semester-5 Map Projections	CO1	<b>Understanding Map Projection Concepts:</b> Students will gain a conceptual understanding of map projections, including the basic principles and mathematical transformations involved in converting the three-dimensional Earth onto a

		two-dimensional map.
	CO2	Students will learn about the different types of
		map projections, including cylindrical, conic,
		and azimuthal projections.
12	CO3	Students will become familiar with commonly
	1000	used map projection systems, such as the
		Mercator, Robinson, Lambert Conformal Conic,
	Street Street	and Polar Stereographic projections. They will
		learn about the properties, distortions, and
	CO4	suitable applications for each projection system. Map Projection Selection: Students will learn
	04	the factors that influence map projection
	100	selection for specific purposes and applications.
	1	They will understand the importance of
		considering factors such as the area of interest,
		map purpose, spatial extent, and distortion trade-
	1	offs when selecting an appropriate map
		projection.
	CO5	Understanding Coordinate Systems: Students
		will learn about different coordinate systems
		used in conjunction with map projections, such as latitude and longitude (geographic coordinate
	- Ph.	system) and Cartesian coordinate systems
	11.7	(projected coordinate system). They will
		understand how these coordinate systems relate
	- TV	to specific map projections.
Semester-6	CO1	Proficiency in Field Data Collection
Field Methods in Geography	10	Techniques: Students will gain practical
	1	experience in using various field data collection
	1 2	techniques, such as surveys, interviews,
	6.00	observations, and measurements. They will learn
	DO	how to design and conduct field surveys, select appropriate sampling methods, and collect
1	- V~	accurate and reliable data in diverse geographic
		settings.
6.5	CO2	Competence in Field Observation and
	1 7.3	Recording: Students will develop skills in
	16.33	making detailed field observations and
	N SP U	accurately recording qualitative and quantitative
	N. 1	data. They will learn techniques for recording
		field notes, maintaining a field diary, and
		capturing field sketches or photographs to document their observations.
	CO3	<b>Data Management and Quality Control:</b>
	005	Students will gain knowledge and skills in
		managing and quality-checking field data. They
		will learn how to organize and store collected

		data, perform data cleaning and validation procedures, and ensure data accuracy and reliability.
	CO4	<b>Integration of Field and Lab Work:</b> Students will understand the link between fieldwork and laboratory analysis. They may learn how to collect field samples, such as soil, water, or vegetation samples, and analyze them in the laboratory using appropriate techniques and equipment.
	CO5	Effective Communication of Fieldwork Findings: Students will develop skills in effectively communicating the findings of their fieldwork. They will learn how to write field reports, present their findings through maps, graphs, and visual aids, and effectively communicate the significance of their field data
	CEOCDADI	in oral and written formats.
Semester 3 & 4	CO1	HY HONOURS Understand the fundamental concepts of
The Nature of Geography	COI	geography: Students will gain knowledge and comprehension of the key concepts in
	1/2	geography, such as location, place, region, scale, space, and environment.
	CO2	<b>Develop spatial thinking skills:</b> Students will
	D	learn to think geographically and develop the ability to analyze and interpret spatial patterns and relationships.
1	CO3	<b>Comprehend the interconnections between</b> <b>physical and human geography:</b> Students will explore the interactions between the physical environment and human activities, including topics such as landforms, climate, ecosystems, population, migration, urbanization, and globalization.
Semester 3 & 4	CO1	Understand the basic concepts and theories of
Population Geography	1162	population geography: Students will gain
	(S)	knowledge and comprehension of key concepts such as population distribution, population growth, demographic transition, migration, fertility, mortality, and population pyramids.
	CO2	Analyze population patterns and trends: Students will learn to analyze and interpret population patterns and trends at various spatial scales, including global, regional, national, and local levels.

	CO3	<b>Study population dynamics:</b> Students will explore the factors influencing population change, including birth rates, death rates, fertility rates, migration patterns, and demographic processes.
	CO4	<b>Examine population structure and characteristics:</b> Students will understand the composition and characteristics of populations, including age structure, gender ratios, ethnic composition, socioeconomic factors, and health indicators.
	CO5	<b>Explore</b> population-environment interactions: Students will examine the relationships between population and the environment, including topics such as carrying capacity, resource consumption, environmental impact, and sustainability.
	CO6	<b>Investigate urbanization and rural-urban</b> <b>migration:</b> Students will study the processes and impacts of urbanization, including the causes and consequences of rural-urban migration, urban growth, and the formation of megacities.
	CO7	Analyze population policies and their implications: Students will evaluate population policies, both historical and contemporary, and assess their social, economic, and political implications.
	C08	Understand the implications of population change: Students will examine the social, economic, and environmental implications of population change, including issues such as aging populations, population growth in developing countries, population decline in developed countries, and the impact of migration on receiving and sending regions.
Semester 5 & 6 Applied Geography	COI	Knowledge of Geographic Concepts: Graduates will have a solid understanding of fundamental geographic concepts, such as location, place, region, spatial distribution, and spatial interaction. They will be able to apply these concepts to analyze various geographical phenomena.
	CO2	<b>Versatility and Interdisciplinary Approach:</b> Applied Geography combines knowledge from various disciplines such as geography, environmental science, economics and urban

		planning. This interdisciplinary approach equips students with a broad skill set, allowing them to tackle complex real-world problems from multiple perspectives.
	CO3	<b>Career Opportunities:</b> A degree in Applied Geography can lead to diverse career paths. They can work as GIS analysts, urban planners, environmental consultants, market analysts, transportation specialists, or researchers, among other roles.
	CO4	<b>Global Perspective:</b> Applied Geography promotes a global perspective by examining the spatial dimensions of social, economic, and environmental issues. Students gain insights into global interconnections, cultural diversity, and geopolitical dynamics.
	CO5	<b>Lifelong Learning:</b> Geography is a dynamic field, and Pursuing a degree in Applied Geography offers opportunities for lifelong learning and professional growth. Graduates can engage in continuing education, pursue advanced degrees, or stay updated with the latest developments in the field.
Semester 5 & 6 Agricultural Geography	CO1	<b>Understanding agricultural systems:</b> Agricultural geography provides a comprehensive understanding of various agricultural systems, including crop cultivation, livestock production, agro forestry, and sustainable farming practices.
	CO2	<b>Environmental sustainability:</b> They learn about sustainable farming techniques, conservation strategies, and land management approaches that promote ecological balance and mitigate the negative effects of agriculture on natural resources.
	CO3	<ul><li>Food security and production: Agricultural geography plays a crucial role in analyzing and addressing global food security challenges.</li><li>Climate change adaptation: Agricultural</li></ul>
	4	climate change adaptation. Agricultural geography equips graduates with knowledge on climate change impacts, vulnerability assessments, and adaptation strategies in agricultural contexts.
	CO5	<b>Policy and planning:</b> Agricultural geography graduates can contribute to policy formulation and planning related to agriculture.

	MATH	EMATICS
COURSE NAME		COURSE OUTCOMES
Semester-1 Calculus 1	CO1	Students will understand the fundamental concepts of differential calculus and their applications
3	CO2	They understand the basic concepts of integral calculus and their applications in problems. They also understand the relationship between
1	CO3	the derivative and the definite integral as expressed in both parts of the Fundamental Theorem of Calculus.
Semester-1 Differential Equations	CO1	Student will be able to solve first order differential equations utilizing the standard techniques for separable, exact, linear, homogeneous, or Bernoulli cases.
	CO2	Student will be able to find the complete solution of a non homogeneous differential equation as a linear combination of the complementary function and a particular solution.
Semester-1 Linear Algebra	CO1	Course demonstrates knowledge and understanding of topics including, but not limited to divisibility, prime numbers, quadratic reciprocity, Diophantine equations.
	CO2	Graduates can use mathematical induction and other types of proof writing techniques.
Semester-2 Calculus-II	CO1	Students Can determine asymptotes for rational expressions.
	CO2	They can locate the x and y intercepts, any undefined points, and any asymptotes
Semester-2 Partial differential equation	CO1	Course enables students to classify partial differential equations and transform into canonical form
	CO2	They can solve linear partial differential equations of both first and second order
/	CO1	It describes the various forms of equation of a plane, straight line, Sphere, Cone and Cylinder.
Semester-2 Analytic Geometry	CO2	Students can find the angle between planes, Bisector planes, Perpendicular distance from a point to a plane, Image of a line on a plane, Intersection of two lines
	CO1	Students will be able to understand the concept of limit for real functions and be able to calculate limits of standard functions and construct simple proofs involving this concept;
Semester-3	CO2	Student will be introduced to the concept of

Analysis 1		continuity and be familiar with the statements and proofs of the standard results about continuous real functions;
	CO3	Student will understand the concept of the differentiability of a real valued function and be familiar with the statements and proofs.
3	CO1	This course enables students to understand the reduction of force system in three dimensions to a resultant force acting at a base point and a resultant couple, which is independent of the choice of base of reduction.
Semester-3	CO2	This course enables students to learn about a nul
Mechanics	60	point, a nul line, and a nul plane with respect to a system of forces acting on a rigid body together with the idea of central axis
Semester-3 Linear Programming	CO1	The student is expected to learn about the basic principles of linear programming.
5 8	CO2	To have full knowledge of concepts involving the fundamental tools such as continuity and differentiability
	CO3	Students are able to reason rigorously in mathematical arguments. They can follow abstract mathematical arguments and write their own proofs.
Semester-4 Analysis-II	CO1	This course enables students to compute sums, products, quotients, conjugate, modulus, and argument of complex numbers
	CO2	They can write equation of straight line, circle in complex form
Semester-4 Numerical Method	CO1	Students will learn various techniques for numerical approximation, including interpolation, curve fitting, and numerical differentiation and integration.
10	CO2	Students will study methods for solving equations numerically, including root-finding algorithms such as the bisection method, Newton-Raphson method, and secant method.
Semester-4 Number Theory	CO1	Students will develop an understanding of prime numbers, composite numbers, and the fundamental theorem of arithmetic.
	CO2	Students will study modular arithmetic and its applications in Number Theory.
Semester-5	CO1	This course enables students to Recognize the
Abstract Algebra 1		concepts of the terms span, linear independence, basis, and dimension, and apply these concepts to various vector spaces and subspaces

	CO2	This course enables students to Use matrix algebra and the related matrices to linear
	CO3	transformations, They can identify and construct linear
		transformations of matrix.
Semester-5 Mathematical methods -I	CO1	This course enables students to understand the importance of algebraic properties.
	CO2	Graduates can extend group structure to finite permutation groups (Cayley's Theorem).
	CO3	This course enables students to understand the three major concrete models of Boolean algebra: the algebra of sets, the algebra of electrical circuits, and the algebra of logic.
Semester-5 Discrete Mathematics- I	CO1	Graduates can Learn about partially ordered sets, lattices and their types.
Discrete Wrathematics- 1	CO2	This course enables students to understand Boolean algebra and Boolean functions, logic gates, switching circuits and their applications.
Semester-6 Optimization Techniques	CO1	Students will gain an understanding of the fundamental concepts and principles of optimization.
	CO2	Students will study linear programming, which involves optimizing a linear objective function subject to linear constraints.
Semester-6 Mathematical method-II	CO1	This course enables students to introduce the concepts of partial differential equations, Calculus of Finite differences, statistics, Fourier series and Fourier transform. Identify real
	N	phenomena as models of partial derivative equations.
	CO2	This course enables students to solve real problems by identifying them appropriately from the perspective of partial derivative equations.
Semester-6 Discrete mathematics-II	CO1	The course aims at introducing the concepts of ordered sets, lattices, sub lattices and homomorphism between lattices.
	CO2	The course aims at introducing the concepts of ordered sets, lattices, sub lattices and homomorphism between lattices.
	CO3	The second part of this course deals with introduction to graph theory, paths and circuits, Eulerian circuits, Hamiltonian graphs etc.

ART AND CULTURE			
MUSIC VOCAL			
COURSE NAME		COURSE OUTCOMES	
Semester-1	CO1	Vocal Technique: Students will develop a	
MUSIC VOCAL		strong foundation in vocal technique, including	
		breath control, vocal range, tone production, and diction.	
	CO2	Musical Knowledge: Students will acquire a	
0.2	11	comprehensive understanding of music theory, including notation, scales, chords, and harmony.	
	CO3	<b>Performance Skills:</b> Students will develop their	
	000	performance skills through regular practice,	
		rehearsals, and public performances	
Semester-2	CO1	Students will build a diverse repertoire of vocal	
MUSIC VOCAL	1	pieces from different musical genres and historical periods.	
	CO2	Students will improve their ability to read music	
	002	notation and sight-sing melodies accurately.	
	CO3	Students will gain the knowledge and skills	
	001	necessary to teach vocal music to others.	
Semester-3 MUSIC VOCAL	CO1	Students will enhance their ability to critically listen to vocal performances and analyze them in	
WOSIC VOCAL	1	terms of technique, style, interpretation, and	
	16	artistic expression.	
	CO2	Students will learn how to collaborate	
	12	effectively with other musicians, such as pianists, guitarists, or other vocalists, in	
		ensemble settings.	
	CO3	Students will cultivate self-discipline,	
	1.2	perseverance, and a strong work ethic. They will	
	NO	develop their creativity, expression, and personal	
	- 200	identity as vocal artists, continually striving for improvement and growth.	
Semester-4	CO1	Students will demonstrate proficiency in vocal	
MUSIC VOCAL	001	technique, including breath control, posture,	
	0.1.1	resonance, articulation, and vocal range	
S. 1		expansion.	
	CO2	Students will develop the ability to interpret and express musical and lyrical content through	
	N.I	vocal performance, effectively conveying	
	~	emotions and storytelling.	
	CO3	Students will learn techniques for maintaining	
		vocal health, including proper warm-up and cool-down exercises, vocal hygiene, and injury	
		prevention.	
	1	r	

Semester-5 MUSIC VOCAL	CO1	Students will develop sight-singing skills, enabling them to accurately read and perform music notation.
1. Ca.	CO2	Students will acquire a solid foundation in music theory, including notation, scales, key signatures, intervals, chords, and basic harmonic
5		analysis. They will apply this knowledge to enhance their understanding of vocal music.
	CO3	Students will gain knowledge of vocal pedagogy principles, learning how to analyze and diagnose
	1111	vocal technical issues in themselves and others.
Semester-6 MUSIC VOCAL	CO1	Students will explore the use of technology in vocal music, including recording techniques, digital audio workstations, and basic editing.
	CO2	Students will develop essential professional skills such as time management, self-promotion, networking, and collaborating with other musicians.
	CO3	Students will build a diverse repertoire of vocal music, including selections from various genres, historical periods, and languages
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MUSIC INSTRUMENTAL		
COURSE NAME	COURSE OUTCOMES	
Semester-1 Music Instrumental	CO1	Students will develop advanced skills and technical proficiency in playing their chosen instrument(s) through regular practice, performance, and instruction.
	CO2	Students will gain a solid foundation in music theory, including reading and writing musical notation, scales, chords, and harmony.
1	CO3	Students will study the history of music, exploring various musical styles, genres, and periods.
Semester-2 Music Instrumental	CO1	Students will have opportunities to participate in various musical ensembles, such as orchestras, bands, chamber groups, or choir
	CO2	They will learn to collaborate with other musicians, develop ensemble skills, and perform repertoire in a group setting.
	CO3	Students will prepare and present solo performances, demonstrating their technical proficiency and musicality.
Semester-3	CO1	Students will explore the art of musical improvisation, developing their ability to

Music Instrumental		spontaneously create music within various styles and genres.
	CO2	They may also have opportunities to compose original music, applying their knowledge of music theory and instrumentation.
	CO3	Students will be introduced to music technology and its applications in music production, recording, and performance.
Semester-4 Music Instrumental	CO1	Students may have the opportunity to study the principles of music education and teaching methods.
	CO2	They will gain insights into effective instructional strategies and develop skills necessary to teach their instrument(s) to others.
	CO3	Students will develop their ability to critically listen to music, analyze musical structures, and articulate their interpretations
Semester-5 Music Instrumental	CO1	Students will be equipped with the knowledge and skills necessary for a career in music.
Wusie mist unentai	CO2	They may receive guidance on audition techniques, portfolio development, networking, and entrepreneurship in the music industry.
	CO3	Students will demonstrate a high level of competence in technique, musical expression, and interpretation.
Semester-6 Music Instrumental	CO1	Develop advanced technical skills on your chosen instrument(s) through regular practice and instruction.
	CO2	Demonstrate a high level of musical expression and interpretation through the instrument, conveying emotions and communicating effectively through music.
1	CO3	Gain knowledge of a diverse repertoire of music for your instrument, including works from different time periods, genres, and styles.
	(E)	

MEDICINE			
HOME SCIENCE			
Course Name		Course Outcomes	
Semester-1 Home Management &Hygiene	CO1	Studying home management provides opportunities for students to understand and shape preferred solutions to a range of challenges in their personal, family, community and work roles.	
	CO2 CO3	Provide opportunities for students to Balance work responsibilities with personal responsibilities and leisure. Take control of their health and develop health	
	05	promoting behaviours.	
Semester-2 Resource Management & Human Physiology	CO1	Provide opportunities for students to utilize design and technology relevant to families and households.	
	CO2	Demonstrate an understanding of the physiology and basic regulatory concepts related to the functioning of life processes.	
	CO3	Demonstrate an understanding of the physiology and basic regulatory concepts of the organ systems associated with this course and the mechanisms that allow the body to carry out those functions, and predict how a perturbation (e.g., disease, experimental manipulation) will alter function.	
Semester-3 Clothing	C01	To advance knowledge and pushing the boundaries in fashion, textiles and design.	
_	CO2	To discuss different types and styles of clothing.	
1	CO3	To analyze the roles of weather and occasion in clothing choice and explain the primary functions of clothing.	
Semester-4 Textiles	CO1	To understand the detailed structure of fiber, yarn and fabrics and to understand the properties of fiber, yarn and fabrics	
	C02	To understand the behavior of fiber, yarn and fabrics in end condition And to become able to design fiber, yarn and fabric having the required properties to meet the end-user requirements.	
	CO3	To identify faults & their causes & nature in fiber, yarn and fabrics	
Semester-5	CO1	Provide opportunities for students to develop related knowledge and skills such as those	

Food Science & Child Development		related to food preparation, food technology and food consumption
	CO2	Design, evaluate and make decisions related to food.
	CO3	To understand and take action to enhance human growth and development.
Semester-6 Nutrition, Diet Therapy &	CO1	Enable students to choose nutritious foods in a changing market place.
Child Care	CO2	To prepare nutritious foods and develop health promoting food behaviors.
	CO3	Demonstrate the use of the scientific method and quantitative reasoning in the field of child care.