Mahila Vikas Sanstha's
INDRAPRASTHA NEW ARTS COMMERCE & SCIENCE COLLEGE, AT POST NALWADI, DIST. WARDHA (M.S.)
Accredited 'B' by NAAC

Approved by government of Maharashtra
Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur
Recognised by U.G.C New Delhi under section 2 (f) & 12 (b) of UGC act 1956

Date:19/04/2024

DECLARATION

This is to declare that the information, reports, true copies and numerical data etc. furnished in this file as supporting documents is verified by IQAC and found correct. Hence this certificate.

IQAC

Coordinator
Internal Quality Assurance Cell
Indraprastha New Arts Commerce and Science College, Wardha

New Arts Comm. & Sci. College Indraprastha WARDHA

Principal

PRINCIPAL
Indraprastha New Arts, Commerce & Science College, WARDHA.

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Indraprastha New Arts Commerce and Science College ,Wardha

Sl No	Name of the Programme leading to Degree	Year of Introduction of Programme	Programme Duration	Current Affiliation Status Permanent/ Temporary
(I)	B.A. (Economics, English, English Literature, Fashion Design, Geography, History, Home Economics, Marathi, Marathi Literature, Philosophy, Political Science, Sociology, Supplementary English)	1996	Three years	**Permanent**
(II)	Bachelor of Commerce (BCom)	2006	Three years	**Temporary**
(III)	Bachelor of Science (Biotechnology, Chemistry, Computer Science, English, Hindi, Marathi, Mathematics, Microbiology, Physics, Supplementary English)	2002	Three years	**Temporary**
IV	Bachelor of Business Administration (BBA)	2004	Three years	**Temporary**
V	Bachelor of Commerce (Computer Application)	2001	Three years	**Temporary**
VI	Master of Science (Biotechnology)	2004	Three years	**Temporary**
VII	Master of Science (Chemistry)	2004	Three years	**Temporary**
VIII	Master of Science (Computer Science)	2001	Three years	**Temporary**

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(IX)	Master of Science (Mathematics)	2020	Two years	**Temporary**
(X)	Master of Commerce (English Medium)	2013	Two years	**Temporary**
(XI)	Master of Commerce (Marathi Medium)	2017	Two years	**Temporary**
(XII)	Master of Social Work (MSW)	2004	Two years	**Temporary**
(XIII)	Master of Arts (Marathi)	2000	Two years	**Temporary**
(XIV)	Master of Arts (Political Science)	2000	Two years	**Temporary**
(XV)	Master of Arts (Sociology)	2000	Two years	**Temporary**
(XVI)	Master of Arts (Home Economics)	2002	Two years	**Temporary**

Programme Outcomes (POs)

1. **Comprehensive Subject Understanding**: Learners acquire a broad understanding of the subject concepts, ensuring a well-rounded grasp of the key topics.
2. **Enhancement of Knowledge**: There is a noticeable improvement in learners' knowledge base, positively impacting their educational growth.
3. **In-depth Engagement**: Learners develop a serious concern for the subject matter and course content, indicating deeper intellectual engagement.
4. **Employability and Maturity**: The programme fosters a matured thought process in learners, enhancing their employability skills.
5. **Creativity**: A sense of creativity is cultivated, encouraging innovative thinking and problem-solving skills.
6. **Emotional Intelligence and Teamwork**: Learners gain emotional intelligence and develop the ability to work effectively in teams.

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7. **Contextual Understanding**: Learners gain insights into the development of various social, political, economic, psychological, and literary trends, providing a comprehensive backdrop to their primary field of study.

Programme Specific Outcomes (PSOs)

1. **Specialized Focus**: The programme facilitates a narrow focus towards a particular subject, enabling detailed learning and expertise.
2. **Opportunity Recognition**: Learners observe definite opportunities for professional and academic growth.
3. **Research Initiative**: Learners develop the capability and initiative to engage in research, contributing to academic and practical advancements.
4. **Evaluation of Trends**: Learners are equipped to analyze and compare the latest trends with traditional ones and form informed personal opinions.
5. **Confidence in Expression**: Learners become confident in expressing their thoughts on subject matters and related opinions clearly and effectively.
6. **Multilingual Communication**: Learners achieve the ability to communicate proficiently in at least one foreign language, enhancing global communication skills.
7. **Critical Thinking and Social Responsibility**: The programme promotes the critical development of thinking, leading to the formation of socially responsible individuals.
8. **Academic Linkages**: Learners develop strong academic linkages, fostering networking and collaborative opportunities.
9. **Textual Analysis**: Learners are capable of analyzing original texts, allowing for a deeper understanding and interpretation of primary sources.

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Course Outcome

Bachelor of Arts (BA)

	Compulsory English
CO1	Learners will be motivated through the life Sketches of Successful sportspersons.
CO2	Learners will understand the structure of sentences through prescribed grammar
CO3	Learners will be able to draft an impressive application and resume for a job
CO4	Learners will develop confidence in grasping and understanding the English language and its usage
	Supplementary English
CO1	**The Many worlds of Literature** 1. Students will be exposed to the values of life in the contemporary world because without a sense of values their education would of no use 2. Platform will be provided to young learners to acquaint themselves with literary language and theoretical dimension
CO2	**Macmillan selected short stories** 1. Students will develop the taste for reading through material which would acquaint them with a keen and subtle way in which the English language is used 2. Students will be provided with moral visions which will at as a permanent resource of their behavior in society
CO3	**Basics of Academic English** 1. The ability to read and understand the range of written texts including those central to academic studies will be developed in the students 2. Students will be exposed to varied strategies for reading that are appropriate for given purposes and discourses types 3. Students will be able to understand spoken English as encountered in classrooms, seminars, public lectures, social settings and in TV or WEB based programs 4. Students will be able to express ideas inn varied forms of speech and writing

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CO4	**The Spectrum** 1. Students will learn about the authors from the wide spectrum and different walks of life 2. Students understand the relevance of literary aspects in grasping scope and intricacies of language
	English literature
The students will be able	
CO1	To define the historical, socio-economic and cultural characteristics of the 16th and 17th century England
CO2	To summarize the writings of the selected poets and prose writers of the 16th and 17th century
CO3	To examine the characters and dramatic situations as depicted in the prescribed plays of Shakespeare
CO4	To identify the prescribed work of art as per the literary genres and social setting of the 16th and 17th century
	Sociology
By the end of the program the students will be able to	
CO1	Think critically by exercising sociological imagination
CO2	Question common wisdom, raise important questions and examine arguments
CO3	Collect and analyze data, make conclusions and present arguments
CO4	Think theoretically and examine the empirical data
CO5	Skillfully participate in research groups and market research firms
CO6	Serve in development agencies, government departments and projects
CO7	Competent to make a difference in the community
	Political science

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CO1	Understand what political theory is?
CO2	Understand the different approaches to political science like traditional and modern
CO3	Understand the overall evolution and development of political theory
CO4	Clear the air existing in the concepts like power, authority and legitimacy
CO5	Understand some of the important concepts like liberty, equality, rights, power and justice
	History
CO1	Students understand rise and establishment of Mughal dynasty in India
CO2	Students become acquaintance on the war of succession of Shahjahan, understand the Deccan Policy of Aurangzeb and get introduced to art and architecture in Mughal India
CO3	Students perceive knowledge on establishment of Maratha kingdom under the leadership of Chhatrapati Shivaji Maharaj, Maratha administration system and rule of Chhatrapati Sambhaji Maharaj
CO4	Students understand Marathas rule under Peshwas, their decline and consequential rise of English East India Company in India
	Economics
After completing this course	
CO	The students will be able to learn various concepts of GDP and relationship between National Income and welfare of people. They will further be able to understand factors determining domestic productivity, employment level of prices and interest rates. They will be able to apply basic concepts to analyze the situations of inflation and business cycles. Further they will be able evaluate the role of monetary and fiscal policy of Government to fight inflation or to stabilize business cycles. Lastly, they will have ability to understand the relationship between consumption function and investment in economy and shall be able to give suggestion for promoting investment.
	Home economics
CO1	Given the information about Self-employment, students will be able to start self-employment related to the field of Home Economics after completion of course

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CO2	Given the knowledge of Principles of housing, students will be able to make its use
CO3	Given the knowledge of different techniques of work simplification, students will be able to use these techniques to save energy, time and money
CO4	Given the detailed knowledge of different color schemes, students will be able to use it effectively in arts
CO5	Given the knowledge about consumers and their rights and laws, students will be able to make community aware about rights of consumers
CO6	Given the information of different types of furniture and how to take its care, students will be able to implement it at their homes
CO7	Given the information about Self-employment, students will be able to start self-employment related to the field of Home Economics after completion of course
	Geography
CO1	An understanding of geomorphology and landforms development
CO2	Application of geomorphology in various fields
CO3	To understand mechanism of geomorphic agents and processes for origin of relief features
CO4	Prominently it will develop skill among students to identify landforms and distinguish their process and agents
CO5	Students will be able to get fundamental information on Physical Geography
CO6	Students will be able to read and study Physical Maps of different regions
CO7	Students will study about Ecology and Ecosystem
	Fashion design
CO1	To impart knowledge how fabric is constructed
CO2	To impart knowledge of tools and equipment used for sewing and measuring
CO3	To impart technical knowledge of tasks such as pattern cutting and sewing

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CO4	To create knowledge of fashion trends
CO5	To create awareness of fashion

Bachelor of Commerce (B.Com)

Fundamentals of Accounting	
CO1	Given the information about the business transactions/each student will be able to identify the nature of transaction/events and will be able to record the financial transaction in the books of accounts i.e. Journal, lender, personal, real, nominal account and subsidiary books etc.by applying double entry system of accounting.
CO2	Given the trial balance of a sole trading concern along with the accompanied adjustments the students will be able to prepare the financial statement of a sole trader at the end of a financial year
CO3	Given the detail business transactions between the head office and branches, students will be able to prepare branch account, cash and credit sales, debtors and stock and debtor method of accounting
CO4	Given the trail balance along with the adjustment of a co-operative society a student would be able to prepare trading account, profit and loss account, profit and appropriation accounts and balance sheet of co-operative society as per state co-operative societies act 1960
CO5	Given the information of business receipts and payments student will be able to a simple cash book
Business economics I	
CO1	Students will be able to classify fundamental problems of an economy
CO2	Students will be able to use demand analysis and indifference curves analysis in given situation
CO3	Students will be able to apply various demand forecasting techniques
CO4	Students will be able to identify key elements in supply and isoquant curves
CO5	Students will be able t measure and comment on elasticity of demand for given data
Commercial firms	
CO1	Students will be able to relate the concepts of commercial firms

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CO2	Students will be able to interpret the concept of sole trader into practice
CO3	Students will able to analyze partnership firm and will gain knowledge about starting a partnership firm
CO4	Students will be gaining knowledge about comp and its various concept and will be able to gain knowledge about starting a company
CO5	Students will relate to the concept of start-ups and will be aware about starting a start-up and will be able to prepare project report
Digital Marketing	
CO1	The students will be able to understand the concept and develop the knowledge of digital marketing, e-commerce and m-commerce
CO2	The students will be able to understand the concept and will be equipped with the practical knowledge of creating electronic mail, websites, brochures
CO3	The students will be able to develop the knowledge about usage and procedures for handling various important digital marketing platforms for earning income
CO4	The students will be equipped with the practical knowledge of various important digital marketing platforms
CO5	The students will be able to develop the knowledge about recent trends for earning income through digital marketing
Business skills	
CO1	The students will be able to classify different forms of business and business activities
CO2	The students will be able to differentiate between management and administration and also will be able to formulate a plan for a given activity
CO3	The students will be able to distinguish types of organizations and will also able to decide actions for a given situation
CO4	The students will be able to select leadership skills in a group and demonstrate direction skills to achieve objectives
CO5	The students will be able to demonstrate the roles, skills and functions of management required for a business activity
MS Office	
CO1	The students will be able to create and manage word documents required for formatting. The students will be able to compose word documents and operate relevant features and tools of MS word

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CO2	The students will be able to perform operations like creating, storing, formatting data using different excel formatting tools and features
CO3	The students will be able to perform calculations using functions and present the data visually using charts and graphs
CO4	The students will be able to create and design professional presentation using different features and tools of PowerPoint
CO5	The students will be able to prepare and appraise professional business data, document and presentation

Bachelor of Business Administration (BBA)

Evolution of Business	
CO1	The students will be able to relate the reasons of World war and its effects on global business environment
CO2	The students will be able to describe cold war and OPEC crises on international business
CO3	The students will be able to differentiate the Indian business structure pre- and post-independence
CO4	The students will be able to analyze the contribution of various sectors in Indian business
CO5	The students will be able to summarize Global business and Indian business scenarios
Aptitude Development I	
CO1	The students will be able to practice effective communication in real life situations
CO2	The students will be able to recognize problem solving skills
CO3	The students will be able to infer logical reasoning techniques
CO4	Students will be able to explain and infer data analytical techniques
CO5	Students will be able to prepare themselves for various competitive exams and different placement aptitude test as well
Basics of MS Excel	
CO1	Students will be able to perform operations using Excel tabs and tools effectively

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CO2	Students will be able to reorganize the data with the help of Excel and compute various statistical parameters using Formulas and Functions
CO3	Students will able to demonstrate ability to work effectively on data sheet with the knowledge of Excel
CO4	Students will demonstrate the ability to construct pivot tables and perform operations on given data
CO5	Students will demonstrate the ability to present data in charts and graphs using Excel skills
Financial Accountancy using Tally	
CO1	Student will acquire knowledge and understanding of basics of financial accounting and computerized accounting
CO2	Given the day wise transactions of firm, the students will be able to prepare ledger and group and will be able to create various vouchers using tally software
CO3	Given the details about the day wise transactions of a firm the students will be able to create bill wise detail based on stock
CO4	Given the details about transactions, students will be able to prepare profit and loss A/C report and balance sheet
CO5	Given the situation and data students will be able to perform operations in Tally
Foundation of Managerial effectiveness	
CO1	The students will be able to relate the concept of skill development with managerial skills
CO2	The students will be able to interpret the problem-solving technique with the help of Johari window
CO3	The students will be able to analyze group behavior and explain of SWOT analysis
CO4	The students will be able to differentiate between different structures of organization and classify between empowerment and delegation
CO5	The students will be able to point out the effective managerial traits and ways to improve them

Bachelor of Commerce in Computer Application (BCCA)

MS Office (IT)

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CO1	Students will be able to create and manage word documents with required formatting. Students will be able to compose word documents and operate relevant features and tools of MS Words
CO2	Students will be able to perform operations like creating, storing, formatting data using different excel formatting tools and features
CO3	Students will be able to perform calculations using functions and present the data visually using charts and graphs
CO4	Students will be able to create and design professional presentation using different features and tools of PowerPoint
CO5	Students will be able to prepare and appraise professional business data, document and presentation
Fundamentals of Computer	
CO1	Students will be able to understand and use information of various components of Computer
CO2	Students will be able to use the knowledge of peripheral devices for effective working. Students will be able to perform calculations based on various number systems
CO3	The students will be able to analyze and differentiate various modes of data transmission and will also be able to decide the choice of communication channel for given situation
CO4	Students will be able to apply the knowledge of system software and application software in effective manner
CO5	Students will be able to understand and use information of various functions and features of operating system
Professional Ethics and Human Values	
CO1	Students will be able to outline the importance of values in life and explain the concept of o-existence of the self and the body
CO2	Students will be able to discuss the basics of values in human-human interaction
CO3	Students will able to critically evaluate the different theories of ethics
CO4	Students will be able to highlight the role of code of conduct in ethical behavior in professional life
CO5	Students will be able to analyze the issues in professional ethics
Personal Well being	

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CO1	The students will be able to identify importance of food and nutrition for personal health
CO2	The students will be able to relate stress factors affecting personal health
CO3	The students will be able to demonstrate various exercises related to yoga
CO4	The students will be able to prepare financial plan for the future
CO5	The students will be able to combine various elements of personal wellbeing in their life
Practical of Tally-I	
CO1	Given the details about the company student will be able to create company and also able to do some alteration according to the requirement
CO2	Given the day wise transactions of firm, the students will be able to prepare ledger and group and will be able to create various vouchers using tally software
CO3	Given the details about the day wise transactions of a firm the students will be able to create bill wise detail based on stock
CO4	Given the details about transactions, students will be able to prepare profit and loss A/C report and balance sheet
CO5	Given the details about cash and bank transactions for a specific period, students will be able to prepare bank reconciliation on statement

Bachelor of Science (Chemistry/Biotechnology/Microbiology)

Chemistry	
Inorganic chemistry	
CO1	Details about quantum numbers Also factors affecting and trends in chemical properties like IonizationPotential, Electron affinity and Electronegativity
CO2	Learn, Lattice energy and Born- Haber cycle and Formation of Hydrogen molecule with Potential energydiagram by of VBT.
CO3	Should learn s- block elements, Ionization potential, reducing properties Application of s-block elements(Na, K and Ca) in biosystem. And structures, bonding and applications of Xenon fluorides (XeF2, XeF4,XeF6).Structure and bonding in XeOF2 and XeOF4.

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CO4	Students Practice of p-block elements Oxides: Structure of P2O3, P2O5, Oxyacids of Phosphorous: Structureof H3PO3 and H3PO4 And Simple tests for the detection of food adulteration in tea leaves and coffee, spices (turmeric and chili powder) and, milk.
Physical chemistry	
CO1	To impart the students' concepts of thermodynamics and thermochemistry.
CO2	To understand the basics of Gaseous state, ideal gas and real gas.
CO3	To provide an insight into the liquid state and properties of liquid state.
CO4	To get an overview about the adsorption and colloidal state

Biotechnology

Microbiology

On completion of this course students will be able to

CO1	Recognize the contribution of major scientist in the development of microbiology and will be understand and apply the principle of various types of Microscope and staining techniques.
CO2	Identify and describe bacterial morphology and subcellular structure including genetic material and its endospore generation.
CO3	Understand the classification of microorganisms through Bergey's manual and describe general characteristics and classification of viruses

Macromolecules

On completion of this course students will be able to

CO1	Describe the structure and function of DNA and RNA in the cell
CO2	Understand the concept of Gene and describe the structure and function of chromatin
CO3	Recognize the structure of amino acid and classifies them on the basis of physicochemical properties and comprehends the primary structure of the protein
CO4	Describe the three-dimensional structure of proteins, including the significance of amino acid R-groups and their impact on the three-dimensional structure of proteins.

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Microbiology	
Fundamentals of Microbiology	
On completion of this course students will be able to	
CO1	Understanding of the different aspects of microbial growth and the concept of pure culture
CO2	Understand and apply the concept of microbial control and the mechanism of cell injury.
CO3	Identify and summarize the structure and function of eukaryotic sub-cellular structures.
CO4	Understand the structure and function of Plant cell walls and cytoskeleton and can reflect on the process in cell division. And the activity of muscle and nerve cell structure
Basic techniques in Microbiology	
On completion of this course students will be able to	
CO1	Understand and illustrate the principle and functioning behind spectrophotometry
CO2	Enumerate the application of UB -Visible spectrophotometry and comprehend principles of other spectrometric methods
CO3	Understand and illustrate the principle and functioning behind Chromatography. CO4 Distinguish between different types of chromatography techniques

Bachelor of Science (Computer Science)

Programming in C	
CO1	Students will gain the skills to design and implement algorithms. They will learn how to break down a problem into smaller subproblems and use control structures to create efficient and logical solutions.
CO2	Students will develop skills in algorithmic thinking and problem-solving, enabling them to design efficient algorithms and implement them.
CO3	Students will grasp the fundamental concepts of programming, such as variables, data types, operators , control structures (e.g., loops and conditionals), functions, and arrays. They will learn how to write simple programs using these elements
CO4	Students will become familiar with the syntax and semantics of the C

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	programming language, including the proper use of statements, expressions, and declarations.
CO5	Students will develop the skills to write C programs to solve various computational problems. They will learn how to write code that is clear, efficient, and follows best programming practices
CO6	Students will develop the skills to write C programs to solve various computational problems. They will learn how to write code that is clear, efficient, and follows best programming practices
CO7	Students will grasp the concept of arrays as a collection of elements of the same data type stored in contiguous memory locations. They will learn how to declare and initialize arrays, as well as access and manipulate individual array elements
CO8	Students will learn about the differences between unions and structures in terms of memory allocation and member access. They will understand that unions store only one member at a time, whereas structures store all members simultaneously.
Introduction to Information Technology	
CO1	Students will understand the basic principles of Information Technology like computer-based system and component to meet desired needs
CO2	Understand fundamentals of the data/signal transmission over communication media
CO3	Understand the transmission media and their standards to practice different protectionschemes at individual and team level.
CO4	Explore the concept of network topology, and different ways of communication between PCs using Wi-Fi, Bluetooth and Infrared devices. And understand the architecture ofpeer-to-peer and client/server.

Bachelor of Science (PCM)

Physics	
Properties of Matter and Mechanics	
CO1	Understanding Elasticity; Hooke's Law of Elasticity, Numerical based on topics.
CO2	Understand Kinematics of moving fluids; Variation of viscosity with temperature.Surface tension, Numerical
CO3	Understanding concept of surface tension, Newton's laws of motion and Co-ordinate systems
CO4	Understand Motion of a Rigid body; rotational motion, Numerical based on topics.

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Electrostatics, Time varying fields & Electric Currents	
CO1	The concept of charge should be known along with the properties of electrical forces. Understand familiar forces such as gravitation, Coulomb's Law, along with the principle ofsuperposition, calculation of electrostatic forces from a given charge distribution
CO2	Understand the concept of dielectric constant and polarization in dielectric materials.Summarizing various types of polarization of dielectrics. Interpreting Lorentz field and Claussius- Mosotti relation in dielectrics. To understand the basic concept of Capacitor
CO3	To distinguish between static and time -varying fields. Gain knowledge of fundamentallaws and principles of electromagnetic induction. To explain electrical current, circuits, construction and their use and network theorems
CO4	Knowing and Analyzing the Concepts of Alternating Currents and theory of transformer, its losses and uses. Numericals based on topic.

Chemistry	
Inorganic chemistry	
CO1	Details about quantum numbers Also factors affecting and trends in chemical properties like IonizationPotential, Electron affinity and Electronegativity
CO2	Learn, Lattice energy and Born- Haber cycle and Formation of Hydrogen molecule with Potential energydiagram by of VBT.
CO3	Should learn s- block elements, Ionization potential, reducing properties Application of s-block elements(Na, K and Ca) in biosystem. And structures, bonding and applications of Xenon fluorides (XeF2, XeF4,XeF6).Structure and bonding in XeOF2 and XeOF4.
CO4	Students Practice of p-block elements Oxides: Structure of P2O3, P2O5, Oxyacids of Phosphorous: Structureof H3PO3 and H3PO4 And Simple tests for the detection of food adulteration in tea leaves and coffee, spices (turmeric and chili powder) and, milk.
Physical chemistry	
CO1	To impart the students' concepts of thermodynamics and thermochemistry.
CO2	To understand the basics of Gaseous state, ideal gas and real gas.
CO3	To provide an insight into the liquid state and properties of liquid state.
CO4	To get an overview about the adsorption and colloidal state

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Mathematics	
Elementary Mathematics	
CO1	Apply De Moivre's Theorem to find powers and roots of complex numbers, and solve polynomialequations involving complex roots.
CO2	Analyze and manipulate matrices using various techniques, including determining the rank of a matrix, transforming matrices to row canonical form, solving systems of equations, and applying the Cayley- Hamilton theorem to derive propertiesof a matrix.
CO3	Students will gain a comprehensive understanding of various theorems and techniques for analyzing and solving equations, including relations between roots andcoefficients, Descartes' rule of signs, Horner's process, transformation of equations, reciprocal equations, and solutions for cubic and biquadratic equations.
CO4	Students will be able to understand and apply the division algorithm, greatest common divisor, Euclidean algorithm, Diophantine equations, the fundamental theorem ofarithmetic, properties of congruence, linear congruence, and the Chinese remainder theorem.
Differential andIntegral Calculus	
CO1	Students will be able to find out expansion of various functions
CO2	Students can find limit and continuity of functions of two variables
CO3	Students will able to solveproblems of maxima and minima offunctions of two variables.
CO4	Students learn how to find nth derivative of functions by using reduction formulae.

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Master of Arts (Political Science)

Ancient & medieval Indian Political thought	
CO1	Students will understand the wide spectrum of ancient Indian political thought
CO2	They will realize the in depth philosophical and practical holistic approach in grained in ancient political thought
CO3	Students will get knowledge of different political institutions and their comprehensive role in the society
Indian government and politics	
CO1	This paper will make students know about the Indian constitution and its actual implementation
CO2	Students will be equipped with knowledge of all the institutions that come under the constitution
CO3	Students will be able analyze the co-relation between functioning of the political offices and impact of non-political forces on them
International relations	
CO1	This paper will provide knowledge about present world politics and interdependence of the sovereign
CO2	Students will get insight into the major issues in the world since the 2nd world war
CO3	Students will understand working of world organizations and their respective role in global politics
Political theory	
CO1	The students are given clear idea about the concepts of contemporary political theory
CO2	After completing post-graduation in the department students go for higher education
CO3	This course will provide conceptual understanding about major traditions of political theory. After completion of course students will be able to understand the idea of policy framing
International law	
CO1	Students will study one of the most ancient concepts viz; international law and its development into a specialized branch of study
CO2	This paper will give knowledge about vast compass of the subject with all its theoretical perspective

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CO3	This paper will enable students to analyze the present complex nature of international law and its implementation
Public opinion and survey research	
CO1	The students will assimilate various techniques of survey. He will understand the value of public opinion
CO2	This will further help in formation of policies
CO3	Students will be equipped to get employment as researcher
Research methodology	
CO1	Students will realize that research is the basic and most crucial aspect of development in any field
CO2	They will comprehend the ingrained procedure of scientific research
CO3	They will understand basic techniques and new methods of research in social science

Master of Arts (Sociology)

Classical sociological thinkers	
CO1	Students develop critical *thinking and analytical skills*
CO2	To learn to analyze complex social phenomenon, understand the underlying structures of society and critically evaluate different perspectives on social issues
CO3	To enable students to approach social problems and phenomenon with a deeper understanding and the ability to analyze them from multiple angles, leading to informed decision making and problem solving in various personal, academic, and professional contexts
Perspectives on Indian society I	
CO1	To develop cultural awareness and sensitivity towards diverse social perspectives and experiences in India
CO2	Students will gain insights into the complexities of Indian society, particularly with regards to tribes, caste, gender, family, and kinship
CO3	enable students to understand and appreciate the diverse cultural practices, beliefs and social structures that exist in India
Constitution and social change in India	
CO1	To develop students' constitutional literacy and understanding

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CO2	To critically analyze the constitutional provisions related to education, employment, health, social justice, individual rights, minority rights and the rights of weaker sections
CO3	Students will develop a deep appreciation for the constitutional framework that guides the social, economic and political aspects of Indian society equipping them to participate actively in democratic processes and advocate for social change
Sociology of religion I	
CO1	To develop a comprehensive understanding of the sociology of religion as a scientific discipline
CO2	Explore the relationship between religion and morality, religious belief and values and gain insights into different ideologies such as theism, atheism, secularism and fundamentalism
Family, kinship and marriage	
CO1	To develop a comprehensive understanding of family, kinship and marriage theories and concepts including structural functionalism, alliance theory and cultural approaches. Examine constitutional laws related to inheritance, succession and authority within families
CO2	To analyze power dynamics, gender relations and changing gender roles within families. Investigate the conditions of children, youth and families with a focus on the influence of gender on power dynamics
CO3	Study the intersection of family, laws and violence including domestic violence, crimes against women and honor killings within the context of marriage, family and caste dynamics
Gender and society	
CO1	To develop a comprehensive understanding of the social construction of gender, including the role of patriarchy and socialization in shaping gender norms and expectations
CO2	Explore the dilemmas associated with gender such as the tension between biology and gender, equality and difference and the public and private spheres
CO3	To examine different feminist theories including liberal feminism, Marxist feminism, radical feminism and black feminism
Sociology of social movement	
CO1	To develop a comprehensive understanding of social movements by exploring reform, revival, revolutionary, protest and counter movements and to examine theories of social movements
CO2	To analyze the relationship between social movements and social transformation
CO3	Study the scenario of social movements in India, examine leadership, organizations and role of ideology
CO4	Analyze different types of ideology associated with social movements and their

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	impact on guiding movements and creating social unrest
Sociology of education	
CO1	To examine the influence of gender, caste, and class on education and recognize the significance of studying the sociology of education in understanding social dynamics
CO2	To analyze traditional perspectives of education
CO3	To understand the key concepts and theories proposed by these sociologists in relation to education and to explore new theoretical perspectives in the sociology of education
Quantitative method in social research	
CO1	To develop a comprehensive understanding of social research including its meaning, nature and ethical considerations
CO2	Explore the formulation of research problems, research design, sampling techniques and data collection methods
CO3	Understand the fundamentals of quantitative and qualitative research approaches
CO4	To gain practical skills in data analysis and interpretation for both quantitative and qualitative research

Master of Arts (Home Economics)

Resource management	
CO1	To utilize knowledge regarding managerial skills
CO2	To understand and utilize the knowledge of decision making in their daily life
CO3	To develop insight regarding values in the family
CO4	To clear the concepts of the role of woman in family life cycle
CO5	To create awareness in the students regarding family budget saving and investment facilities
CO6	To create awareness among students regarding reality and problem of community services
CO7	To understand stress and its management
Human development	
CO1	Given knowledge about domains of Human development and psychological tests students will be able to work with psychologists for testing

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CO2	Given knowledge about different methods of child study students will be able to conduct research in the field of child research
CO3	Given the knowledge about learning theories in education students will be able to implementation of theories in the field of education
CO4	Given the knowledge about personality development students will be able to conduct personality development workshops
CO5	Given the knowledge about theories of intelligence and creativity students will be able to conduct workshops of creativity for young children
Textile and clothing	
CO1	Receive detailed knowledge about the properties of different fibers and their use in day-to-day life
CO2	Gain detailed knowledge of manufacturing process of natural and manmade fibers and will be able to identify different types of yarns
CO3	Use different methods of fabric construction
CO4	Identify the differences in woven and nonwoven fabric
CO5	Prepare different types of fabric finishes
CO6	Prepare different types of dyes by using dying techniques and application of suitable dye on different types of fabric
CO7	Attain skills on various printing techniques
CO8	Prepare an album of origin of various traditional Indian textiles
Research methods and statistics	
CO1	Discuss the importance of research, research process and types of research and their use
CO2	Recognize the main characteristics of qualitative and quantitative research design
CO3	Formulate a research problem, frame objective, set hypothesis and a research design applicable to address the problem
CO4	Design a good quantitative purpose statement and good quantitative research questions and hypothesis
CO5	Define the meaning of a variable and to be able to identify independent, dependent and mediating variables
CO6	Discuss about importance of statistics in research and should be able to use the basic statistics i.e. mean, median, mode, standard deviation
CO7	Appropriately apply the tools of descriptive statistics e.g. frequency distributions, measures of central tendency and measures of variability to organize, summarize and describe research data
Early childhood care and education	
CO1	Learn aims and objectives of early childhood and care education based on child development

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CO2	Enhance the qualities of nursery (pre-primary) level teachers
CO3	Prepare a plan of play way approach for the holistic development of children
CO4	Understand the growth and development of child
CO5	Understand the principles of program planning and acquire the skill set in planning and administration of ECCE center
CO6	Prepare themselves to work in the field of ECCE
Residential interior design	
CO1	Given the information about element and principles of design, interior designing terminology, students will be able to make use of elements and principles of design in interior designing
CO2	Given the information about materials and methods of interior construction students will be able to make use of materials and methods of interior
CO3	Given the knowledge of fixtures and finishes and lightings, students will experience and learn by visiting actual interior construction sites
CO4	Given the knowledge of accessories in interior designing, students will be able to work in the field of gardening, sculpture, paintings, flower arrangement and start their self-employment
CO5	Given the detail information about designing of various spaces, students will be able to prepare work plan of living space, kitchen, sleeping space, child's room bathroom etc.
Research methodology	
CO1	Design a good quantitative purpose statement and good quantitative research questions and hypothesis
CO2	Define the meaning of a variable and to be able to identify independent, dependent and mediating variables.
CO3	Distinguish between a population and a sample
CO4	Know the various types of quantitative sampling and general consideration in determination of sample size
CO5	Prepare the steps in the process of quantitative data collection and appropriate selection of method to be used
CO6	Adopt the techniques of coding, various types of classification tabulation, interpretation and its application in research

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CO7	Interpret the diagrams and graphs
CO8	To write a research paper
CO9	Appropriately apply inferential statistical procedures e.g. t-test, correlation, ANOVA, Chi square to test research hypothesis and interpret the results

Master of Arts (Marathi)

प्राचीन ि मध्ययुगीन मराठी सहहत्याचा इनतहास	
At the end of the course students would be able to	
CO1	प्राचीन धमापंथ संप्रदाय ि ि्ाङ् मय यांचे परस्पर संबंध समजून घेतो,
CO2	राजकीय श्स्थत्यंतरे आणि मराठी साहहत्य ननसमातीतील संबंध जाि्ून घेतो.,
CO3	मराठी संत परंपरेचे योगदान ि महत्ि जाितो .
साहहत्यशास्त्र	
At the end of the course students will be able to	
CO1	साहहत्यशास्त्राचे स्िरुप ि संकल्पना जाि्ून घेतो,.
CO2	भारतीय ि मराठी साहहत्यमीमांसकांच्या संदभाात विकास जडिघडननची जाि होते,
CO3	प्रमुख साहहत्यप्रकारचे स्िरूप ि ि्ैसशस्थे याचे आकलन होते,
CO4	शब्दशश्तत,रससंकलपिा याची समज ि्ाढते.

नाटक (विशेष ि्ाङ्मय प्रकार)	
At the end of the course students will be able to	
CO1	नाटक ि्ाङ्मय प्रकाराची संकल्पना ि जडिघडि जाि्ून घेतो,.
CO2	मराठी नाट्य योगदान ि महत्ि जाितो ,.
CO3	विविध प्रकारच्या नाटकांचा संबंध जाि्ून घेतो,.
CO4	विविध कालखंडातील नाटकांची जडिघडि जाि्ून घेतो

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वि.ि◌ा.सशारिडकर (विशेष लेखकाचा अभ्यास)	
CO1	एकाच लेखकाचे ि◌ाङ् मयीन आकलन लेखकाच्या व्यशततमत्त्ि◌ाची जडिघडि समजाऊन घेता येते
CO2	लेखकाचा काळ ि त्याची साहहत्यननसमाती यातील संबंधाचा शोध ि लेखनातील कालतत्ि याचा मागोि◌ा घेतो .
CO3	साहहत्य ननसमातीतील ि◌ैविध्य त्यातील लेखकाचे स्थान ि ि◌ाङ् मयीन योगदान समजाऊन घेतो

Master of Commerce (M.Com)

CO1	Apply knowledge of theories and procedures related to accountancy, economics, management and other allied areas to solve problems of business organizations
CO2	Foster analytical and critical thinking abilities for data based decision making
CO3	Ability to develop value-based leadership ability
CO4	Ability to understand, analyze and communicate global, economic, legal areas of business
CO5	Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to a team management

Master of Science in Chemistry (MSc Chemistry)

Inorganic Chemistry	
At the end of the course students would be able to	
CO1	Predict the nature of bond and its properties through various electronic structural methods; bonding models
CO2	Design new coordination compounds based on a functional understanding of their electronic properties
CO3	Develop the possible catalytic pathways leading to desired products
CO4	Apply the principles of transition metal coordination complexes to derive reaction mechanism
Physical chemistry	
At the end of the course students will be able to	

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CO1	Understand, analyze and exercise the principles of classical thermodynamics in various applications
CO2	Understand and execute the quantum mechanical problems and their applications
CO3	Understand the concept of adsorption and its application in surface chemistry
CO4	Analyze and understand the characterization techniques for polymer
CO5	Understand the principles of chemical kinetics and their applications in chemical dynamics

Analytical Separation Techniques	
At the end of the course students will be able to	
CO1	Understand various separation technique based on sample and target analyte
CO2	Elaborate he working principles of various separation techniques
CO3	Apply logic behind working and applicability of each technique
CO4	Identify most suitable separation tool resolution of mixtures
CO5	Develop separation methods for multicomponent analysis
CO6	Evaluate efficiency of separation of mixture based on analysis parameters

Research Methodology	
At the end of the course students will be able to	
CO1	Understand what research is and what is not
CO2	Raise awareness of crucial aspects of the nature of knowledge and the value of scientific method
CO3	Introduce the concept at the heart of every research project the research problem and to discuss what a researchable problem is
CO4	Evaluate literature, form a variety of sources, pertinent to the research objectives
CO5	Identify and justify the basic components of the research framework, relevant to the tackled research problem
CO6	Explain and justify how researchers will collect research data

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CO7	Discuss how to cite sources and justify this choice
CO8	Put forward a credible research proposal
CO9	Warn the common mistakes in the field of research methodology

Master of Science in Biotechnology (M.Sc. Biotechnology)

Cell Biology, Enzymology and Genetics	
CO1	Comprehend and correlate the structure and function relationship of cells, sub-cellular organelles, cellular communication and cell cycle
CO2	Realize the basic concepts of enzymology and enzyme kinetics
CO3	Gain familiarity with the concepts of enzyme engineering and immobilization
CO4	Develop proficiency in the fundamental molecular principles of genetics and basics of genetic mapping
Biomolecules	
CO1	Gain insights into the biochemistry and diversity of carbohydrates and their involvement in biological functions
CO2	Comprehend the biochemistry and diversity of lipids and lipoproteins
CO3	Recognize the importance pf protein structure fuction and relationship and interactions
CO4	Demonstrate the understanding of nucleic acid structure and its dynamics
Nanotechnology	
CO1	Gain insights into multidimensional attributes of nanotechnology
CO2	Appreciate the importance of microelectronics in the field of life sciences
CO3	Develop new and existing cross disciplinary technologies
CO4	Demonstrate the knowledge application of nanotechnology for improving our everyday life
Research Methodology	
CO1	Appreciate and recognize the methods to arrive at research objectives

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CO2	Demonstrate the understanding about research and experimental designing
CO3	Apply the principles of biostatistics in biotechnology research for validated depiction of research data
CO4	Acquire the knowledge of practices used for scientific reading, writing and presentation

Master of Science in Mathematics (M.Sc. Mathematics)

Algebra	
CO1	Foundational knowledge : Students will be able to update their basics of group theory, discuss on various topic of group in algebra
CO2	Elementary skills : students will be able to understand the importance of solvable and nilpotent, alternating groups
CO3	Basic analytic skills : the main outcome of the course is to equip students with necessary basic analytic skills for problem solving on Sylow theorem
CO4	Application : By applying the principles of basic theorems of algebra through the course curriculum, students can solve a variety of logical problems in science and engineering
Topology	
CO1	Foundational knowledge : Students will learn the basic concepts of topological space, metric spaces, product topology, closed sets, limit points and continuous function. Students will also get to know about interrelating these concepts with one another
CO2	Elementary skills: students will study about the connectedness of topological spaces. They will get to know about connectedness on real line with standard examples
CO3	Basic analytic skills : students will study about covering spaces and relate it with compactness of the spaces. Students will gain analytical skills to relate compactness on real line, limit point compactness and local compactness

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CO4	Application : students will be able to think critically and apply the knowledge of topological spaces in the study of analysis and will be able to prove the standard results regarding countability and separation axioms
Ordinary differential equation	
CO1	Foundational knowledge : Students will be able to study basic notions in differential equations and use the results in developing advanced mathematics
CO2	Elementary skills: students will able to solve problems
CO3	Basic analytic skills : students will study about covering spaces and relate it with compactness of the spaces. Students will gain analytical skills to relate compactness on real line, limit point compactness and local compactness
CO4	Application : students will be able to think critically and apply the knowledge of topological spaces in the study of analysis and will be able to prove the standard results regarding countability and separation axioms
Research Methodology	
CO1	Appreciate and recognize the methods to arrive at research objectives
CO2	Demonstrate the understanding about research and experimental designing
CO3	Apply the principles of biostatistics in biotechnology research for validated depiction of research data
CO4	Acquire the knowledge of practices used for scientific reading, writing and presentation

Master of Science in Computer Science (M.Sc. Computer Science)

Artificial Intelligence	
CO1	Evaluate Artificial Intelligence (AI) methods and describe their foundations
CO2	Apply basic principles of AI in solutions that require problem solving, inference, perception, knowledge representation and learning
CO3	Demonstrate knowledge of reasoning and knowledge representation for solving real world problems
CO4	Analyze and illustrate how search algorithms and planning play vital role in problem solving

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Compiler Construction	
CO1	Demonstrate the knowledge of Lexical analysis
CO2	Derive an appropriate model of code generation
Computer Architecture and Organization	
CO1	Provide fundamentals on machine instructions and addressing modes
CO2	Comprehend the various algorithms for computer arithmetic
CO3	Analyze the performance of various memory modules in memory hierarchy
CO4	Compare and contrast the features of I/O devices and parallel processors
CO5	Outline the evaluation of memory organization
CO6	Analyze the performance of Arithmetic logic unit, memory and CPU
Discrete mathematical structure	
CO1	Observe the various types of sets, functions and relations
CO2	Understand the concepts of group theory
CO3	Understand the concepts of combinatorics
CO4	Understand the concepts of graph theory and its applications
CO5	Learning logic and Boolean algebra. Using these concepts to solve the problems
Research Methodology	
CO1	The basic concepts of research and its methodologies, identify appropriate research topics, select and define appropriate research problem and parameters
CO2	Prepare a project (to undertake a project)
CO3	Organize and conduct research in a more appropriate manner, writing research report and thesis

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Master of Social Work (MSW)

Community organization and social action	
CO1	To identify as a professional social worker and conduct oneself accordingly
CO2	Learner will be able to develop procedural skills and interaction skills
CO3	Practice personal reflection and self-correction one's own practice skills
Social work research and statistics	
CO1	Evaluate the relationship between aspects of care multidimensional outcome such as health statues, quality of life, process measures, resource utilization and cost through observational research
CO2	To develop among students' interest regarding research processing, presentation and proposal

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