#### Vidya Prasarak Mandal's



### **Amolakchand Mahavidyalaya**

Godhani Road, Umarsara, Yavatmal, Maharashtra 445001 Affiliated to Sant Gadge Baba Amravati University, Amravati 2(f) and 12(B) Recognition of UGC

Accredited by NAAC with 'B' Grade (Accreditation valid up to 4 November 2021)

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Date: 27/07/2023

#### Declaration

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

Amolakchand Mahavidyalaya,

(Dr.Rammanoffar A. Mishra)
Principal
Amolakchand Mahavidyalaya
Yavatmal

#### AMOLAKCHAND MAHAVIDYALAYA, YAVATMAL (MS)

#### **PROGRAM OUTCOMES [UG Level]**

#### **Faculty of Science and Technology**

After graduating from faculty of Science and Technology;

- ➤ To develop a strong foundation in basic sciences such as physics, chemistry, mathematics, and biology.
- ➤ To impart analytical and research skills that enable students to identify and solve scientific problems.
- ➤ To acquire theoretical and practical knowledge in a chosen specialization such as biology, chemistry, physics, mathematics, electronics or computer science.
- ➤ To prepare graduates for higher education and research in leading institutions in India and abroad.
- ➤ To instil ethical values and professionalism among students towards scientific research and development.
- > To enable students to communicate effectively in scientific discourse and disseminate scientific knowledge to the public.
- ➤ To pursue careers in research and development, academia, government, industry, and entrepreneurship.
- > To encourage creativity, innovation, and independent thinking among students.
- > To provide students with opportunities for experiential learning and hands-on training through laboratory and fieldwork.
- > To develop problem-solving skills in students that enable them to apply scientific principles to real-world situations.

#### PROGRAM OUTCOMES [UG Level]

#### **Faculty of Commerce and Management**

After graduating from faculty of Commerce and Management;

- ➤ The students will have a comprehensive knowledge of business principles, accounting practices, and financial management.
- ➤ The students will be able to analyse and interpret financial data and apply it in decision-making processes.
- ➤ The students will possess effective communication skills, both oral and written and be proficient in the use of modern technology for business communication.
- ➤ The students will understand the importance of ethical behaviour and social responsibility in the business environment.
- ➤ The students will be able to work effectively in teams and appreciate the benefits of collaboration and diversity.
- ➤ The students will possess strong analytical and critical thinking skills to solve complex business problems.
- > The students will be able to adapt to changing business environments and emerging trends.

- > The students will demonstrate entrepreneurial skills and can identify and pursue new business opportunities.
- ➤ The students will have a global perspective and be aware of cultural differences in business practices.
- ➤ The students will be prepared for further education and lifelong learning opportunities.

### PROGRAM OUTCOMES [UG Level] Faculty of Arts/Humanities/ Social Sciences

After graduating from faculty of Arts;

- The students will have proficiency in the respective language he has chosen (Marathi/Hindi/English).
- > The students will have ability to critically evaluate and analyse various literary works and texts.
- > The students will have understanding of economic concepts and principles.
- > The students will have ability to evaluate critically political theories and systems.
- ➤ The students will be able to understand historical events and their impact on society.
- > The students will have ability to analyse and critically evaluate philosophical theories.
- ➤ The students will have proficiency in music and ability to perform in a professional setting.
- ➤ The students will have ability to communicate effectively in both oral and written forms.
- The students will be able to understand cultural diversity and its impact on society.
- > The students will have ability to undertake independent research and present findings in a clear and concise manner.

#### PROGRAM OUTCOMES [PG Level]

### Faculty of Science and Technology Master of Physics

After Post graduation in Physics;

- > Students will acquire advanced knowledge of the fundamental principles and concepts of physics.
- > Students will develop skills to solve complex problems in various areas of physics, including classical mechanics, thermodynamics, electromagnetism, quantum mechanics, statistical mechanics, nuclear physics, classical mechanics, Digital electronics and microprocessor and condensed matter physics.
- > Students will gain proficiency in using mathematical and computational methods for modelling and analysing physical phenomena.
- > Students will learn to design and conduct experiments, analyse data, and communicate their findings effectively.
- > Students will develop critical thinking, analytical, and research skills necessary for pursuing doctoral studies or a career in academia, research, or industry.

- > Students will acquire knowledge and understanding of interdisciplinary areas that intersect with physics, such as materials science, biophysics, nuclear physics, and astronomy.
- > Students will demonstrate the ability to work independently, collaborate with peers, and effectively communicate scientific concepts and research findings in written and oral formats.
- > Students will acquire the ethical and professional values necessary for scientific research and the responsible conduct of science.

#### PROGRAM OUTCOMES [PG Level]

### Faculty of Science and Technology Master of Chemistry

After Post graduation in Chemistry;

- > Students will have ability to conduct theoretical and experimental research in the discipline of chemistry.
- > Students will have capability to design and execute chemical experiments, analyse data and interpret results.
- > Students will have proficiency in the use of modern laboratory techniques and instrumentation.
- > Students will have understanding of the fundamental principles and concepts of various branches of chemistry.
- > Students will have knowledge of advanced topics in chemistry such as quantum mechanics, spectroscopy, and thermodynamics.
- > Students will have awareness of chemical safety practices and regulations.
- > Students will have ability to communicate scientific ideas and results effectively through oral and written presentations.
- > Students will have capacity to critically evaluate scientific literature and engage in independent research.
- > Students will have understanding of ethical and professional responsibilities in scientific research.
- > Students will be prepared for advanced studies or careers in academia, industry, or government sectors.

#### PROGRAM OUTCOMES [PG Level]

Faculty of Science and Technology

Master of Mathematics

After Post graduation in Mathematics;

> Students will possess advanced mathematical skills that allow them to solve complex problems in various fields such as finance, engineering, statistics, and physics.

- > Students will be able to apply their knowledge of mathematical concepts to real-world problems, using mathematical models to analyse and solve problems in various industries.
- > Students will have the skills to conduct independent research in mathematics and related fields. They will be able to design experiments, gather and analyse data, and draw valid conclusions.
- > Students will be effective communicators, both orally and in writing, able to explain complex mathematical concepts to a range of audiences.
- > Students will be able to work collaboratively with other professionals in interdisciplinary teams, applying their mathematical skills to address a range of complex challenges.
- > Students will have developed critical thinking skills, able to evaluate different approaches to problem-solving and apply appropriate mathematical methods to address specific problems.
- > Students will be committed to continuous learning and professional development, remaining up-to-date with developments in their field and adapting to changing needs and trends.

### PROGRAM OUTCOMES [PG Level] Faculty of Commerce and Management MASTER OF COMMERCE

After Post graduation in Commerce;

- > Students will have advanced knowledge and understanding of the key concepts and theories in commerce that can be applied in diverse settings.
- > Students will have a strong ethical foundation and will be equipped with the skills to make complex ethical decisions in the business world.
- > Students will be able to communicate effectively both orally and in writing to articulate complex business concepts.
- > Students will be able to evaluate and analyse complex, multidimensional business problems and develop creative and innovative solutions.
- > Students will have a global mindset and an understanding of how diverse cultural contexts influence business practices and decisions.
- > Students will be equipped with the skills to lead and manage teams and organizations effectively.
- > Students will be able to think strategically and make evidence-based decisions that help organizations achieve their goals.
- > Students will have strong quantitative skills and be proficient in using data and analytics to inform business decisions.
- > Students will be proficient in using technology tools and platforms to analyse data, communicate effectively, and solve problems.
- > Students will develop professionalism and be equipped with the skills to work effectively in diverse business environments.

#### PROGRAM OUTCOMES [PG Level]

### Faculty of Arts/Humanities/ Social Sciences M.A. (ECONOMICS)

After Post graduation in Economics;

- > Students will demonstrate deep knowledge and understanding of economic theories, principles, and concepts. They will be able to analyse and interpret economic data and apply economic theories in real-world situations.
- > Students will develop critical thinking and problem-solving skills by applying economic theories to solve complex economic problems. They will be able to identify economic challenges and propose solutions based on their understanding of economic theories.
- > Students will develop effective communication skills, both written and oral, to present economic ideas and data effectively.
- > Students will be able to communicate economic concept analysis clearly to different audiences, including policymakers, business executives, and the general public.
- > Students will develop research skills to conduct independent research in economics, including data collection, analysis, and interpretation. They will be able to use various economic models, empirical methods, and statistical techniques to design and conduct research projects.
- ➤ Students will develop global and cultural awareness by understanding the interconnectedness of economies and societies worldwide. They will be able to analyse and evaluate the impact of economic policies and decisions on different cultures and societies.
- > Students will equip them with skills and knowledge to pursue careers in a variety of fields, including government, academia, international organizations, and private sectors such as banking and financial services, consulting and research.

# PROGRAM OUTCOMES [PG Level] Faculty of Arts/Humanities/ Social Sciences M.A. (POLITICAL SCIENCE)

After Post graduation in Political Science;

- > Students will be able to demonstrate an in-depth knowledge of the theories, concepts, and practices of politics and governance.
- > Students will be able to analyse and critically evaluate political phenomena, institutions, and policies using various qualitative and quantitative research methods.
- > Students will be able effectively to communicate and articulate complex political ideas and arguments through written and oral means.
- > Students will be able to develop creative and innovative solutions to political problems, based on sound research and analysis.
- > Students will be able to conduct independent research on topics of interest in political science, using appropriate research methods and tools.

- > Students will be able to e engage in professional and ethical behaviour in all aspects of their work as political scientists.
- > Students will be able to demonstrate an understanding of the role of political science in society, including the interface between politics and other sectors such as economics, society, and culture.
- > Students will be able to identify and analyse the impact of global, regional, and local events, trends, and actors on politics and governance.
- > Students will be able to collaborate effectively in diverse teams and contexts, including with individuals from different cultural, disciplinary, and professional backgrounds.
- > Students will be able to apply their knowledge and skills to various professional and academic contexts, such as public service, non-governmental organizations, academia, or the private sector.

## PROGRAM OUTCOMES [PG Level] Faculty of Arts/Humanities/ Social Sciences M. A. (HISTORY)

After Post graduation in History;

- > Students will be able to develop an advanced understanding and knowledge of historical events, concepts, and theories.
- > Students will be able to develop critical thinking and analytical skills to evaluate sources and arguments.
- > Students will be able to develop advanced research skills and methodologies to conduct independent historical research.
- > Students will be able to demonstrate effective communication skills through written and oral presentations of historical research.
- > Students will be able to develop a broad and interdisciplinary approach to the study of history, including the analysis of political, economic, social, and cultural forces.
- > Students will be able to demonstrate proficiency in using primary and secondary sources to generate original insights and interpretations.
- > Students will be able to develop a nuanced understanding of the complexities and diversity of historical experiences across different cultures, societies, and periods.
- > Students will be able to apply historical perspectives to contemporary issues and debates and relate historical knowledge to present-day contexts and debates.

# PROGRAM OUTCOMES [PG Level] Faculty of Arts/Humanities/ Social Sciences M.A. (ENGLISH)

After Post graduation in English;

> Students will develop advanced skills in analysing literature and language, applying critical thinking to literary and cultural texts.

- > Students will develop advanced communication skills in written and oral communication, with the ability to communicate complex ideas clearly and effectively.
- > Students will develop advanced research skills, including the ability to conduct independent research, analyse and synthesize existing research, and present findings effectively.
- > Students will develop an appreciation for the diversity of perspectives and cultures represented in literature and language, with the ability to apply this knowledge in various contexts.
- > Students will develop professional skills applicable to a variety of industries, including critical thinking, problem-solving, oral and written communication, and project management.
- > Students will develop skills in creative and innovative thinking, with the ability to explore new ideas and approaches to literature, language, and culture.
- > Students will develop an understanding of the ethical and social responsibilities associated with literary and language studies.
- > Students will develop leadership skills, including the ability to work collaboratively, delegate responsibilities, and manage projects effectively.
- > Students will develop a commitment to lifelong learning and the ability to adapt to new technologies, methodologies, and information relevant to their field of study.
- > Students will develop global perspectives, with an understanding of the interconnectedness of language and literature across cultures and nations.

# PROGRAM OUTCOMES [PG Level] Faculty of Arts/Humanities/ Social Sciences M. A. (MARATHI)

After Post graduation in Marathi;

- > Students will be able to demonstrate in-depth knowledge and critical understanding of Marathi literature, including its history, cultural milieu, and literary traditions.
- > Students will be able to analyse and interpret various literary genres in Marathi literature, such as poetry, fiction, drama, and literary criticism.
- > Students will be able to apply theoretical concepts and literary tools to evaluate Marathi literature and critically assess their cultural, social, and political significance.
- > Students will be able to develop advanced research, analytical, and written communication skills through independent research projects and scholarly writing.
- > Students will be able to articulate and defend original ideas and perspectives on Marathi literature, both orally and in writing.
- > Students will be able to understand the contribution of Marathi literature to regional and national literature and its impact on cultural and intellectual discourse.
- > Students will be able to develop intercultural competencies and appreciate diverse perspectives in Marathi literature and society.

> Students will be able to engage in ethical and responsible intellectual discourse on Marathi literature and cultural issues, demonstrating the ability to respect diverse opinions and perspectives.

## PROGRAM OUTCOMES [PG Level] Faculty of Arts/Humanities/ Social Sciences M.A. (HINDI)

After Post graduation in Hindi;

- > Students will have attained a high level of proficiency in reading, writing, speaking, and comprehension of the Hindi language.
- > Students will have a deep understanding of the rich traditions of Hindi literature, including its history, major authors, genres, themes, and critical approaches.
- > Students will be able to analyse and interpret literary texts independently and critically, using appropriate theories, methods, and evidence.
- > Students will have acquired advanced research and writing skills, including the ability to formulate research questions, conduct original research, and produce scholarly papers and presentations.
- > Students will have developed an appreciation for the cultural and historical contexts that shape Hindi literature, including its relationships with other literary traditions and social movements.
- > Students will be able to communicate their ideas effectively in Hindi and English, using a variety of oral and written formats, such as essays, presentations, and seminars.
- ➤ Students will have learned to conduct themselves in a professional and ethical manner, showing respect for scholarly norms, cultural diversity, and intellectual property rights.
- > Students will be prepared for careers in fields such as teaching, writing, journalism, translation, publishing, cultural diplomacy, and international business, as well as for further research at the doctoral level.

#### PROGRAM SPECIFIC OUTCOMES [UG Level]

#### **Faculty of Science and Technology**

- The students will be able to demonstrate a solid understanding of the fundamental concepts, principles, theories, and methodologies in mathematics, physics, chemistry, botany, zoology, computer science, and electronics.
- The students will be able to apply analytical and critical thinking skills to identify, formulate, and solve complex problems in various areas of science and technology.
- The students will be able to develop proficiency in conducting laboratory experiments, collecting data, analysing results, and drawing appropriate conclusions.
- ➤ The students will be able to apply scientific methods and approaches to design simple experiments, analyse data, and communicate findings effectively.

- ➤ The students will be able to integrate knowledge and concepts from multiple disciplines to address complex scientific problems and challenges.
- The students will be able to utilize mathematical and computational tools to model and analyse scientific phenomena and to solve quantitative problems.
- The students will be able to effectively communicate scientific information and ideas through oral, written, and visual means to both technical and non-technical audiences.
- The students will be able to demonstrate ethical conduct, professionalism, and awareness of societal and environmental issues related to science and technology.
- ➤ The students will be able to collaborate effectively with peers, professionals, and interdisciplinary teams to accomplish common goals and projects.
- ➤ The students will be able to engage in continuous learning, keep up with advancements in science and technology.

#### PROGRAM SPECIFIC OUTCOMES [UG Level]

#### **Faculty of Commerce and Management**

- > Students will be able to understand accounting terminologies and principles, financial statements, accounting procedures, and fundamentals of bookkeeping and ledger maintenance.
- > Students will be able to apply mathematical tools and techniques to solve business problems, including algebra, calculus, and statistical methods.
- > Students will be able to understand the foundational aspects of commercial laws, including contract law, consumer protection laws, intellectual property laws, and company law.
- > Students will be able to understand the principles of management, including planning, organizing, staffing, directing, and controlling.
- > Students will be able to learn about the basics of starting and running a business, including market research, business planning, and funding.
- > Students will be able to understand financial techniques used for decision-making, including cost and management accounting, working capital management, capital budgeting, and investment appraisal.
- > Students will be able to understand basic marketing principles, including market segmentation, product positioning, advertising, sales promotion, and sales management.
- > Students will be able to understand the basics of banking and financial services, including credit functions, investment banking, money market operations, and foreign exchange management.
- > Students will be able to apply basic computer skills and learn about the basics of computer applications relevant to business.
- > Students will be able to develop good communication and interpersonal skills, including the ability to present their ideas effectively, negotiate, and work in teams.
- > Students will be able to gain the knowledge and skills necessary for pursuing further studies or professional careers in different fields of commerce and industries.

#### PROGRAM SPECIFIC OUTCOMES [UG Level]

#### Faculty of Arts/Humanities/ Social Sciences

- ➤ The students will be able to understand and demonstrate the key concepts, theories and historical developments in their chosen subject of study.
- ➤ The students will be able to communicate effectively in both written and oral forms of Marathi, English, and Hindi.
- ➤ The students will be able to apply critical thinking skills to analyse and evaluate different perspectives on various issues related to their respective subjects.
- ➤ The students will be able to demonstrate proficiency in research and data analysis in their chosen field of study, using appropriate methodologies and techniques.
- ➤ The students will be able to interpret and analyse historical documents and understand the historical context of events.
- The students will be able to understand the political systems, government structures, and political theories.
- The students will be able to apply ethical principles and practices in academic and community settings as per the values of their chosen subject.
- ➤ The students will be able to develop a deep understanding of the impact of music on society and analyse musical traditions with cultural awareness.
- ➤ The students will be able to understand and demonstrate diverse philosophical traditions with critical thinking and analytical reasoning.
- ➤ The students will be able to display/exhibit knowledge of the literature and literary techniques of English, Marathi, and Hindi literature.
- > Students will be able to explain fundamental economic theories and concepts, such as supply and demand, market equilibrium, production and costs, and macroeconomic principles.
- > Students will be able to apply mathematical and statistical models to analyse economic data and draw conclusions from the findings.
- > Students will be able to examine the impact of economic policies on different sectors of the economy, such as trade, taxation, globalization, inflation, and unemployment.
- > Students will be able to present economic and political information and ideas clearly and logically.
- ➤ The students will acquire the ability to collaborate and work effectively in a team environment.
- > Students will be able to develop skills in research, analysis, and synthesis of information.
- > Students will be able to gain the knowledge and skills necessary for pursuing further studies or professional careers in the arts.

PROGRAM SPECIFIC OUTCOMES [PG Level]
Faculty of Science and Technology
MASTER OF PHYSICS

- > Students will be able to demonstrate proficiency in fundamental physical principles and theories, as well as advanced topics in various subfields of physics.
- > Students will have a deep understanding of the mathematical tools and computational methods used for modelling, analysis, and experimentation in physics.
- > Students will be able to develop the ability to design, conduct, and analyse experiments with advanced equipment, instrumentation, and techniques to obtain reliable and accurate results.
- > Students will be able to attain the ability of critical thinking, problem-solving, and analytical skills to evaluate the quality of scientific information and to identify open questions and areas for further research.
- > Students will be able to develop excellent communication skills to present scientific findings and ideas effectively in written and oral formats to both scientific and non-scientific audiences.
- > Students will be able to understand the ethical principles and professional values that guide scientific research practices in physics, including a commitment to safety and responsible conduct of research.
- > Students will be proficient in contemporary software, languages, and tools used for physics research, including those used for data analysis, numerical simulations, and modelling.
- > Students will be able to develop the ability to formulate scientific questions, design and execute research projects, and interpret and analyse numerical and experimental results.
- > Students will be able to gain expertise in the various subfields of physics, including classical mechanics, quantum mechanics, electromagnetism, and thermodynamics, and their applications in interdisciplinary areas (biophysics, materials science, engineering, etc.).
- > Students will be able to attain the ability of teamwork, leadership, interpersonal, and collaboration skills by working in groups and facilitating joint research projects. Develop the ability to design, conduct, and analyse experiments with advanced equipment, instrumentation, and techniques to obtain reliable and accurate results.

### PROGRAM SPECIFIC OUTCOMES [PG Level] Faculty of Science and Technology

#### MASTER OF CHEMISTRY

- > Students will be able to demonstrate advanced knowledge and understanding of chemical principles and their applications in different fields of chemistry.
- > Students will be able to acquire the ability to design, conduct, and analyse chemical experiments using advanced techniques and instrumentation to obtain accurate and reliable results.
- > Students will be able to acquire the ability of critical thinking, problem-solving, and analytical skills to evaluate scientific information and identify new areas of chemistry research.

- > Students will be able to demonstrate proficiency in communication skills to present scientific findings and ideas effectively in written and oral formats to a range of audiences.
- > Students will be able to develop professional and ethical values as a chemist that include the safe handling of chemicals, responsible conduct of research and the proper treatment of scientific data.
- > Students will be able to understand advanced concepts and methodologies in the different subfields of chemistry such as organic, inorganic, physical, and analytical chemistry specially organic chemistry.
- > Students will be able to attain proficiency in contemporary tools and software used in chemical research and analysis.
- > Students will be able to develop the ability to generate scientific questions.
- > Students will be able to demonstrate teamwork, leadership, and collaboration skills by working in groups and facilitating collaborative research.
- > Students will be able to gain experience and expertise in the practical aspects of chemical research, including laboratory management and dissertation writing.

### PROGRAM SPECIFIC OUTCOMES [PG Level] Faculty of Science and Technology MASTER OF MATHEMATICS

- > Students will have the ability to apply mathematical methods and techniques in solving complex problems across various fields.
- > Students will have proficiency in analytical thinking, quantitative reasoning, and problem-solving skills.
- > Students will have advanced knowledge and understanding of the fundamental concepts, theories, and methods in mathematics.
- > Students will have Competence in using advanced mathematical software tools and techniques for modelling and simulations.
- > Students will have the ability to communicate complex mathematical ideas and concepts effectively to both technical and non-technical audiences.
- > Students will be ready for continuing education, research, or industrial positions that require a strong mathematical background.
- > Students will acquire the ability to demonstrate ethical and professional behaviour in applying mathematical practices and principles.

## PROGRAM SPECIFIC OUTCOMES [PG Level] Faculty of Commerce and Management MASTER OF COMMERCE

> Students will be able to analyse and interpret complex business scenarios using advanced methodologies and techniques to provide effective solutions.

- > Students will be able to develop critical thinking and problem-solving skills to identify and evaluate emerging trends, issues, and opportunities in various industries.
- > Students will be able to communicate effectively and persuasively with stakeholders, including employees, customers, shareholders, and government agencies.
- > Students will be able to demonstrate strong knowledge in finance, accounting, marketing, and operations management to make informed business decisions.
- > Students will be able to leverage advanced technological tools and analytics to create innovative business models and improve organizational performance.
- > Students will be able to foster creativity and entrepreneurship to identify and pursue new business opportunities.
- > Students will be able to exhibit a strong sense of ethical and social responsibility in decision-making and corporate governance.
- > Students will be able to demonstrate the ability to work in interdisciplinary teams, collaborating with professionals from diverse backgrounds and cultures.
- > Students will be able to develop leadership competencies that enable effective management of people, resources, and organizational goals.
- > Students will be able to engage in lifelong learning and professional development to stay abreast of the latest industry practices and innovations.

## PROGRAM SPECIFIC OUTCOMES [PG Level] Faculty of Arts/Humanities/ Social Sciences M.A. (ECONOMICS)

- > Students will be able to demonstrate an advanced understanding of macroeconomic and microeconomic theories, principles, and models and apply them to analyse and solve complex economic problems.
- > Students will be proficient in statistical, mathematical, and econometric methods and software relevant to economic analysis and be able to collect, process, and analyse data to produce meaningful economic insights.
- > Students will be able to critically evaluate economic policies, both domestic and international, and assess their potential impact on economic growth, welfare, and inequality.
- > Students will be able to understand global economic issues such as trade, globalization, and international finance and analyse their impact on the domestic economy.
- > Students will have strong oral and written communication skills and be able to effectively communicate complex economic concepts and analyses to diverse audiences.
- > Students will understand the ethical and professional standards associated with conducting economic research and analysis and adhere to these principles in their work.

#### PROGRAM SPECIFIC OUTCOMES [PG Level]

### Faculty of Arts/Humanities/ Social Sciences M.A. (POLITICAL SCIENCE)

- ➤ Students will be able to understand and analyse the core concepts and theories of political science, such as democracy, governance, power, and authority, and apply them to practical situations.
- > Students will be equipped with the knowledge and skills to carry out independent research, including data collection, analysis, and interpretation, and present their findings to a wide audience.
- > Students will develop the ability to assess complex political issues and identify potential solutions to problems faced within the political arena.
- > Students will learn to communicate complex ideas effectively through written and oral presentations and demonstrate critical thinking abilities when writing research papers, policy briefs, and other professional documents.
- > Students will have the necessary knowledge to understand the political dynamics of different regions and the interrelationship between national, regional, and global political institutions.
- > Students will possess a thorough understanding of ethical principles and be able to work by professional ethical norms.
- > Students will be able to apply political science theories to unpack the phenomena of current events and have the skills to devise practicable policies in diverse political contexts, making informed judgments on contemporary political issues.

# PROGRAM SPECIFIC OUTCOMES [PG Level] Faculty of Arts/Humanities/ Social Sciences M.A. (HISTORY)

- > Students will be able to demonstrate comprehensive knowledge and understanding of the key events, themes, and issues in global and local history.
- > Students will be able to evaluate and analyse historical sources critically and use them to develop sophisticated and nuanced arguments.
- > Students will be able to demonstrate advanced research skills, including the ability to identify and use primary and secondary sources, conduct original research, and produce a substantial research paper.
- > Students will be able to demonstrate proficiency in written and oral communication, including the ability to effectively present historical arguments and analysis to different audiences.
- > Students will be able to demonstrate a deep understanding of historical methodology and debates, and the ability to engage with different historical traditions and approaches.

- > Students will be able to develop a critical awareness of contemporary issues and debates related to history, and the ability to reflect on the implications of historical knowledge for contemporary society.
- > Students will be able to demonstrate the ability to work independently and collaboratively in a variety of contexts, including conducting research, presenting findings, and engaging with different stakeholders.
- > Students will be able to develop a global perspective on history, including an understanding of the interconnectedness of historical events and processes across different regions and cultures.
- > Students will be able to demonstrate proficiency in the use of digital tools and techniques in historical research and presentation.
- > Students will be able to develop a professional attitude and ethical framework for historical research and dissemination, including a commitment to objectivity, accuracy, transparency, and respect for diverse perspectives and voices.

## PROGRAM SPECIFIC OUTCOMES [PG Level] Faculty of Arts/Humanities/ Social Sciences M.A. (ENGLISH)

- > Students will be able to analyse and interpret a variety of literary works and genres from different historical periods and geographical regions.
- > Students will be able to demonstrate advanced research skills and the ability to engage in scholarly discourse.
- > Students will be able to apply critical and theoretical frameworks to literary analysis and interpretation.
- > Students will be able to develop advanced writing skills and produce original scholarly work.
- > Students will be able to evaluate the cultural, historical, and social contexts in which literature is produced and received.
- > Students will be able to demonstrate an understanding of the diversity of perspectives and experiences represented in literature and culture.
- > Students will be able to communicate effectively and present complex ideas accurately and persuasively.
- > Students will be able to collaborate effectively with peers in academic and professional settings.
- > Students will be able to analyse and interpret literary texts from a variety of cultural and historical contexts.
- > Students will be able to demonstrate critical thinking and communication skills through written and oral modes.
- > Students will be able to understand and engage with major literary theories and methodologies.
- > Students will be able to conduct independent research using scholarly sources and draw evidence-based conclusions.

- > Students will be able to evaluate literary works in terms of their social, political, and cultural relevance.
- > Students will be able to apply their knowledge of literary works to broader issues and questions in the humanities and beyond.
- > Students will be able to develop a sophisticated understanding of the relationship between literary texts, language, and culture.
- > Students will be able to demonstrate the ability to produce original literary criticism and analysis.
- > Students will be able to apply their knowledge and skills in diverse professional settings, including education, publishing, media, and the arts.

#### PROGRAM SPECIFIC OUTCOMES [PG Level]

### Faculty of Arts/Humanities/ Social Sciences M.A. (MARATHI)

- > Students will be able to analyse and critically evaluate various literary genres, styles, and themes in Marathi literature.
- > Students will develop proficiency in reading, writing, and speaking Marathi with clarity and fluency.
- > Students will be able to understand the historical, cultural, and social contexts of Marathi literature and their influence on literary production.
- > Students will be able to conduct independent research and produce scholarly work related to Marathi literature.
- > Students will develop proficiency in using contemporary research methodologies and critical tools to interpret Marathi texts.
- > Students will be familiar with the major literary movements and figures in Marathi literature.
- > Students will be able to Understand the role of Marathi literature in shaping regional, national, and global cultural discourses.
- > Students will be able to apply literary theories and critical approaches to Marathi texts.
- > Students will acquire skills in communicating ideas and insights related to Marathi literature effectively, both orally and in writing.
- > Students will be sensitive to the issues of gender, caste, class, and identity in Marathi literature, and its representation.

# PROGRAM SPECIFIC OUTCOMES [PG Level] Faculty of Arts/Humanities/ Social Sciences M.A. (HINDI)

> Students will gain an in-depth understanding of Hindi literature concerning its historical, cultural, social and linguistic aspects.

- > Students will be able to analyse literary texts, critically evaluate literary works and their socio-cultural context, and draw meaningful conclusions.
- > Students will be proficient in the Hindi language, both written and spoken. They will be able to use Hindi language resources, literature and criticism.
- > Students will develop effective communication skills in the Hindi language, which will enable them to express their thoughts and ideas clearly and concisely, both in oral and written form.
- ➤ Students will be able to apply critical thinking and research skills to various literary texts, analyse and evaluate arguments and assumptions, and conduct in-depth research on the subject.
- > Students will have extensive knowledge of Hindi literary traditions, including classical, medieval and modern literature, and various literary genres such as poetry, drama, fiction, and non-fiction.
- > Students will develop an understanding of cultural nuances and sensitivities which are inherent to Hindi literature and their impact on societal and political structures.
- > Students will be able to appreciate Hindi literature beyond their cultural boundaries, shedding light on its universal appeal and the beauty of its words and thoughts.
- > Students will be able to incorporate interdisciplinary approaches to the study of Hindi literature and appreciate the richness and complexity of various theories and perspectives.
- > Students will have excellent career advancement opportunities in academia, research, publishing, journalism, and other fields related to language and literature.

### AMOLAKCHAND MAHAVIDYALAYA, YAVATMAL-445001

### COURSE OUTCOME (CO)[Subjects covered under faculty of Science& Technology]

	Subject- Botany		
Class	Course	Outcome (Students will be able to)	
B. Sc. I,	Diversity and applications of	Know about Plant kingdom, Diversity of cryptogams, Viruses, Bacteria and importance of microbes.	
SemI	microbes and cryptogams	Understand general characters of algae like Habitat, Thallus organization, Pigmentation reserve food and reproduction and classification of algae.	
		Know the general characters of Fungi along with subdivision of Mastigomycotina, Ascomycotina, Basidiomycotina and Deuteromycotina with their specific example of Albugo, Aspergillus and Puccinia with whole life cycle.	
		Acquire knowledge of Bryophytes along with Class Hepaticopsida and Bryopsida with their specific genus of Marchantia and Funaria with whole life cycle.	
		Identify following classes Sphenopsida and Filicopsida with special reference to examples Equisetum and Marsilea.	
		Identify the different types of steles and understand the evolution about the seed habit in plants.	
		Know the role of Algae and Fungi in Industries, Medicine, Food & Agriculture, Mycorrhiza, Plant Diseases-viral, bacterial and fungal diseases.	
		Identify and learn the difference between Algae, Fungi, Bryophytes and Pteridophytes.	
		Identify and learn to handle the lab equipment's like, compound microscope, dissecting microscope and their detail structure etc	
		Observe the material carefully and prepare a temporary slide or permanent slide by using different stain.	
		Know the internal structure or anatomy and life cycle of Algae, Fungi, Bryophytes and Pteridophytes with	
		their specific examples by using permanent slide or with the help of charts and by using images through internet sources	
		Study the symptoms of fungal, viral, bacterial and Mycoplasmal diseases and Lichens	
B. Sc. I,	Gymnosperms, Morphology of	Know about Paleobotany, and different types of fossils, Geological time scale which is divided into different	

SemII	Angiosperms and Plant	Eon, Era, Period and Epoch, fossil gymnosperms- Pteridospermales and Bennettitales.
	Utilization	Understand the Gymnosperms- Classification of Gymnosperms, Morphology, anatomy, life cycle and
		taxonomic position of Pinus and Gnetum, and Economic importance.
		Types of roots, stem, leaf and its modifications, parts of leaf, phyllotaxy, venation.
		Know types of inflorescences and flower and its parts along with its functions, different position of ovules
		and types of pollination.
		Know the fruits types and along with their examples and Morphology, varieties and economic importance of
		the Food plant including Wheat and Potato, fibre plants Cotton and oil yielding plant like Groundnut.
		Know origin or history and economic importance of the spices like Black pepper, Clove, Cinnamon and
		Cardamom, sources of firewood, timber and Bamboos. Pharmacognosy and Phytochemistry with respect to
		following medicinal plants.
		Learn hand techniques like cutting thin section, staining and mounting an object.
		Acquire the knowledge of preparation of double stain permanent slide of Pinus stem, needle and Gnetum
		stem and leaf.
		Study the Morphology and anatomy of the following members Pinus, Gnetum.
		Study of fossils like Lyginopteris and Bennettites.
		Learn the different morphological types of roots and its modification, stem and its modification, leaf
		venation, phyllotaxy and its modification. Different forms of corolla and different types of placentation.
		Know types of fruits and morphology of plant of medicinal properties and uses like Aloe-vera, Adathoda
		vasica etc. Morphology and economic importance of spices like Black pepper, Clove, Cinnamon and
		Cardamom etc., Food plant like Wheat, Potato and Groundnut and Cotton plant.
B. Sc. II,	Angiosperm Systematic,	Acquire the origin and evolution of angiosperm, Plant nomenclature, Herbarium, Botanical Garden, Concept
SemIII	Anatomy and Embryology	of biodiversity and its conservation by ex-situ and in-situ method and importance of biodiversity.
		Know Bentham and Hookers and Engler and Prantle's classification and systematic studies & economic
		importance of following Families of Dicotyledons (Polypetalae) like Malvaceae, Brassicaceae, Leguminosae,
		Apiaceae.
		Understand taxonomy, Systematic studies andeconomic importance of Asteraceae, Asclepiadaceae,
		Apocynaceae, Solanaceae, Verbenaceae and Lamiaceae, Euphorbiaceae, Liliaceae and Poaceae.
		Know the types of meristematic and permanenttissue, characteristics of growth rings, Sapwood and
		heartwood and primary and secondary structure of root.

		Find out Primary structure of the monocot and dicot stem and secondary growth in dicot stem. Anomalies
		structure in Bignonia, Dracaena and Boerhha via stem. Internal structure Nerium and Maize leaf
		Know the structure of microsporangium and megasporangium, development of male and female
		gametophytes. Types of ovules, double fertilization, classification of embryo endosperm types & significance.
		Learn about the different Angiospermic families by utilising the knowledge of plant taxonomy.
		Learn different floral structures and other morphological characters.
		Understand the concept of embryology and with the help of permanent slides, learn the structure of anther,
		ovule and embryo
		Upgrade themselves with the knowledge of anatomy and through the study of double staining, able to make
		permanent slides of plant materials.
B. Sc. II,	Cell Biology, Genetics and	Know the concept of cell, Prokaryotic and Eukaryotic cell and its structure. Structure and functions of Cell
SemIV	Biochemistry	wall, Plasma membrane and ultrastructure of Nucleus and its function.
		Understand the structure and functions cell organelles like Endoplasmic Reticulum, Golgi complex, Vacuole,
		Ribosome, Peroxisome etc.Cell cycle: different stages of Mitosis and Meiosis.
		Indentify chromosome Morphology: structure and type. Chromosomal aberrations, Structural aberrations and
		Numerical aberrations
		Know basics of Genetics and Mendel's law and developed problem-solving ability on the Mendelism and
		Interaction of genes.
		Know the concepts of Linkage, crossing over, Gene mutation, Extra nuclear genome i.e. mitochondrial DNA
		and chloroplast DNA.
		Understand the nomenclature and characteristics of enzymes, holoenzyme, coenzyme, cofactor, Mechanism
		of action of enzyme and structure of carbohydrates.
		Acquire knowledge of Cell cycle, Mitosis and Meiosis and through this knowledge they will be able to learn
		and identify their different stages.
		Know about Genetics, Mendel's work on inheritance, and how Mendel's law of inheritance had formed.
		Furthermore, they will learn about the Monohybrid and Dihybrid ratio and its practical significance.
		Gain an ability to solve problems on interaction of genes.
		Study of Biochemistry they will gain knowledge to demonstrate the presence of starch, proteins and lipids.
B. Sc. III,	Plant Physiology and Ecology	Know importance of water to plant life, Active and passive absorption of water, Ascent of sap, transpiration
		and mineral uptake.
	<u>I</u>	<u> </u>

SemV		Understand the concepts of Photosynthesis and Respiration.
		Understand Tropic, Nastic Plant movements, Concept and types of stress- biotic and abiotic.
		Know phenomenon of photoperiodism, role of phytochrome, concept of florigen and vernalization and plant
		response to light and temperature.
		Understand components of environment, scope and importance of ecology, ecological factors, edaphic factor
		and ecological adaptations.
		Understand the concepts of Ecosystem- Structure and function, ecological succession, types of ecosystem and
		population ecology.
		Know the Importance of the Subject, Departmental Discipline, Laboratory environment & Laboratory
		equipments& also know that how to become a true nationalist & true Indian.
		Know Historical account & Importance of Plant Physiology, Plant physiology, Plant-Water Relations &
		related topics.
		Know about Ecology-Environment, Ecosystem & related topics.
		Know about Theoretical & Practical knowledge of the subject.
B. Sc. III,	Molecular Biology and	Understand the Historical account, chemical composition, double helical model of DNA. Eukaryotic
SemVI	Biotechnology	replication, DNA packaging, satellite, repetitive DNA and Transposable elements.
	3.	Know the Concept of gene, fine structure of gene, central dogma, types of RNA, genetic code, Structure of
		ribosomes, eukaryotic transcription and translation.
		Identify the Regulation of gene expression in Prokaryotes and Eukaryotes, Protein Folding Mechanism and
		Structure, Protein Sorting and Trafficking.
		Know the Basics of recombinant DNA technology, Restriction Enzymes, Cloning vectors, techniques of general
		transfer and PCR.
		Understand the concepts of Plant tissue culture, requirement for PTC, Growth hormones, cellular totipotency
		differentiation, morphogenesis, callus culture and micropropagation
		Know the application of biotechnology in agriculture, industry, health care and conservation.
		Know the Importance of the Subject, Departmental Discipline, Laboratory environment, Laboratory
		equipments& also know that how to become a true nationalist & true Indian.
		Know the Historical account & Importance of Molecular Biology and Biotechnology.
		Know about the nature, ultra structure, chemical composition and functions of sole genetic material i.e. DNA
		molecule.

		Know about Genetic Engineering, Plant tissue culture and Applications of Biotechnology.
		Know about the importance of theoretical and practical aspects of the subject.
		Subject- Chemistry
Class	Course	Outcome (Students will be able to)
B. Sc. I,	Paper- I:	Solve the conceptual questions using the knowledge gained by studying periodicity in atomic radii, ioni
SemI	Periodic Properties and Ionic	radii, ionization energy, electronegativity and electron affinity of elements.
	bonding, s-Block and p-Block	Know the electronegativity Pauling scale and Mulliken Scales and partial ionic character of a covalent bond.
	elements, Electron	Understand the concept of ionic solids, lattice energy and salvation energy & its determination
	displacements, Reactive	Compare different reaction intermediates, functional group chemistry through the study of methods of
	intermediate and Aliphatic	preparation, properties and chemical reactions with mechanism.
	hydrocarbon, Aromatic	Identify the correct synthetic pathway to prepare important molecules.
	hydrocarbons,	Solve different numerical problem of varying difficulty associated with gaseous and liquid state.
	Thermodynamics, Gaseous	Perform the single stage preparation with the help of given procedure and process of filtration
	state and Phase Rule	recrystallization, melting point, percentage yield.
		Understand the effect of orientation effect of a group.
		Apply the concept of Inductive effect, electromeric effect, resonance effect and hyperconjugation to explai the stability of organic compounds.
		Write the reaction and its mechanism of given single stage preparation
		Separate basic and acidic radicals from the given inorganic mixture.
		Detect cations and anions from the mixture by using different test.
B. Sc. I,	Paper- II:	Apply the knowledge gained by studying types of bonding, solvation, hybridization and molecular
SemII	Polarization, Covalent	geometries
	bonding, Acids & Bases, P-	Draw the correct molecular structures, bond order and bond length
	block elements, Noble gases	Know the oxidising properties of halogens with reference to oxidation potential
	and Non-aqueous solvent,	Acquire skills to use chemical kinetics to develop mechanism of chemical reactions.
	Alkyl halides, Aryl halides and	Gain knowledge about properties of solvents namely liquid range, dielectric constant, dipole moment, heat of vaporisation and solubility behaviour.

	Alcohols, Phenol, ether and	Know the synthesis of various alkyl halide, aryl halide and alcohols (dihydric) and their application for
	epoxides, Physical properties	different compounds
	& Molecular structure,	Measure the dipole moment by temperature and refractivity methods
	Chemical Kinetics	Apply the concept of dipole moment for determination of molecular structure. i.e. percentage ionic character
		of covalent bonding, molecular geometry, cis-trans isomers, ortho, meta and para isomers.
		Know the Paramagnetic and diamagnetic substances, origin of paramagnetism, diamagnetism,
		ferromagnetism and Anti-ferromagnetism
		Know the relationship between magnetic moment and number of unpaired electrons.
		Perform experiments carefully and safely.
		Detect elements and functional group present in the given compounds.
		Analyse the given organic compound qualitatively by different tests
		Identify the compound based on observation, melting point and preparing the derivative of the provided
		substance.
		Skilfully determine the surface tension of liquid by Stalagmometer and viscosity by Ostwald's Viscometer.
		Calculate the unknown percentage composition of given ethanol-water mixture by viscometer
		Determine cleansing capacity of samples of detergent.
		Predict the endothermic or exothermic process from heat of solution of a salt.
B. Sc. II,	Paper- III:	Learn the basic concepts & types of chemical bonding, laws, rules & equations for formation of chemical
SemIII	Covalent Bonding, Metallic	bonds, solubility and hybridization of molecules.
	Bonding, VSPER Theory,	Study VSEPR theory to explain molecular geometry and its Limitations.
	Volumetric Analysis,	Study the modern approaches of chemical bonding (Molecular Orbital Theory).
	Gravimetric Analysis,	Know the basic concepts quantitative estimation by using Volumetric and Gravimetric analysis.
	Aldehydes and Ketones,	Study the properties and reactions of carbonyl compounds (aldehyde, ketone and acids) and corresponding reaction mechanisms.
	Carboxylic Acids, Optical	Learn the basic concepts of Optical, geometrical and conformational isomersium and stablity of organic
	isomerism. Geometric	compound base on bayer's strain theory.
	isomerism &Conformational	Acquire the knowledge of association and dissociation of solute in solvents and study the phase diagram of
	isomerism, Thermodynamics&	two immiscible solvents
	<b>Equilibrium Phase</b>	Understand about the applications of Thermodynamics in Colligative Properties and Phase Equilibrium.

	Equilibrium, Liquid state &	Know the details about surface tension and Viscosity and effect of temperature on it.
	- ' -	Learn about how conductance of weak electrolyte varies with respect to dilution & temperature and
	Electrochemistry	determination of Dissociation constant using Kohlrausch's law.
		Understand to prepare standard solutions.
		Apply the knowledge of titration and carry out various types of titrations.
		Analyze the observations and interpret the results of experiments performed.
		Evaluate the observations.
		Compare theoretical with experimental results.
		Understand the aspects and to carry out of gravimetric analysis.
	Paper- IV:	Study the chemical and physical properties of d-Block elements and their compounds. extraction of element
B. Sc. II,	Chemistry of elements of	using various process.
SemIV	Transition Series& Exaction of	Compare 3d series elements with 4d and 5d series elements with respect to size, oxidation states, magnetic
	elements, Inner transition	properties and color.
	elements& General properties	Learn Lanthanides with respect to Electronic configuration, Atomic and ionic radii Oxidation states
	of Metallurgy, Polynuclear	Magnetic properties, Color of salts, Complex formation behavior.
	Hydrocarbons & Reactive	Understand about the classification of structure, properties, reactions and use of Polynuclear hydrocarbon
	Methylene Compounds,	carbohydrate molecules and reactive methylene compounds
	Aromatic Nitro compounds,	Learn in detail about the preparation, properties, chemical reactions and mechanisms of Amides, Amines
	Amino compounds, Diazonium	Diazonium salts and Amino-acids
	salts& Amino acids and	Constitute the cyclic structure of glucose and concept of Pyranose, Furanose structure, Epimerization.
		Know conversion of glucose to fructose and vice-versa and Introduction to fructose, ribose, 2-deoxyribose
	Proteins, Colligative properties	maltose, sucrose.
	of dilute solutions, Crystalline	Prepare benzene, phenol, halobenzene, nitrobenzene and benzonitrile coupling with phenol and
	state	Aniline with Benzene diazonium chloride.
		Determine the structure of polypeptides by end group analysis
		Understand about the applications of Thermodynamics in Colligative Properties
		Helps to know the Law of rational indices, Weiss and Miller indices and Laws of Crystallography, Crysta
		Planes.
		Create the chromatographic chambers and analyze binary mixtures by chromatography.
		Apply the knowledge and carry out complexometric titrations.

		Analyse data obtained by colorimetric or spectrophotometric titrations.
		Understand the various isolation processes.
		Analyse the observations and interpret the results of experiments performed.
B. Sc. III,	Paper- V:	Understand key features of co-ordination compounds including variety of structures and know the concepts
SemV	<b>Coordination Compounds and</b>	of oxidation number, coordination number, ligands, chelates and stability of complex.
	Chelates, Crystal Field Theory	Get knowledge of crystal field theory to understand splitting in complexes and factors affecting in crystal
	(CFT) Electronic Spectra of	field splitting.
	Transition Metal Complexes,	Know Inner and outer orbital complexes and their magnetic properties of complexes of 3d series elements
	Heterocyclic compounds,	Find out the ground term symbols for d <sup>1</sup> to d <sup>10</sup> and draw the spectra of d <sup>1</sup> and d <sup>9</sup> octahedral complexes,
	Organometallic compounds,	Understand heterocyclic compounds especially about their synthesis, reactivity and application of
	Dyes:, Drugs and Pesticides,	heterocyclic compound in advanced chemical synthesis.
	_	Understand the concept of Organometallic reagents such as Organo-magnesium and organo-lithium and their
	Photochemistry, Molecular	use in synthesis of various organic molecules
	Spectroscopy	Classify dyes on the basis of structure and mode of application, preparation and uses of dyes, drugs and
		pesticides.
		Understand photochemical and thermal reactions by interaction of radiation with matter.
		Know fluorescence and phosphorescence on the basis of Joblonski diagram and basic terminology about
		Chemiluminescence and Bioluminescence.
		Identify the electric and magnetic properties of radiation and know the spectroscopic techniques for
		understanding the atomic structure and structure of molecule.
		Prepare metal complexes in laboratory and study their structure
		Prepare and Understand applications of Prussian blue.
		Study structure and get knowledge to prepare crystals of chrome alum
		Explore electroanalytical techniques based on conductance and emf measurements using conductometer
		Apply the basic knowledge to determine strength of given solution conductometrically
		Analyse the observations and interpret the result of experiments performed with the help of graph.
		Determine molecular weight by Rast's method and specific rotation of optically active compound by
		Polarimeter
B. Sc. III,	Paper- VI:	Understand thermodynamic and kinetic stability of complexes and SN1 dissociative and SN2 associative
		mechanism.

SemVI	Kinetic Aspects of Metal	Know the labile and inert complexes, factors affecting lability of complexes namely arrangement of d-
	Complexes,	electrons
	Spectrophotometry and	Differentiate between colorimetric and spectrophotometric technique for determination of concentration of
	Colorimetry, Paper	metal ion
	Chromatography,	Know the principle and technique of paper chromatography in ascending, descending and circular, Rf value
	Organometallic Chemistry,	and factors affecting Rf value
	Inorganic Polymers,	Know basics of organometallic chemistry such as Metal-carbonyl, inorganic polymers and also get basic
	Bioinorganic Chemistry,	knowledge of metal ions such as of Na <sup>+</sup> , K <sup>+</sup> , Ca <sup>2+</sup> and Mg <sup>2+</sup> in biological processes.
	Electronic spectroscopy and	Understand the concept of chromophore, auxochrome, bathochromic shift, hypsochromic shift, hyperchromic
	1 10	effect and hypochromic effect
	Infrared spectroscopy, NMR	Identify the types of bond and functional group of compound by use of electronic and infrared spectroscopy
	spectroscopy and Mass	and know how to interpret spectra.
	spectroscopy, Elementary	Determine the structure of simples organic compound based on number and position of signals Nuclear
	<b>Quantum Mechanics, Electro-</b>	Magnetic Resonance Spectroscopy.
	chemistry and Nuclear	Know the rules of fragmentation and identify the molecular ion peak, base peak and metastable peak of
	Chemistry	neopentane and methanol,
		Understand limitation of classical mechanics and differences between classical and quantum mechanics
		Know how to derive Schrodinger's wave equation and its applications.
		Identify interconversions of chemical energy and electrical energy by knowing electrochemistry. Understand
		fundamental concept of nuclear chemistry and application of radioisotopes in industry, agriculture, medicine
		& biosciences.
		Comprehensive understanding of the estimation of given sample Iodometrically.
		Understand and learn skills to prepare standard solutions for titrations.
		Apply the basic knowledge to determine dissociation constant of weak acid conduct metrically.
		Determine pH of soil sample and perform strong acid and strong base titration by pH-Metry.
		Understand principle of colorimeter to verify Beer-Lambert's law.
		Analyse the observations and interpret the result of experiments performed with the help of graph
M.Sc. I	Paper- I:	Study stereochemical rules and resultant geometry of the compounds of non-transitional elements
SemI	Inorganic Chemistry-I	Predict the nature of bond and its properties through various electronic structural methods; bonding models
		Study factors affecting the magnetic properties, orbital splitting, quenching of orbital angular momentum and

prediction of shapes of	effect of ligand field on spin-orbit coupling.
molecules	Acquaintance with metalloboranes, Carboranes and Metallocarboranes and Correlate structure and bonding
molecules	with reactivity of boron clusters
	Know the role of non-aqueous solvents in chemical reactions, effect of physical and chemical properties.
	Determine stability constants by Job's and Mole ratio, Bjerrum's pH metric, polarographic and
	Conductometric method.
	appreciate specialized and advanced topics in inorganic and coordination chemistry
	recognize and assign symmetry characteristics to molecules and objects
	Find out point group of element and construction of character table and group multiplication table.
Paper- II:	Understand rules of aromaticity, anti-aromatticity, homoaromaticity to organic molecules by following Huckel's Rule.
Organic chemistry-I	
	Draw organic molecules in different projection formula and assign its configuration and Study
	Stereochemistry of the compounds containing Nitrogen, Phosphorous and Sulphur
	Apply their understanding about the organic reactions of industrial significance with respect to the chemo-
	selectivity, regioselectivity and enantioselectivity.
	Analyze the product distribution and the stereochemistry of various organic products.
	Evaluate the organic reactions based on the influence of the substituents on substrate molecules
	Identify the reactive intermediates such as carbocations, Carbanions, radical anions and radical cations, Carbenes, nitrenes andarynes in organic transformation.
	Understand the effect of leaving group, nucleophiles and substrates regiospecificity and neighbouring group
	in reactions
	Know the concept of Aromatic Nucleophilic Substitution and elimination reaction with reference to
	rearrangement.
Paper- III:	Understand basic concepts and theories for quantum mechanics, surface chemistry, thermodynamics and
Physical chemistry-I	electrochemistry
	Know the concepts of quantum mechanics to solve higher order problems associated with shapes, size and energy of atomic entities.
	Develop the methodologies to identify and use colloidal substances and micelles.
	Execute and build theoretical and experimental processes using thermodynamics and electrochemical
	concepts
	Сопсерь

		Solve numerical problems associated with quantum mechanics, thermodynamics, and electrochemistry
	Paper- IV:	Appraise specific analytical technique based on sample and target analyte
	Modern methods of separation	Develop analytical ability and critical thinking in selection of statistics and their use in making interpretation
	•	meaningful and productive
		Understand the principles of Partition Chromatography, Liquid-Liquid Chromatography, Reverse Phase
		chromatography and Adsorption chromatography
		Select proper chromatographic technique among the available techniques
		Study principles and applications of ion exchange separation in determination of total salt concentration,
		removal of interfering ions, separation of anions and metals.
		Understand principles and different extraction of diketone, hydroxyquinoline, oximes, dithiocarbamets,
		xanthets, thiols, high molecular weight amines i.e. crown ethers, cryptands and calixarenes.
		Correlate the use of indicator used in different types of titration.
		Explore electro analytical techniques based on conductance and emf measurements. Design buffer systems of
		the required pH
		Understand the Gas Chromatography, HPLC,GC-MC,LC-MC applications and problems
M.Sc. I	Lab-I	Get awareness about laboratory safety and handling of chemicals.
SemI		Design organic reactions in order to achieve the required product(s)
		Monitor the progress of the reaction and consumption of substrate molecule during the reaction
		using Thin Layer Chromatography
		Syntheses organic compounds in two steps and purify using recystallisation as well as column
		chromatography.
		Apply different purification techniques like distillation and solvent extraction during the reaction.
		Know the applications of synthesized compound in industry & research.
		Develop methods and remedies for reactions with environmental pollution.
		Estimate the Glucose and number of hydroxyl groups present in the given organic compounds
		Analyse the Vitamin "C, Phenol, Amine and formaldehyde using various methods.
M.Sc. I	Lab-II	Select the proper indicator for a titration
SemI		Improve scientific skill of data collection and analysis.
-		Create methods for estimation of concentration of electrolytes in mixture using potentiometry.

		Compare the nature of graphs in various conductometric titrations perform in the labortory
		Get awareness about laboratory skills of handling electroanalytical instruments such as condctometer,
		potentiometer, pH-meter etc.
		Apply concept of critical micellar concentration to cleaning power of detergents.
M.Sc. I	Paper- V:	Recollect the principles of electronic structure, bonding & reactivity of coordination complexes
SemII	Co-ordination Chemistry&	Understand the concept of synthesis and stability of transition metal organometallic complexes
	Inorganic Chemistry	Develop the possible catalytic pathways leading to desired products
	,	Apply the principles of transition metal coordination complexes in understanding functions of biological
		systems  Identify the medicinal applications of inorganic compounds
		Unravel and interpret the photochemical properties of coordination complexes
		Apply knowledge to develop method for qualitative identification elements from the mixture having
		applications in industry and research.
	Paper- VI:	Predict the orientation and stereochemistry of the product of addition reaction
	Organic chemistry-II	Study the different organic name reaction based on addition of Carbon-Carbon and Carbon-Hetero multiple
	Ç	bonds
		Understand the halogenations at alkyl and allylic position and Coupling of alkynes and arylation of aromatic compounds by Diazonium salts.
		Draw mechanism for various rearrangement reaction based on Carbon, Nitrogen and Oxygen deficient atom
		Understand the Basic principle of green chemistry: Prevention of waste by products, Maximum incorporation
		of the reactants (starting material and reagents) into the final products
		Apply the concept of green chemistry for addition, substitution and elimination reaction
		Formulate green chemistry synthesis to increase atom economy.
	Paper- VII:	Demonstrate the ability to use chemical dynamics to solve problems associated with enzyme kinetics, fast
	Physical chemistry-II	reactions and complex reactions.
		Understand the Calculation of energy levels from wave functions, physical picture of bonding & anti-bonding wave functions.
		Learn the various types of polymers & its characterization and mechanism of polymerization and also its applications in various field.
		Get knowledge of Electrochemistry of solutions various types of experimental techniques, corrosion, Types

		of corrosion, corrosion inhibitors, Corrosion monitoring.
		Acquire basic and advanced level statistical thermodynamics, reaction kinetics.
		Apply the concepts of statistical thermodynamics and reaction kinetics to solve complex problems.
	Paper- VIII:	Understand key features of Formulate experiments based on optical and electroanalytical techniques.
	<b>Optical Methods and</b>	Get knowledge of Summarize principles and applications of molecular absorption, molecular emission and
	Environmental chemistry	flame emission spectroscopy.
	·	Understand water pollution, Classification, causes, consequences and methods to prevent water pollution.
		Identify parameter such as colour, turbidity, total solid, conductivity, acidity, alkalinity, hardness, chloride,
		sulphate, fluoride, silica, phosphates and different forms of nitrogen. Heavy metals.
		Understand air pollution, Classification, causes, consequences and methods to prevent water pollution.
		Know how Green house effect, acid rain, ozone depletion and their consequences are affect on environment
		Memorise the Chemistry of soil, soil irrigation by effluents. Agricultural pollution, role of micronutrients in
		soil, trace element analysis in soil.
		Know the natural forces and effect of pesticide such as DDT residue and their detection using analytical
		technique.
M.Sc. I	LAB-III	Separate and identify the Amino acids, Metal Ions and Carbohydrate molecule by paper Chromatography
SemII		Determine the molecular weight of sulphur, alpha-naphthol and biphenyl by freezing point method and
		liquid by steam distillation method
		Study the effect of temperature on adsoption
		Find strength of halides ion, HCl, Acetic acid by potentiometrically
		Find out the strength of commercial vinegar by conductometrically.
		Determine the heat of reaction, equilibrium constant by potentiometrically.
M.Sc. I	LAB-IV	Create methods for estimation of element/metal from the complexes.
SemII		Improve skill for separation identification and removal of interfering radicals
		Get idea about development of spot test for the different elements.
		Understand importance of metal complexes and green methods for the synthesis.
		Do the Quantitative analysis of binary mixture of cations involving their chemical separation and separate
		analysis of one cation by gravimetry and another by volumetric or colorimetric.
M.Sc. II	Paper- IX: Spectroscopy-I	Get advanced knowledge about the interactions of electromagnetic radiation with matterabsorbance

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SemIII	emission, transmission, reflection, refraction, dispersion ,polarization and scattering
	Compare nanocrystalline versus macro-crystalline materials in terms of reactivity.
	Interpret UV-visible spectroscopy and its basic principle and applications in terms of organic compounds
	Interpret IR spectroscopy and its basic principle and applications in terms of functional group analysis
	Learn various electronic transitions and their rules such as Fisher-Woodward & Fieser-Kuhn
	Know mass spectral fragmentation of organic compounds of various types, common functional groups
	molecular ion, metastable ions, Mcllaferty rearrangement. Retro-Diels Alder fragmentation, nitrogen rule.
	Interpret elemental analysis by using mass spectrometry.
	Solve problems related to the structure, purity and concentration of chemicals and to study molecular
	interactions by choosing suitable spectroscopic methods and interpreting corresponding data
	Interpret Mass spectra Elementary study using advanced technique such as GCMS, FTMS, high resolution
	MS, ESI-MS and MALDI-MS.
	Understand NMR spectroscopy and its basic principle and applications in terms of structural analysis
	Get idea about two dimensional NMR spectroscopy such as COSY,NOESY, HETCOR- DEPT techniques
	INPET, APT, INADEQUATE
	Combine information from the techniques in determination of molecular structures in organic chemistry
Paper- X: Analytics	Understand principle, instrumentation of various techniques such as TGA, DTA, TG-DTA, DSC for inorganic
Chemistry- I	and organic compounds
	Study the applications of various thermal methods of analysis and thermometric titrations.
	Understand theory, instrumentation, applications, advantages and disadvantages of high frequency titrations
	electrogravimetry and coulometry
	Know the principles and types of chemical sensors, biochemical sensors, biosensors and ion exchange
	electrodes.
	Study the application of Chemical Sensors in the Food Industry, Agriculture and Biotechnology,
	Biosensors
	Know types of Biosensors, Amperometric Immunosensors, Cholesterol Biosensor, Electrochemical Glucose
	Biosensors, Electrochemical biosensors, Drug Delivery Systems, Microbial Biosensors for Environmenta
	Applications
	Study the applications of ion selective electrode in determination of some toxic metals and some anions (F
	Cl <sup>-</sup> , Br <sup>-</sup> , I and NO <sub>3</sub> ), in Biomedical Applications
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	Understand different electroanalytical techniques like polarography, voltammetry, chronopotentometry and amperometric titrations
	Understand concept of bio-analytical chemistry along with applications of spectrophotometry spectroflurimetry, ultracentrifugation, gel electrophoresis and toxicology.
Paper- XI:	Learn about the oxidation and reduction of various organic compound using different oxidizing and reducing
Special Paper-I,	agents.
Organic Synthesis-I	Do the conversion of hydrocarbons into alcohol, aldehyde, ketones, epoxide and carboxylic acid by various oxidants and reductants.
	Synthesize organic compounds itself involves large part of synthetic reagents
	Predict the reactivity of an organic compound with reagents from its structure and Justify a reasonable
	mechanism for a chemical reaction.
	Learn metal and non metal hydride reduction of organic compounds in organic medium.
	Understand the aromatic character of linear and non-linear polynuclear Hydrocarbon such as fluorine
	anthracene and phenanthrene.
	Study the synthesis, reaction and importance of Azirines, Oxiranes and Thiziranes
	Recognize the basic practical skills for the synthesis and analysis of organic compounds
	Develop basic skills for the multi-step synthesis of organic compounds.
	Understand the Umpolung concept and its synthetic applications as well as the importance of Phosphorus and sulphur ylide, and Enamines.
	Illustrate chemical structures stereochemistry and mechanism of modern named reactions
	Apply synthesis methodology to perform advanced organic synthesis.
	Explain basic chemo, regio and stereoselective concepts and apply these in synthesis, as well as construct reactions pathways of complex organic compounds using retro synthetic analysis
	Understand about organic-chemical reactions with a focus on principles for effective synthesis strategies stereo selectivity, catalysis, as well as metal organic chemistry
	Understand research-based in-depth understanding in the field of design and production (synthesis) of complex molecules.
Paper- XII:	Investigate types as well as general methods of structure and ring size determination of different sugars
Special Paper-II (Natural	Study types as well as structures and function of various lipids
`	Know the structures, stereochemistry, synthesis and reactions of amino acids, proteins and peptides

	<b>Products</b> )	Understand mechanism of action, orientation, steric effect and reactions of enzymes
		Study classification, nomenclature, occurrence, isolation and general methods of structure determination of
		alkaloids and terpenoids.
		Learn occurrence, nomenclature, structure, stereochemistry, synthesis and reactions of steroids and hormones
		Know occurrence, classification, biogenesis, physiological effects and synthesis of prostaglandins,
		pyrethoids, rotenones and pheromones
		Study structure, synthesis, and chemistry of Vitamins and Natural Pigments
M.Sc. II	LAB-V	Estimate the quantity of copper (II) with EDTA photometric titration.
SemIII		Investigate the amount of Ca ion content in Calk/Milk sample by permagnetometry and drug sample by complexometry.
		Study the amount of ascorbic acid from biological samples and phosphate from plant sample by spectrophotometry
		Find out the parameter such as Hardness, pH, alkalinity, Chloride, DO, COD etc from water samples.
		Determine stability constant and stoichiometry of Ferric-thiocyanate complex by spectrophotometrically.
		Know the Separation and estimation of Fe <sup>3+</sup> and Mg <sup>2+</sup> by solvent extraction
M.Sc. II	LAB-VI	Syntheses benzilic acid by following green principles such as non-hazardous solvent, atom economy.
SemIII		Determine saponification value, iodine value of oil extracted from oil seed such as groundnut.
		Estimate the Nitrogen, Sulphur and Halogen from organic samples using various technique.
		Estimate the Cholesterol and Caffeine by spectrophotometrically.
		Monitor the progress of the reaction and consumption of substrate molecule during the reaction
		using Thin Layer Chromatography
		Syntheses organic compounds in two/three steps and purify using recystallisation as well as column
		chromatography.
		Calculate Theoretical and practical % yield for product conformation.
		Give the theoretical IR and NMR values of substrate, intermediate and final product.
M.Sc. II	Paper- XIII:	Implement rules of Raman spectroscopy to organic molecules
SemIV	Spectroscopy-II	Study interaction of x-ray with matter, scattering and diffraction.
		Study the basic principle, classification of electron microscopy methods such as XPS, XPES, ESCA, AFM, SEM and TEM

	Interpret ESR spectra, application of ESR to study the free radicals, structure determination, reaction velocities
	Understand the application of Mossbauer spectroscopy for Bonding and structure of Fe <sup>+2</sup> & Fe+ <sup>3</sup> , Sn <sup>+2</sup> and Sn <sup>+4</sup> compounds.
	Elucidate structure of I <sub>2</sub> Br <sub>2</sub> Cl <sub>4</sub> , I <sub>2</sub> Cl <sub>6</sub> and Structural problems using Mossbauer spectroscopy
	Analyse structure of inorganic molecules.
	Solve the problem of organic molecules based on UV, IR, <sup>1</sup> H NMR, <sup>13</sup> C NMR
Paper- XIV:	Study principle and working of proportatinal counters and Geiger Muller (GM) counters. principle and
General Analytical Chemistry	working of scintillation counters. Semiconductors dectors (eg.HPGe).
	Find types of reactions used in fluorimetric analysis. Also advantages and disadvantages and its applications of (RTP).
	Study the principles, atomization and excitation, ICP-source, Instrumentation and applications FIA
	techniques, pretreatment of sample in packed reactiors, components of FIA apparatus, Factors affecting FIA
	and applications.
	Elucidate to determine minerals, vitamins, anti-oxidants, toxins and preservatives. General idea of the
	properties of drugs for their characterization and quantification.
	Sudy the classification Fuel analysis, its advantage and disadvantage, classification of poisons.
Paper- XV:	Familiarize the organometallic reagents and its applications in organic synthesis. Learn about the Catalysis,
Special Paper-III Organic	hydrogenation of olefins and oxoprocess, Wilkinson catalyst etc. Learn about organometallic compounds and
Chemistry-III	Alkyls and Arene complexes
·	explain and rationalize the synthesis, structure, bonding, properties and reactivity of both main group and
	transition metal organyls rationalize industrially important catalytic processes through the application of organometallic principles
	Understand the bonding in olefin, acetylene and allyl systems. Concepts of synthesis, structure and bonding in metallocenes
	Learn about transformations for C-X and C-C bond-formation, functional group reactivity, chemoselectivity, regioselectivity, and the strategy of multistep synthesis will be the core topics that are covered
	Learn about concepts include strategy/retrosynthesis, advanced aromatic chemistry, protecting groups, stereochemistry, enolates and other carbonyl chemistry, alkene synthesis, reduction/oxidation (introductory), heterocycles, cross-coupling reactions and other modern methods of synthesis

	Identify, analyse and avaluate synthetic neutres to tomest malecules using networnthesis
	Identify, analyse and evaluate synthetic routes to target molecules using retrosynthesis
	Describe the recent increase in the structural complexity of drug molecules.
	Describe and apply stereochemical concepts such as chirality, stereoisomerism, and stereoselectivity in
	relation to chemical transformations and apply organometallic reagents and reactions in organic synthesis
	Plan and design experimental setups for various types of laboratory tests, perform transformations of
	importance for organic synthesis.
	Understand the functional group protection and know the protection of important functional groups.
	Learn about heterocyclic compounds are very interesting due to their distinct structure and the availability of
	this kind of heterocyclic structures in medicinal drugs
	Learn about technique of synthesis of heterocyclic compounds is important in the synthesis of different drugs
	Gives the quantitative ideas about the synthesis, properties and uses of such heterocyclic compounds like
	pyrole, pyridine qunolene, thiophene, furan etc
	Understand detailed chemistry of Pyrozole, imidazole, oxazole, thiazole, thiazine, diazines,
	triazinespyrimidines, pyrazines and zepines, oxepines, Indoles, Benzofurans, Quinolines Flavones,
	Chromones, Coumarines, Phenithiazines, Azitidines and its importance.
Paper- XVI:	Study the polymerisation of various synthetic polymers and stereo regulated polymers like Atactic, Isotactic
Special Paper-IV: Applied and	and Syndiotactic.
Medicinal Chemistry	Study the different terms, nomenclature, classification, synthesis, mechanism and assay of drugs
	Learn classification of different drugs on the basis of applications and also their synthesis, mode of actions,
	pharmacokinetics, pharmacodynamics data and secondary metabolism.
	Understand classification of drugs and also procedures, types, various theories as well as concepts of drug
	designing.
	Study the mode of actions, Pharmacokinetics, pharmacodynamic data and secondary metabolism of
	Antibiotics, Antimalerial, Antipyretic, Analgesic, Anti- inflammatory, Sedatives & Hypnotics drugs.
	Study the mode of actions, Pharmacokinetics, pharmacodynamic data and secondary metabolism of
	Antitubercular, antileprotic, Anaesthetics, Antihistamines, Tranquilizers and Cardiovascular drugs
	Learn about ligand, structure, fragment and natural product based drug design.
LAB-VII	Separate, purify and identify of unknown ternary mixtures
	Determine the elements, functional group, MP/BP and prepare the derivative
	Interpret and solve the combine spectra of organic compounds using NMR, IR, UV and Mass spectroscopy.
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		Learn ChemDraw software for organic compound identification.
		Syntheses anaesthetic drug Benzocaine, anticancer drug 6-methyl uracil, anticonvulsant. Drug 5,5-
		Diphenylhydantoin.
		Extract Limonene (essential oil) from orange by steam Distillation.
M.Sc. Part-	LAB-VIII-Project Work/	Acquire skills to collect literature hypothized based on their topics in first part of project.
II, Sem-IV	Dissertation	Know the various structural characterization techniques.
		Develop the practical skill for synthesis, collect experimental data, finding physical constants, analyse the
		compounds using appropriate analytical technique and tools like Chemdraw and Origin Lab data processing.
		Apply theoretical knowledge in practical lab for experimental set up.
		Communicate their research findings through written reports, manuscript, presentations, and possibly
		scientific publications.
		Get the position as Project assistant in various research Lab and Job in industry based on project work.

## **Subject- Computer Science**

Class	Course	Outcome (Students will be able to)
B. Sc. I,	Computer Fundamentals & C	Learn The Concept of Computers & Characteristics, generation of computers. Memory and their types and
SemI	Programming	Printers and their types.
		Learn The concept of DOS, Booting process, DOS commands such as REN, CD, MD. RD, DIR, DEL,
		COPY, TYPE, DATE, TIME, COPYCON, PROMPT External commands: FORMAT, XCOPY,
		CHKDSK, PATH, ATTRIB, AUTOEXEC.BAT, introducing windows its features and understanding
		number systems like, decimal, binary, octalec
		Learn the concept of Internet, Types of Internets connection: Direct dial-up, broadband, Internet protocol
		TCP/IP, FTP, HTTP, understanding Domain name e-mail address, WWW, understanding web Browser
		Internet Explorer, Netscape navigator, search engines
		Understand Concept of Programming, Algorithm, Flowcharting, programming process, Structured
		programming, Concept of C programming, its structure, history& features.
		Understand Concept of Elements of C:Introduction to C, History, features structure of C program,
		header file, character set, keywords, identifiers, constants, variables, basic data types, symbolic constants,

		type def operators & Expressions: Arithmetic, Relational, logical assignment, Increment and decrement,
		precedence of operators
		Understand Concept of Formatted 1/0 and Unformatted 1/0 operations, Control structures if, ifelse,
		nested else, conditional operator, for do, dowhile structures, break and continue the loop
		Design and implement the solution to the real-life problems by using word, excel, power point, will be able to
		use printer. Student will be able to Perform various dos operations using DOS commands, will be able to
		browse the web using various search engines, able to construct e-mails and sending these emails and
		attaching documents to emails.
		Design and implement the solution to the real life problems by using C Programming.
B. Sc. I,	Computer Fundamentals & C	Learn The Definition of Data structure, their types, various operations, concept of stack, implementing
SemII	Programming	operation on linear array and stack.
		Learn concept of Queue & linked list, their representation in memory, traversing, insertion& deletion
		operations, types of linked list.
		Learn definition & concept of binary tree, traversing operation. Various sorting and searching techniques.
		Understand Concept Of array, pointers and strings. Student should be able to design different programs on
		array, pointer, and strings.
		Understand Concept of functions, its need, defining it, calling and returning functions, types of functions,
		function recursion, local and global variables.
		Understand Concept of structure, declaring it, defining structure variables, accessing structure members,
		array of structure, nested structure, concept of union, comparing with structure, concept of file handling and
		related operations.
		Design and implement the solution to the real-life problems related to data structure by using c language.
		Design and implement the solution to the real-life problems by using advance C Programming
B. Sc. II,	<b>Object Oriented programming</b>	Learn The Concept of HTML language, Structure of HTML Document, Elements, attributes & tags of html.
SemIII	with C++ & Web Technology	Learn The Concept XML, its features, components of XML document, elements, Attributes, DTD, its need,
		declaring attributes, attribute types, Internal and External DTD
		Understand style sheet, its types & various properties such as Test, Font, Color, background, border, display,
		height, line-height, margin, and width. CSS with HTML and XML.
		Understand Concept Of OOP, its features, advantages and applications, tokens, basic data types, constants,
		variables, symbolic constants, declaration And Dynamic initialization of variables
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		Understand Concept of control & looping structures, functions, passing objects and returning objects from
		functions, inline and friend functions, concept of function overloading, scope resolution operator, member
		dereferencing operator, implicit & explicit type conversions.
		Understand Concept of class and objects, defining and accessing data members and member functions,
		passing & returning objects from functions, managing I/O operations, concept of constructor, destructor,
		default, parameterized, copy constructors
		Design different web pages using HTML, XML, CSS.
		Design and implement the solution to the real-life problems by using C++ Object oriented Programming.
B. Sc. II,	Advanced C++ and Web	Understand Concept of OOP, its features, advantages and applications, concept of class and objects, defining
SemIV	Designing	and accessing data members and member functions, managing I/O operations, manipulator, new, delete,
	5 5	operators.
		Understand Concept of functions, passing objects and returning objects from functions, concept of
		inheritance, their types, examples on single, multilevel, multiple, hybrid, hierarchical inheritances, concept of
		templates
		Understand Concept of different visibility modes, pointers to derived class, dynamic binding, virtual and pure
		virtual functions, rules for virtual functions and abstract base classes. Working with files, stream classes,
		opening and closing of file, file input/output with stream class
		Learn The Concept XML, its features, components of XML document, elements, Attributes, DTD, its need,
		declaring attributes, attribute types, Internal and External DTD
		understand style sheet, its types & various properties such as Test, Font, Color, background, border, display,
		height, line-height, margin, width. CSS with HTML and XML.
		Understand Comparison with DTD, Schema elements, element type element attributes, XML schema
		data type, converting DTD to schema, namespace, refit namespaces, scope of namespaces collusion &
		Applications
		Design different web pages using HTML, XML, CSS.
		Design and implement the solution to the real-life problems by using advance C++ Programming.
B. Sc. III,	RDBMS & V.B.	Understand Concept of DBMS, comparison with traditional file approach, storage structure, data
SemV		representation & various data base models.
		Understand Concept of relational models, relations, domains, attributes, keys, E-R diagrams, tables and
		various normalization techniques.

Class	Course	Subject- Electronics  Outcome (Students will be able to)
		Design and implement the solution to the real-life problems by using Advance Visual Basic programming.  Design and implement the solution to the real-life problems by using PL/SQL programming
		working with sequential access file, print# input#, write# statement, working with random access file, put, get statement, defining user defined data types, file control, file related commands.
		Understand Concept of Working with Files, Open & close statements, file modes, locking the file,
		format with print, print method, multiple forms, placing tool bars on forms.
		Understand Concept of forms, collection of forms, accessing it, uploading forms, placing text on forms,
		dialog boxes, Mouse response and Control, multiple list boxes.
		Understand Concept of Need for dialog box control, adding the dialog box control, producing the various
		data base, types of privileges, Grant and Revoke commands. Concept of table and Row locking.
		Understand Concept of Transaction. The Rollback, Commit, Save point commands. Concept of security of
		Concept of Cursor, types, opening, closing, using & fetching data. The concept of Trigger & its types.
SemVI		Understand Concept of features & block structure of PL/SQL, variables, data types & control structure.
B. Sc. III,	PL/SQL & Advanced V.B.	Understand Concept of functions and understanding various category of functions like Number, Character & Conversion functions.
<b>D</b> G <b>TT</b>	D. (601 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Design and implement the solution to the real-life problems by using V.B Programming.
		Design and implement the solution to the real-life problems by using RDBMS technology.
		control as arguments.
		Programming including Private and public procedure passing data by reference and value, passing
		Understand the concept of Internal Functions such as Msgbox0, named constant, default button, VB
		&control structures.
		Learn the Concept of Creating Menu, Application wizard for menu data types & variables, Various operators
		command button.
		Learn the Concept of Visual programming environment such as New Project window, property window, Form layout window, toolbar, menu bar, Form properties, pointer tool, label control, text box, and
		Understand Concept of SQL, data types, operators & various DDL & DML commands.

B. Sc. Part-	Basic of Electronics	Understand the principles and characteristics of passive components.
I, SemI		Apply KVL, KCL, and network theorems to analyze and solve simple electrical circuits.
,		Explain the working principles, construction, and uses of different measuring instruments including their
		limitations and loading effects.
		Understand the operation and characteristics and application of semiconductor diodes. Understand the
		working principles and use of filters in power supplies.
		Explain the construction and working principles & characteristics of NPN and PNP transistors in different
		configurations & understand & concepts of load line, biasing, stability, amplification action & operating point
		Identify and describe the construction, working principles, and characteristics of different switching and
		optoelectronic devices and understand the relationship between FET parameters and their applications.
		Identify and describe the characteristics and behaviors of active and passive components used in electronic
		circuits.
		Apply network theorems, such as Ohm's law and Kirchhoff's laws, to analyze and solve electrical circuits.
		Utilize various electronic measuring instruments like voltmeters, ammeters, ohmmeters, multimeters, and
		CROs to measure and analyze electrical quantities and waveforms.
		Understand and demonstrate the working principles of regulated power supplies, rectifiers, filters, and IC
		regulators used in electronic circuits.
		Describe the operation and characteristics of bi-polar devices (such as transistors) and uni-polar and
		optoelectronic devices (such as diodes, LEDs, and solar cells), and their applications in electronic circuits.
		Develop practical skills in IC testing, understanding IC pin configurations, making proper connections,
		constructing simple IC circuits on PCBs, and ensuring correct voltage levels at each pin for successful circuit
		operation.
B. ScPart-	<b>Digital Electronics</b>	Demonstrate the ability to convert numbers between binary, octal, and hexadecimal systems using
I, SemII		interconversion techniques
		Apply binary arithmetic operations such as addition, subtraction multiplication, and division to solve practical
		problems
		Explain and utilize different binary codes such as 8421 BCD, Excess-3, and Gray code in electronic circuits.
		Design and implement basic logic gates using truth tables and understand their logical behavior in electronic
		circuits.
		Construct and analyze more complex logic circuits such as EXNOR gates, EXOR gates, half adders, full

		adders, and 4-bit binary full adders.
		Understand and apply Boolean algebra laws, De Morgan's theorem, and simplify Boolean equations using
		Boolean algebra techniques. Analyze different logic families and evaluate their characteristics.
		Design and construct adders, converters, and logic gates using electronic components.
		Apply De-Morgan's theorems and K-maps to simplify logical expressions and design circuits using TTL and CMOS logic families.
		Construct transistorized astable, bistable, and monostable multivibrators and understand the principles of
		their operation. Design and implement various flip flops,
		Construct and analyze different types of binary counters, Implement SISO,SIPO ,PISO and PIPO configurations.
		Use decoders and multiplexers to simplify circuit designs and demonstrate proficiency in mounting and
		testing BCD to Seven Segment Decoder.
		Develop a comprehensive understanding of different types of memories, such as ROM, RAM, and EEPROM,
		including their architecture, working principles, and applications.
B. Sc. Part-	<b>Electronic Devices and Circuit</b>	Understand the hybrid-parameters of transistors and their use in small signal CE amplifiers.
II, SemIII		Analyze and design cascaded amplifiers with different types of coupling.
,		Classify power amplifiers into Class A, Class B, Class C, and Class AB and understand their construction, working, and efficiency.
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		Gain knowledge of feedback amplifiers, including positive and negative feedback, and their advantages.
		Learn about different types of oscillators and their basic elements, such as RC oscillators and LC oscillators.
		Understand operational amplifier its characteristics, applications and advanced applications like regenerative comparators and multivibrators.
		Understand the need for A/D and D/A converters, learn about different types of converters and Solve
		numerical problems based on A/D and D/A converters.
		Identify and analyze the characteristics and working principles of CE, CB, and CC amplifiers, as well as
		cascaded amplifiers.
		Design and construct power amplifiers using appropriate components and calculate their performance
		parameters such as power efficiency and gain.
		Demonstrate the ability to design and build different types of oscillators, including RC, LC, and crystal
		oscillators, and understand their frequency stability and generation.

		Apply operational amplifiers (Op-Amps) in various circuits such as inverting and non-inverting amplifiers,
		differentiators, integrators, and voltage followers.
		Construct and analyze astable, monostable, and bistable multivibrator circuits using Op-Amps and understand
		their timing characteristics and applications.
		Utilize analog-to-digital (ADC) and digital-to-analog converters (DAC) to interface analog signals with
		digital systems and comprehend their conversion techniques, sampling rates, and resolution.
B. Sc. Part-	<b>Communication Electronics</b>	Understand modulation and demodulation, focusing on AM and FM modulation. Explore the generation of
II, SemIV	and Microprocessor 8085	AM and FM signals, along with the operation of diode detectors and slope detectors. Analyze AM and FM
, ~	P	transmitters and receivers block diagrams and functionalities.
		Understand the advantages of fiber optic communication, types of fibers, internal reflections, numerical
		aperture in OFC. Explain semiconductor injection LASER, LEDs, optical detectors, photodiodes, PIN diodes,
		phototransistors. Fiber optic connections and losses.
		Learn principles, types and applications of pulse modulation. Compare TDM and FDM multiplexing and
		understand their advantages.
		Explore microprocessor evolution, including block diagram and functions. Analyze Intel 8085
		microprocessor's architecture, functional pin diagram, and timing. Understand instruction format, cycle
		machine cycle, and timing of MOV and MVI commands.
		Explore addressing modes & instruction sets in 8085 microprocessor. Grasp stack, stack pointer, and execute
		PUSH/POP instructions. Learn subroutines with CALL/RET instructions & delay subroutine implementation
		Apply programming concepts for diverse operations using algorithms, flowcharts, assembly & machine
		language.
		Learn interfacing, memory-mapped I/O, I/O mapped I/O. Explore data transfer schemes and functions of
		8255PPI chip. Analyze its block diagram, pin functions, and operating modes in I/O and BSR modes.
		1. Understand the principles of amplitude and frequency modulation (FM) in the context of transmitter and
		receiver circuits.
		Demonstrate knowledge of Optical Fiber Communication (OFC) systems, including the components,
		working principles, and advantages of using optical fibers.
		Apply pulse modulation techniques and understand the basics of digital communication.
		Gain proficiency in the study of the Microprocessor 8085, including its architecture, instruction set, and
		internal workings.

		Acquire programming skills for the Microprocessor 8085, enabling the students to write and execute
		assembly-level programs to perform specific tasks.
		7 1 0 1
		Develop the ability to interface various electronic components and devices with the Microprocessor 8085,
		understanding the communication protocols and methodologies required for successful integration.
B. Sc. Part-	Measuring Instruments	Understand the block diagram of a generalized instrumentation system and the concept of transducers.
III, SemV		Describe different types of resistive transducers, such as potentiometers, and explain their working principles.
		Identify various temperature measurement devices, including thermocouples, thermistors, and RTDs, and understand their applications.
		Explain the operation of IC 555 timer and its application as an astable, bistable, and monostable multivibrator.
		Discuss the function and application of PLL (Phase-Locked Loop) in FM demodulation, AM detection, and frequency synthesis.
		Learn about different types of displays, such as seven segment, LCD, and dot matrix, and understand the
		advantages and disadvantages of each. Also, understand the working principles of digital instruments and
		recorders.
		Understand the different types of sensors and their methods of fabrication. Understand the working principles
		and applications of various actuators.
		Understand and analyze the principles and working of various biomedical electronic devices and techniques.
		Understand the theory and working principles of LVDT, capacitor transducer, and pot meter for displacement
		measurement.
		Apply thermisters, RTDs, LM34, and LM35 for temperature measurement, and analyze their advantages and limitations.
		Design and analyze astable, monostable, and bistable circuits using IC555 and understand their applications
		in electronics.
		Demonstrate the ability to demodulate FM signals and detect AM signals using PLL (Phase-Locked Loop).
		Demonstrate proficiency in interfacing and displaying data on 16x2 LCD displays, seven-segment displays,
		and other display devices.
		Understand the principles of sensors and actuators, their types, and applications in various fields.
		Gain knowledge and hands-on experience in the operation and usage of medical devices like ECG, EMG,
		EEG, heart rate meter, and oximeter.

B. Sc. Part-	Advanced Microprocessor and	Understand 8086 microprocessor architecture, BIU and EU roles, segmented memory, and memory
III, SemVI	Micro Controller	addressing implications.
		Analyze 8086 instruction set, write assembly programs, use addressing modes, and design programs for data
		transfer and arithmetic/logical operations.
		Describe 8051 microcontroller architecture, including CPU, registers, flags, memory, and I/O ports.
		Demonstrate proficiency in programming 8051 microcontroller, including data transfer, arithmetic/logical
		operations, JUMP, loop, and interfacing programs.
		Develop understanding of serial communication, RS-232C interfacing, and interfacing with external devices
		in 8051.
		Introduce advanced microcontrollers like AVR, understand architecture, memory, peripherals, and
		downloadable flash and SRAM data memory in AVR.
		Write, execute, and debug assembly language programs for the 8086 microprocessor using a kit or a PC.
		Write, execute, and debug programs for the 8051 microcontroller using assembly language and/or C
		language.
		Conceive, design, and implement a minor project based on one of the following microprocessors: 8085, 8086,
		or microcontroller 8051, AVR, ARM, or any other relevant topic in electronics
		Apply their knowledge of microprocessors and microcontrollers to design and construct practical electronics
		applications.
		Prepare a comprehensive report documenting the design, implementation, and testing of their minor project.
		Develop the ability to identify and resolve issues related to programming, hardware, and interfacing while
		working on the practical assignments and the minor project.

### **Subject- Mathematics**

Class	Course	Outcome (Students will be able to)
B. Sc. I,	Algebra &Trigonometry,	Find inverse and normal form of matrices
Sem-I	Differential and Integral	Evaluate the characteristic equation, eigen value and corresponding eigen vector of a given matrix
	Calculus	Evaluate relation between the roots and coefficients of equations.
		Study application of De Movivre's theorem

		Compute summation of trigonometric series.
		Find inverse and normal form of matrices.
		Evaluate the characteristic equation, eigen value and corresponding eigen vector of a given matrix
		Evaluate relation between the roots and coefficients of equations.
		Study application of De Movivre's theorem
		Compute summation of trigonometric series.
B. Sc. I,	Differential Equations	Solve first order differential equations using different technique
Sem-II	(Ordinary and Partial),	Solve differential equations of first order and higher degree and orthogonal trajectories.
	Vector Analysis and Solid	Calculate complementary function and particular integral second order differential equations and describe the
	Geometry	different methods to solve second order differential equations.
		Solve first order partial differential equations using different technique.
		Solve compatible differential equations and homogeneous and non-homogeneous equations with constant
		coefficients
		Interpret the vectors, their product, differentiation and integration
		Determine curvature and torsion
		Solve apply the concepts of divergence, gradient and curls which are useful in physics.
		Describe the different forms of sphere and properties
		Discuss the equations and cone and cylinder.
B. Sc. II,	Advanced Calculus and	Describe series and different test of series.
Sem-III	Elementary Number Theory	Interpret sequence and their types.
		Define limit and study the basic property, classify continuity and discontinuity of function of two variable,
		expand function of two variable by using Taylor's theorem
		Find minima and maxima by using Lagrange's method and study Jacobian
		Evaluate double and triple integration.
		Evaluate GCD of more than two interger by using Euclidean algorithm.
		Study prime number and unique factorization theorem, define Fermat number and solve linear Diophantine
		equation
		Discuss the congruence and their properties, solve linear congruence by using Chinese remainder theorem
		Study different types of functions

		Describe primitive roots, different types of congruences and quadratic residue
B. Sc. II,	Modern Algebra: groups and	Introduce the concept of group with examples and recognize even & odd permutation
Sem-IV	rings and Classical Mechanics	Solve problems on coset.
		Understand major concepts of homomorphim & isomrorphsm
		Gain good knowledge & understand regarding ring & integral domain
		Study definitions of left & right ideal principle ideal & equation rings.
		Understand different concepts of Contrimts & Gengralized Coordinations
		Solve problems on a real velocity &Keplers laws of motion.
		Solve Euler's differential equation.
		Solve Euler's differential equation
		Differential of the equation concept body
B. Sc. III,	Mathematical Analysis and	Interpret Riemann integral and study fundamental theorem and mean value theorem of integral calculus.
Sem-V	<b>Mathematical Methods</b>	Study of improper integral and their tests, beta and gamma function.
		Analyse complex function, Analytic function, harmonic function and conjugate function and illustrate
		complex number by using Milne Thompson method.
		Study Mobius transformation, cross ratio finds image of function by using conformal mapping.
		Study definitions of metric space, limit point, interior point, open set closed set and compactness and solve
		examples on Chauchy sequence.
		Find inverse and normal form of matrices
		Evaluate the characteristic equation, eigen value and corresponding eigen vector of a given matrix
		Evaluate relation between the roots and coefficients of equations.
		Study application of De Movivre's theorem
		Compute summation of trigonometric series.
		Evaluate the characteristic equation, eigen value and corresponding eigen vector of a given matrix
		Evaluate relation between the roots and coefficients of equations.
		To study application of De Movivre's theorem
		Compute summation of trigonometric series.
		Study graphs and various types and uses of graph.
		Describe different types of trees and their properties.

		Analyse fundamental cutset and circuit and different representation of planer graph.
		Study how Vector space associated with a graph and Intersection and join of w and W and W s.
		Describe different types matrix related to the graph.
B. Sc. III,	Linear Algebra	Solve theorem on Vector space
Sem-VI	& Graph Theory	Analyse Linear transformation and representation of matrices
	•	Analyse dual space and Bidual space
		Study analyse inner product space
		Describe modules and sub modules
		Study graphs and various types and uses of graph.
		Describe different types of trees and their properties.
		Analyze fundamental cutset and circuit and different representation of planer graph.
		Study how Vector space associated with a graph and Intersection and join of $W_s$ and $W_s$ .
		Describe different types matrix related to the graph.
M.Sc. Part-I	Paper- I: Real Analysis	Interpret Riemann Stieltjes integral & properties
SemI		Describe Sequences and uniform convergence.
		Define Rearrangement of terms of a series & Power series
		Find Derivatives of higher order and study Jacobian.
		Evaluate Maxima and Minima.
	Paper- II: Advanced Abstract	Recall the concepts of coset and normal subgroups and to prove elementary propositions involving these
	Algebra	concepts
		Recognize different types of subgroups such as normal subgroup, cyclic subgroup and understand the
		structure and characteristics of these subgroup.
		Demonstrate the homomorphism, sum and direct sum of ideals, maximal and prime ideals, nilpotent and nil
		ideals.
		Translate the transition of important concepts of homomorphism and isomorphism from discrete Mathematics
		to advanced abstract Mathematics
		Interpret the definition and examples of modules and sub modules.
	Paper- III: Complex Analysis	Identify Cauchy integral formula apply to find the value of function at inside point of the region.
		Express the function in series of positive and negative power of variable in a given region.

		Record the concept of singularites to find integral of complex valued function on some simple connected
		region and multi connected region.
		Apply the residue theorem to compute several kinds of real integrals.
		Recognize absolute everywhere differential function and they will learn how it helps them to decide
		analyticity of function.
	Paper- IV Topology – I	Identify the cardinal and ordinal numbers and their role in building up the topology
		Demonstrate the concepts such as topological spaces, open and closed sets, closure and boundary
		Categories some important concepts like continuity, compactness, connectness, projection mapping etc and
		prove related theorems.
		Relates the basic concepts of countability axiom, separation axioms and convergence in topological spaces
		Distinguish the regular, normal and completely regular spaces.
	Paper- V: Differential	Discuss the local Intrinsic properties of a surface, curves on a surface and surfaces of Revolution.
	Geometry	Design arguments in the geometric description of family of curves and surfaces in order to establish basic
		properties of geodesic
		Restate Gaussian Curvature, Surface of constant curvature, conformal mapping, Geodesic mapping.
		Recognize tensor calculus, Tensor product of vector spaces, Transformation formulae, contraction special
		tensors, Inner product.
		Apply covariant differentiation of tensors and use absolute derivation of tensorial forms and tensor
		connections.
M.Sc. I	Paper- VI: Measure & Integral	Analysis Lebesgue outer measure, Regularity and Lesbesgue measurability.
Sem-II	Theory	Explain Integration of Non-negative function, the general integral, integration of series, Riemann and
		Lebesgue integrals.
		Demonstrate the concepts of derivative, differentiation and integration.
		Discuss the Measures and outer measures.
		Express completion of a measure, measure spaces and Holder and Minkowski inequality.
	Paper- VII: Advanced Linear	Recall the concepts of Eigen values and eigenvectors and polynomial.
	Algebra and Field Theory	Explain Quadratic forms, Linear transformation, Canonical and Normal form.
		Describe the concepts of Algebraic extension of fields.
		Discuss Normal and separable extension of group.

		Understand the concepts of Galois theory and its Applications.
	Paper- VIII: Integral Equation	Understand the type of integral equations.
		Categorize Volterra integral equations of first and second kind,.
		Determine the solution of Fredholm integral equation of the second kind.
		Define the concepts of iterated kernels and reciprocal kernels.
		Explain solution of Volterra integral equations of second kind.
	Paper- IX: Topology – II	Categorize some important concepts of metric spaces.
		Restate the ideas and concepts of complete metric spaces.
		Interpret the definition and examples of product spaces.
		Express the function and quotient spaces
		Discuss the metrization and paracompactness.
	Paper- X: Riemannian	Discuss the properties of Christoffel symbols, divergence, gradient, Laplacian.
	Geometry	Demonstrate the concepts of Parallel vector field.
		Intercept the concepts of curavature tensor.
		Categorize some concepts like Ricci tensor, curvature invariant and Einstein tensor.
		Summarize the concepts of Riemannian curvature, space of constant curvature, , intrinsic symmetries and
		killing vectors
M.Sc. II	Paper- XI: Functional Analysis	Interpret Quotient spaces of normed linear spaces and its completeness.
Sem-III	I	Describe Dual spaces with example
		Define complex linear spaces.
		Recall solvability of linear equations in Banach spaces.
		Study Hilbert spaces and structure of Hilbert spaces.
	Paper- XII: Classical	Interpret Variational principle and Lagranges Equations & Hamilton's principle.
	Mechanics	Describe Lagranges Equations of first kind and second kind.
		Study Legendre transformations and the Hamilton equations of motion.
		Study Canonical transformations
		Evaluate the Hamilton-Jacobi Equation for Hamilton's principle function.
	Paper- XIII:	Interpret Introduction of special theory of relativity and principles of special theory of relativity.
		Study Einstein's relativity.

	General Relativity	Study Schwarzschild exterior solution and its isotropic form.
	·	Analyze Schwarzschild interior solutions and Gravitational wave equation.
		Study Eddington's form of Schwarzschild solution and Weyl's solution to the lenearized field equation.
	Paper- XIV: Operational	Evaluate Graphical solution, Duality in LP. and Economic Interpretation.
	Research	Study Goal programming& Advanced techniques in LP.
		Discuss the Transportation problem and assignment problems.
		Study Shortest route problem and network route problem
		Describe Characteristics of dynamic programming.
	Paper- XV: Difference	Evaluate approximate summation.
	Equation-I	Study Equations with variable coefficients & Non-linear equations that can be linearized
	-	Discuss the Z-transform: Properties, initial and final value theorems.
		Study Stability of linear systems & Stability of non-linear system.
		Describe Asymptotic analysis of sums.
M.Sc. II	Paper- XVI: Functional	Study Riesz Representation theorem, adjoint of an operator on a Hilbert space
Sem-IV	Analysis –II	Study use of complex analysis in spectral theory.
		Calculate Compact linear operators on normed spaces.
		Analyze Spectral properties of bounded self-adjoint linear operators
		Study Positive operator and projection operators.
	Paper- XVII: Partial	Solve Genesis of first order P.D.E., Classification of intergals, Linear Equations of the first order
	Differential Equation	Recall Classification of second order P.D.E
		Calculate One dimensional Wave equation.
		Solve Laplace's Equation, Dirichlet problem for a half plane, The Dirichlet problem for a circle.
		Solve Heat conduction problem.
	Paper- XVIII: General	Study of static cosmological models of Einstein and De-sitter their derivations.
	Relativity & Cosmology-II	Describe derivation of Roberson Walker Metric, Further Properties.
		Study Motion of particles and light rays in R-W model.
		Study Friedman models: closed model, Flat model, Open model".
		Study Relativistic steller structure.
	Paper- XIX: Operation	Interpret Queing system and Basic characteristic of queing system.

Research	Determine Games and strategies.
	Apply the concepts of General NLLP constrained optimization with equality constraints.
	Solve Solution of Non-Linear Programming method.
	Discuss the unconstrained and constrained geometric programming problems
Paper- XX: Difference	Interpret The Self-adjoint Second Order Linear Equations
Equation-II	Determine The Sturm-Liouville Problem.
	Solve apply Discrete Calculation of Variation.
	Solve the Boundary Value Problems for Non Linear Equations.
	Discuss the Solution of partial differential equations

## **Subject- Physics**

Class	Course	Outcome (Students will be able to)
B. Sc. I,	Mechanics, Properties of	Understand Kepler's and Newton's law of gravitation, acceleration due to gravity, gravitational potential,
Sem-I	matter, Waves and Oscillation	Gauss's theorem, and potential/intensity of solid spheres. Solve gravitational numerical problems.
		Analyze Moment of inertia, principles of perpendicular & parallel axes, and radius of gyration. Calculate
		linear & angular momentum, conservation of momentum through numerical problems.
		Learn Linear & angular SHM, displacement, velocity, acceleration, kinetic & potential energy. Analyze
		pendulums, springs, damped & forced oscillations, and resonance. Solve related numerical problems.
		Understand wave superposition and characteristics, Interference, Lissajous figures, standing waves. Calculate
		velocities of longitudinal & transverse waves. Explore ultrasonic waves' production, detection, and
		applications through numerical problems.
		Know Hooke's Law, elastic constants, bending of beams, and bending moments. Analyze cantilevers,
		centrally loaded beams, torsional pendulums, and Maxwell's needle. Solve related numerical problems.
		Analyze kinematics of moving fluids, streamline & turbulent flow, coefficient of viscosity, equation of
		continuity. Study Bernoulli's theorem, Poiseuille's equation, Reynolds number, and fluid properties. Solve
		numerical problems on fluid mechanics.
		Perform different practical experiments based on mechanics.
		Demonstrate proficiency in handling scientific equipment responsibly.

		Determine the nature of collision by performing experiment and calculate the value of coefficient of
		restitution.
		Determine the value of acceleration due to gravity using Bar &Kater's pendulum and compare it with
		standard value.
		Identify and handle various equipment likes different types of pendulums, traveling microscope.
		Measure various physical quantities by using different measuring instruments such as vernier caliper,
		micrometer screw gauge, travelling microscope, spheromoter.
		Acquire skills in observing and measuring different types of errors.
		Determine elastic constants like Young's modulus and modulus of rigidity of material and compare it with
		standard values.
		Understand and adhere to laboratory safety protocols while working with experimental setups.
B. Sc. I,	Kinetic Theory,	Understand the assumptions and equations governing ideal gases, interpret temperature in the context of
Sem-II	Thermodynamics and Electric	kinetic theory and calculate the RMS speed of gas molecules. estimate Avogadro's number and explore the
2411 11	Currents	specific heat of monatomic gases, with an extension to diatomic and triatomic gases.
		Acquire knowledge about concept of real gases and their behavior through the Vander Waals gas equation of
		state, compare experimental P-V curves with the equation and analyze critical constants, understand Vander
		Waals forces and their nature
		Learn about molecular collisions, mean free path, and Brownian motion in gases, explore the transport of
		mass, momentum, and energy, along with the interrelationship and their dependence on temperature and
		pressure.
		Explain the laws of thermodynamics, apply the laws to PV indicator diagrams and understand work done by
		and on the system, analyse the Carnot Cycle and its efficiency for perfect gases, examine entropy, S-7
		diagrams, and the thermodynamic scale of temperature.
		Understand the Joule-Thomson effect, Joule's coefficient, and Boyle and inversion temperatures, explore the
		principles of regenerative cooling and cascade cooling and examine the liquefaction of hydrogen and helium
		study thermodynamic variables, Maxwell's general relationship, and the Clausius-Clapeyron heat equation.
		Gain insights into the mechanical aspects of the motion of charged particles in electric and magnetic fields
		analyze electron guns, discharge tubes, linear accelerators, and mass spectrographs, understand the principles
		behind cyclotrons and velocity selectors.
		Present their experimental results and findings coherently in written reports or oral presentations.
		1 resent then experimental results and findings concretity in written reports of oral presentations.

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		Acquire skills to perform experiment independently.
		Understand Kirchoff's laws and apply them to verify the validity of electrical networks.
		Apply Thevenin's Theorem to simplify complex circuits and validate its effectiveness in practical scenarios.
		Validate the Maximum Power Transfer Theorem and comprehend its implications in optimizing power
		transfer in electrical systems.
		Apply the Phasor diagram method to measure the inductance of an inductorand capacitance of capacitor and
		analyze its behavior in AC circuits.
		Analyze the structure and characteristics of transformers.
		Compare different capacities, and verify laws of capacitances using the repeated charge decay method.
		Study the frequency response of series LCR circuits and determine the Quality factor (Q).
B. Sc. II,	Electrodynamics, Solid state	Apply mathematical concepts such as gradient, divergence, and curl of vector fields to describe physical
Sem-III	electronics, Theory of	phenomena in electrostatics, and grasp the significance of line, surface, and volume integrals in physics.
	relativity, Atmosphere and	Understand Gauss divergence theorem and Stokes theorem, and their applications in the study of
	Gio-physics.	electrostatics and magnetostatics.
	Gio physicsi	Analyze and calculate various aspects of electrostatic fields, and comprehend Faraday's Law, displacement
		current, and Maxwell's equations, as well as investigate plane electromagnetic waves in vacuum using
		Poynting vectors.
		Understand the principles of semiconductor physics, and study semiconductor diodes, LEDs, and Varactor
		diodes, and comprehend the working and characteristics of BJT and FET devices.
		Acquaint with the postulates of the Special Theory of Relativity, apply Lorentz transformations to understand
		phenomena like length contraction, time dilation, and relativistic addition of velocities, and comprehend
		Einstein's mass-energy relation.
		Acquire knowledge about the structure of the Earth and its atmosphere, earthquakes, their causes, and study
		radiation in the atmosphere and the mechanisms that produce clouds.
		Understand the basic principles of operation of semiconductor diodes and transistors.
		Explain the voltage transfer characteristics of different diodes and transistors.
		Explore principle, characteristic and working of OP-AMP and its various applications.
		Analyze Cathode Ray Oscilloscope (CRO) to determine the hysteresis loss of a known voltage.
		Collaborate to work efficiently and cooperatively in a small team to accomplish tasks related to the physics
		practical experiments.
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		Compare and contrast theoretical predictions with the results obtained from experimental measurements.
		Identify discrepancies between theoretical predictions and experimental measurements, and understand
		potential sources of error in experimental procedures.
B. Sc. II,	Optics, Laser, fibre optics and	Understand cardinal points of an optical system, equivalent focal length, and power of coaxial lens system,
Sem-IV	renewable energy sources	and apply these concepts to practical optical setups.
		Analyze interference in thin films due to reflected and transmitted light, and calculate properties like film
		thickness and refractive index from interference patterns.
		Comprehend the principles of diffraction, types, and apply them to analyze and design diffraction patterns.
		Describe polarization, optic axis, and double refraction, and apply this knowledge to understand the
		behaviour of polarized light in various materials and polarizing devices.
		Explain the working principles of lasers, the process of absorption, spontaneous and stimulated emission, and
		understand the characteristics of different laser systems and their applications.
		Describe the basics of fiber optics, optical fiber structure, propagation of light waves, and analyze the
		advantages, disadvantages, and applications of fiber optic communication systems.
		Identify and describe various renewable energy sources, understand the principles of solar energy storage and
		solar photovoltaic systems, and applications of solar energy in different contexts.
		Understand Newton's rings and the ability to calculate the wavelength of sodium light.
		Demonstrate proficiency in calculating the wavelength of monochromatic light and understand the concept of
		resolving power of a plane diffraction grating.
		Acquire knowledge of the resolving power of telescopes through practical experimentation.
		Explain the concept of refractive index, and acquire the ability to find the refractive index of a prism using a
		spectrometer.
		Demonstrate proficiency in using various experimental apparatus and instruments commonly employed in
		physics experiments.
		Develop skills in setting up, calibrating, and adjusting experimental setups to achieve accurate and reliable
		measurements.
		Draw appropriate conclusions from experimental results and relate them to theoretical concepts.
		Cultivate teamwork and collaboration skills while working in group experiments or projects.
B. Sc. III,	Quantum Mechanics, Nuclear	Understand the historical development and significance of quantum mechanics, failure of classical
		mechanics, success of Planck's Quantum Theory in explaining Black body radiation, Photoelectric Effect and

Sem-V	Physics & Solid State	Compton effect.
	Electronics	Comprehend the wave-particle duality and the concept of matter waves as proposed by De Broglie, along
		with experimental evidence from the Davisson-Germer experiment.
		Analyze the Schrödinger equation and its applications, including the physical significance of the wave
		function, time-dependent and time-independent equations, and the concept of energy eigenvalues and eigen
		functions for various potential systems.
		Explain the principles of atomic and molecular spectroscopy, including quantum numbers, selection rules,
		different types of spectra, Raman spectroscopy and X-rays and it's applications.
		Understand the fundamental concepts of nuclear physics, including the detection of charged particles, alpha
		and beta decay processes, and the stability of nuclei.
		Acquaint with electronic circuits and amplifiers, h- parameter analysis of CE and RC coupled amplifier
		stability, and thermal runaway, noise and distortions in electronic circuits, feedbacks and comprehend the
		principles and functioning of feedback, oscillators and multi-vibrators.
		Demonstrate proficiency in identifying and utilizing different electrical and electronic components used in
		circuits and systems.
		Exhibit competence in operating and handling various equipment such as Cathode Ray Oscilloscope
		travelling microscope, and digital multimeter.
		Develop the ability to design and analyze different types of oscillators, Multivibrators, and amplifiers fo
		various applications.
		Acquire the skill to analyze experimental observations and interpret the results obtained from experimental
		performed in electrical and electronic circuits.
		Apply critical thinking to compare theoretical predictions with experimental results and determine the
		percentage error between the two.
		Demonstrate proficiency in identifying faults in experimental units and soldering electronic components in
		circuits, enhancing practical troubleshooting skills.
		Identify unknown elements through the analysis of line emission spectra, and develop skills in using
		spectroscopic techniques for element identification.
		Acquire proficiency in using a CRO to measure phase and frequency of signals accurately, and analyze and
		interpret waveforms and signals.
		Determine Planck's constant using LED and the reverse photoelectric effect.

B. Sc. III,	Statistical Mechanics and	Understand the concepts of phase space, microstates, and macrostates in Statistical Mechanics to describe the
Sem-VI	<b>Solid-State Physics</b>	behavior of a system with various energy states.
	·	Apply Maxwell-Boltzmann statistics to analyze molecular speed distribution and calculate average speed,
		root mean square speed, and most probable velocity of particles.
		Analyze the behavior of particles using Bose-Einstein and Fermi-Dirac statistics, and apply these
		distributions to study black body radiation and determine Fermi energy and Fermi temperature.
		Comprehend crystallography, analyze the diffraction of X-rays by crystals using Bragg's Law, and learn
		different types of crystal defect
		Analyze the electrical and magnetic properties of matrials.
		Understand principles of superconductivity and their applications in various fields, as well as the introduction
		to nano materials and their physical properties and applications.
		Demonstrate proficiency in identifying and utilizing different electrical and electronic components.
		Operate and handle various equipment such as Cathode Ray Oscilloscope, travelling microscope, and digital
		multimeter.
		Analyze and comprehend the principles and characteristics of diodes (p-n junction diode, Zener diode,
		Photodiode), and Solar cell through designing and studying them.
		Analyze experimental observations and effectively interpret the results obtained from the experiments.
		Compare theoretical expectations with experimental results and calculate percentage errors to evaluate accuracy and precision.
		Develop the skills necessary to identify and troubleshoot faults in experimental setups and units.
		Identify various crystal models and demonstrate proficiency in identifying crystal planes based on
		crystallographic information.
		Understand concept of nuclear disintegration using one-color face dice.
		Analyze and interpret the X-ray film powder photographs to determine the lattice parameter of the cubic
		crystal unit cell accurately.
M.Sc. Part-I	Mathematical Physics	Acquire the knowledge about concepts of vector spaces, matrix algebra, and transformations, proficient in
SemI		performing operations involving matrices, learn how to solve eigenvalue problems and apply matrix
		techniques in classical and quantum mechanics.
		Understand complex variables and their representation, functions of a complex variable and analyze their
		properties, learn about integral theorems, series expansions, Taylor, and Laurent series and residue theorem.

	Solve linear differential equations with variable coefficients using various methods, familiar with Legendre's
	equation, Legendre functions of the second kind, generating functions, and orthogonality of generating
	functions, understand recurrence relations and their applications.
	Demonstrate proficiency in solving Bessel's differential equation and its third kind (Hankel function), learn
	about generating functions, recurrence relations, and orthogonality of Bessel's functions, study the Hermite
	differential equation and Hermite polynomials.
	Explain Laplace transforms, their properties, and how to use the differential equation method to find Laplace
	transforms, gain proficiency in inverse Laplace transforms, understand Fourier transforms, Fourier series
	properties of Fourier series, Fourier integral, and Fourier transforms of derivatives, apply integral transforms
	in various physics-related applications.
Classical Mechanics	Gain a comprehensive understanding of Newtonian mechanics for single particles and systems of particles
	identify different types of forces acting on single particles and systems, analyze examples of these forces in
	practical scenarios, and understand the limitations of Newton's program in explaining certain physical
	phenomena.
	Proficient in the application of conservation laws, acquire knowledge about concept of work-energy theorem
	and its practical applications, analyze open systems with variable mass using the principles of virtual work
	and D'Alembert's principle.
	Explain the concept of constraints in physics, their definition, types, and effects on systems, need for
	imposing constraints and recognize the difficulties. learn to express physical systems using generalized
	coordinates and momenta, proficient in applying Lagrange's equations to obtain the equations of motion.
	Understand Hamiltonian mechanics. derive equations of motion using Hamilton's principle and characteristic
	functions. explore central force problems, analyze orbits, understand Kepler's laws, and solve the differential
	equations of motion for various types of orbits.
	Acquire knowledge about canonical transformations, generating functions, and their properties, explore
	examples of infinitesimal generators and Poisson brackets, understand the transition from discrete to
	continuous systems and apply these concepts to analyze small oscillation
Quantum Mechanics-I	Demonstrate a comprehensive understanding of the failure of classical ideas, including the photoelectric
	effect, Compton effect, blackbody radiation, and atomic spectra, understand the concept of wave-particle
	duality, the Heisenberg uncertainty relation, and the basics of wave function and Schrodinger's equation.
	Apply the general formalism of quantum mechanics, including linear vector spaces and operators, learn how

to represent states and dynamical variables using Dirac bra-ket notation and matrix representations of operators, acquire the knowledge about the concept of Hermitian operators, eigenstates, and eigenvalues.

Analyze and solve simple one-dimensional quantum mechanical problems, such as infinite and finite potential wells and tunneling probabilities, understand the concept of wave packets, minimum uncertainty Gaussian wave packets, group velocity, and dispersion, analyze the behavior of a one-dimensional harmonic oscillator.

Learn the representation of angular momentum operators and Hamiltonian in spherical coordinates, understand the properties of hydrogen electron wave functions and energy states, including principal, orbital, and magnetic quantum numbers, Laguerre polynomials, and spherical harmonics, apply raising and lowering operators to the simple harmonic oscillator.

Acquire the knowledge of Pauli spin matrices, angular momentum algebra, and simultaneous eigenstates of L^2 and Lz, L+ and L- operators, apply this understanding to the spin-orbitals of hydrogen, Clebsch-Gordan coefficients, and examples of simple cases, understand the concept of symmetry and constants of motion, time evolution, and commuting physical observables.

Demonstrate a deep grasp of quantum mechanics, including symmetry, constants of motion, and using formalisms like Schrodinger, Heisenberg, and Interaction Pictures, apply advanced mathematical techniques like the variational principle and WKB approximation to tackle intricate quantum problems, analyzing physical systems like the Helium atom.

# Computational Methods and Programming

Apply numerical methods for finding the roots of linear, nonlinear, and transcendental equations, and analyze the convergence of solutions.

Gain proficiency in solving simultaneous linear equations using various techniques like Gauss elimination with and without pivoting, as well as iterative methods.

Understand the concepts of eigen values and eigenvectors of matrices, and apply power and Jacobi methods to find them.

Use numerical techniques like finite differences, interpolation (both equally spaced and unevenly spaced points), and curve fitting (including least squares fitting and cubic spline fitting) to approximate functions and data.

Acquire skills in numerical differentiation and integration, using Newton-Cotes formulae and Gauss methods, along with the ability to estimate errors in numerical computations.

Develop knowledge of Monte Carlo methods for evaluating integrals and performing importance sampling,

	gain an understanding of numerical techniques for solving ordinary and partial differential equations (such as
	Euler and Runge-Kutta methods, and basic solutions to partial differential equations).
	Acquire elementary knowledge about digital computer principles, compilers, interpreters, and operating
	systems, learn C programming fundamentals, familiar with input/output statements, pre-processor commands,
	and different storage types.
	Learn operators, control statements (e.g., while, for), if-else, switch, break, continue, and goto. Understand
	arrays, pass them to functions, work with multidimensional arrays, define functions, use prototypes,
	implement recursion, explore library functions, and grasp static functions.
1PHY6- General Lab	Conduct experiments in Mechanics, Optics, and Modern Physics.
	Acquire expertise in using experimental and computational tools to effectively analyze real-world problems.
	Handle diverse experimental setups, and determine universal constants accurately while identifying sources
	of error and data fluctuations.
	Learn to calculate and analyze errors in theoretical predictions and experimental measurements.
	Enhance problem-solving skills through hands-on physics practicals and apply theoretical concepts to
	interpret experimental results precisely.
	Apply principle of interference and optics to measure wavelength of Sodium Light and the refractive index of
	liquid.
	Simulate radioactive decay with dice, and analyze the spectral characteristics of a Solar cell for efficiency and
	performance.
	Comprehend the principles and applications of the Chi-square test as a statistical tool for hypothesis testing
	and data comparison.
Electrodynamics-I	Understand the fundamentals of electrostatics, including Gauss' law, electrostatic potential, Poisson's and
•	Laplace's equations, as well as electrostatic energy density and electric energy of a charged distribution.
	Solve boundary value problems in electrostatics using various techniques such as separation of variables,
	method of images, and Green's function method for potentials under different symmetries like Cartesian,
	cylindrical, and spherical.
	Develop an understanding of magnetostatics, Biot-Savart law, and Ampere's law, calculate magnetic fields
	generated by arbitrary current distributions, straight wires, loops, solenoids, toroids, and current sheets,
	acquire the knowledge about the concept of magnetic moment and magnetic forces and torques on a circuit.
	Learn about charge distribution in finite regions and multipole expansion of potential and field, gain
	1PHY6- General Lab  Electrodynamics—I

	knowledge about material media and boundary conditions, with a focus on dielectric spheres in a uniform
	field, understand the concepts of susceptibility and polarizability, along with a molecular model.
	Understand time-varying fields, displacement current, and Faraday's induction, explain Maxwell's equations
	for time-varying fields and learn about scalar and vector potentials, gauge invariance, the wave equation, and
	the Poynting theorem.
	Apply the principles and laws of electrostatics, magnetostatics, and time-varying fields to real-world
	problems and situations, analyze and solve problems involving electric and magnetic fields and understand
	their practical implications.
Quantum Mechanics-II	Understand the principles and applications of time-independent perturbation theory, solve the secular
	equation and calculate first and second-order corrections to energy and wave functions for simple examples.
	Explain the Zeeman effect, both normal and anomalous, and analyze the Stark effect, apply these concepts to
	specific examples, including the hydrogen atom.
	Understand the concepts of time-dependent perturbation theory and calculate transition probabilities using
	Fermi's golden rule, analyze harmonic perturbation and understand transition probabilities for induced
	emission and absorption in atomic systems.
	Analyze scattering from finite-range potentials, including differential and total scattering cross-sections,
	apply partial wave analysis and the Born approximation to understand scattering from a square well potential
	and a perfectly rigid sphere.
	Understand the properties of systems of identical particles and distinguish between symmetric and
	antisymmetric wave functions, calculate spin functions for many particles and apply spin-statistics relations,
	explain creation and annihilation operators and their algebra for fermions and bosons.
	Understand the semi-classical theory of radiation and relativistic wave equations, analyze first-order wave
	equations, including the Dirac equation, and understand the properties of Dirac matrices, analyse second-
	order wave equations, including the Klein-Gordon equation.
Solid State Physics	Understand the concepts of single crystals and poly crystals, crystal symmetry, symmetry elements, different
	crystal types, Bravais lattices in 2D and 3D, and point groups and space groups in 2D and 3D, acquire
	knowledge about the arrangement and characteristics of crystals in various dimensions.
	Learn Bragg's Law in 1D and 3D, the Laue Diffraction Equation, and atomic scattering factor, acquire skills
	in using X-ray diffraction techniques such as Laue, rotating crystal method, oscillation, Burger precession
	method, and powder photograph method to analyze crystal structures.

Interpret powder photographs and measure Bragg's angles accurately, understand the concept of interplanar spacing (d) and learn analytical and graphical methods for determining lattice parameters of known unit cells using Bernel Chart and interpretation of oscillation photographs.

Acquire knowledge about the concept of reciprocal lattice and its vector demonstration in two dimensions, learn Bragg's diffraction condition in terms of the reciprocal lattice and comprehend Brillouin Zones, explore diffraction of electrons and neutrons, as well as inelastic scattering and its applications.

Learn about the cohesive energy of solids and the properties of molecular, ionic covalent crystals, and metals, understand the dynamics of monoatomic and diatomic lattices and explore infrared absorption by ionic crystal lattice, gain knowledge about localized lattice vibrations, localized states, associate wave functions, anharmonicity, and thermal expansion as well as thermal conductivity.

Understand Dulong and Petit's Law, lattice specific heat, and the temperature dependence of specific heat, explore Einstein and Debye theories related to specific heat and distinguish between electronic and lattice contributions to specific heat.

#### Net Work Theorems and Solid-State Devices

Analyze and solve electrical circuits using Kirchoff's Voltage Law and Kirchoff's Current Law, and apply methods such as Loop and Node Analysis for circuit analysis.

Understand and apply the Thevenin's Theorem, Norton's Theorem, and Superposition Theorem for simplifying complex circuits and determining equivalent circuit parameters.

Analyze passive components such as resistors, capacitors, inductors, transformers, relays, and fuses, including their types, applications, common faults, and testing procedures.

Understand the principles of semiconductors, including energy band diagrams, conductors, semiconductors, and insulators, the behavior of junction diodes under forward and reverse bias and study special diodes like Zener diodes, Varactor diodes, and Light Emitting Diodes.

Demonstrate the working principles and characteristics of Unijunction Transistors, JFETs, and MOSFETs, and understand their applications as switches and timebase generators.

Explain rectifiers, filters, and various power supply configurations, study power control devices like Four Layer Diode, Silicon Controlled Rectifier (SCR), Triac, and Diac and understand their principles and applications.

Acquire knowledge about working principles, input-output characteristics, and basic configurations of Bipolar Junction Transistors, analyze and design amplifiers of different classes (Class-A, B, AB, C) and assess their properties such as distortion, noise, and noise figure.

		Explain various transducers and their basic principles, including resistive, capacitive, and inductive
		transducers, understand the operation of pressure transducers, strain gauges, photovoltaic cells, light-
		dependent resistors (LDRs), photodiodes, and phototransistors.
		Demonstrate proficiency in using basic measuring instruments such as Analog Multimeters, Digital
		Multimeters, Cathode Ray Oscilloscopes, and Function Generators, understand the functional block diagram
		and basic working principles of these instruments, as well as the quantities they can measure.
M.Sc. Part-I	2PHY5- Lab on Solid State	Understand and apply the magnetron method to determine the charge-to-mass ratio (e/m) of an electron.
SemII	Physics	Analyze intensity distribution data to assess laser beam divergence and spatial characteristics.
		Apply laser-based techniques to measure wire thickness and laser source wavelength.
		Explain principle, working and characteristics of GM counter, and determine its various parameters through
		practical experimentation and data analysis.
		Demonstrate comprehension of crystal models in the cubic crystal system and their implications in materials
		science.
		Apply crystallographic principles to describe atom arrangements in different cubic crystal structures.
		Analyze experimental data and present clear and concise reports, highlighting significance in advanced
		materials research.
		Compare theoretical predictions with experimental measurements' results
		Design, assemble, and perform experiments on Laser/ Solid State Physics, Modern Physics, and Nuclear
		Physics.
M.Sc. Part-I	2PHY-6: LABORATORY	Demonstrate Proficiency in using measuring instruments such as multimeters, oscilloscopes, and function
SemII	COURSE-2	generators to measure voltage, current, frequency, and other circuit parameters.
		Develop ability to design and analyze various oscillators and multivibrators, understanding their output
		waveforms.
		Acquaint with electronics components, including their specifications and practical usage.
		Understand the basic operation of semiconductor devices and construct electronic circuits based on them.
		Capable to demonstrate practical experiments involving semiconductor devices.
		Develop skills to design circuits for different basic network theorems and verify their laws through result
		analysis.
		Acquire knowledge of electronic circuit design and analysis, including oscillator, multivibrator circuits and
		network theorems.

M.Sc. Part-	Electrodynamics-II	Understand and apply the wave equation for electric and magnetic fields in free space, and analyze wave
II SemIII	•	equations for vector and scalar potential.
		Demonstrate an understanding of Retarded and Lienard-Wiechert potentials and calculate electric and
		magnetic fields due to uniformly moving charges and accelerating charges.
		Analyze the total power radiated and angular distribution of power radiated by moving charges with linear
		and circular acceleration, including phenomena such as Cerenkov radiation and radiation reaction force.
		Describe the motion of charged particles in various electromagnetic fields, including uniform and nonuniform
		E and B fields, and analyze diffusion across magnetic fields and time-varying E and B fields.
		Understand the concept of plasma and its parameters, including temperature and Debye shielding, and apply
		plasma physics concepts to ordinary electromagnetics and classical treatment of magnetic materials and
		dielectrics.
		Analyse plasma oscillations, electron plasma waves, ion waves, and various electromagnetic waves in
		different magnetic field configurations, such as perpendicular and parallel to static magnetic field.
		Understand the concepts of cutoffs, resonances, Whistler mode, Faraday rotation, and hydromagnetic waves.
	<b>Statistical Mechanics</b>	Understand classical statistics and its applications by describing the specification of states, phase space,
		trajectories, and density of states, as well as the application of Liouville's theorem and ensemble theory.
		Compare and analyze the microcanonical, canonical, and grand canonical ensembles, and understand their
		significance in statistical mechanics, Correlate the partition function with thermodynamic quantities and address Gibbs Paradox.
		Demonstrate fundamentals of quantum statistics, including concepts related to distinguishable particles and
		the statistical distributions of Fermi-Dirac and Bose-Einstein.
		Explore the properties of the Ideal Bose-Einstein gas, degeneracy, and Bose-Einstein condensation, analyze
		thermal properties of the Bose-Einstein gas and Planck's distribution law for blackbody radiation.
		Explore the thermodynamic functions of the Ideal Fermi-Dirac gas and their relevance to degenerate systems,
		nderstand the Free Electron model and its application to electron emission. Study specific heats of solids and
		the theories of Einstein and Debye.
		Understand the phase transitions and Landau's theory of phase transition, analyze fluctuations in
		thermodynamic quantities and understand their correlation with space-time-dependent fluctuations, explain
		the relationship between fluctuations and transport phenomena, including Brownian motion and random
		walk, Solve problems using the Fokker-Planck equation.

	Analyze experimentally observed properties of superfluid helium II and understand Landau's theory of
	superfluidity.
Atomic & Molecular Physics	Understand the concept of space quantization and electron spin in atoms.
	Analyze the significance of quantum numbers, examine the l-s coupling for single valence electron atoms and
	explain the Stern-Gerlach experiment and Pauli's exclusion principle.
	Explain spectra of alkali elements and the fine structure in alkali spectra, explore the Zeeman effect, both
	normal and anomalous, and the experimental setups to study, understand Debye's explanation of the normal
	Zeeman effect and the theory behind the anomalous Zeeman effect.
	Demonstrate Paschen-Back effect, Stark effect, LS & JJ coupling in two valence electron atoms, electron spin
	resonance, nuclear magnetic resonance, and the Frank-Condon principle, understand the Born-Oppenheimer
	approximation.
	Identify types of molecules and their molecular (band) spectra.
	Classify molecular spectra and understand the rotational spectra of diatomic molecules as a rigid rotator.
	Analyze the quantum mechanical theory of pure rotational spectra (rigid rotator) and compare the spectra of
	rigid and non-rigid rotators.
	Explore the isotopic effect in pure rotational spectra.
	Understand the energy levels and spectra of diatomic molecules using Morse potential energy curve and
	vibrating rotator model.
	Analyze the vibration spectrum of diatomic molecules, including PQR branches and Raman spectra.
	Demonstrate the IR spectrometer qualitatively and its application in spectroscopy.
Digital Techniques	Understand the working principle and characteristics of digital devices such as transistors, TTL, and C-MOS.
	Analyze and compare different logic families in terms of fan in, fan out, propagation delays, voltage levels,
	power consumption, and packing density.
	Identify and describe the basic building blocks of logic circuits, including NOR and NAND devices.
	Apply Boolean algebraic methods and De Morgan's theorems to simplify logic circuits.
	Design and implement combinational logic circuits using K-map simplification techniques and ICs such as
	7483 and adder/subtractor circuits.
	Design and analyze sequential logic circuits using flip-flops, shift registers, counters (synchronous and
	asynchronous), and different types of memory devices like.
Lab Course-I 3PHY3	Acquire skills in utilizing Quincke's and Gouy balance methods to determine and compare the magnetic

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		susceptibility of different magnetic samples.
		Analyze magnetic data curves to evaluate key magnetic parameters such as coercivity, retentivity, and
		saturation magnetization.
		Operate LCR meters with programmable furnaces to study dielectric properties and find ferroelectric phase
		transition temperature (Tc) in samples.
		Develop the ability to design and utilize high-temperature muffle furnaces for determining the specific heat of
		solid samples.
		Execute powder diffraction data analytical programs (e.g., Celref) to investigate and understand the crystal
		structure of various crystalline solids.
		Apply principles of magnetic properties to practical situations and real-world applications.
		Demonstrate proficiency in interpreting experimental results and drawing meaningful conclusions.
		Develop research and problem-solving skills in the field of physics and experimental techniques related to
		magnetic and dielectric properties of materials.
M.Sc. Part-	Review of Literature	Understand significance of ethical practices and Intellectual Property Rights in Research and Publications.
II SemIII	Project/dissertation	Demonstrate the ability to formulate a clear and feasible research problem, design experiments or theoretical
		investigations.
		Conduct a thorough literature review, critically analyzing existing research and identifying gaps in the current
		understanding of the chosen topic.
		Utilise different e-resources such as web of science, Scopus, inflibnet, google scholar for conducting
		literature review.
M.Sc. Part-	<b>Nuclear and Particle Physics</b>	Understand the general properties of atomic nuclei, including nuclear charge, mass, atomic number, and mass
II SemIV	·	number, differentiate between isotopes, isobars, isotones, isomers, and isodiapheres with relevant examples.
		Gain knowledge of nuclear radius and its classification, including electrical and potential radius, determine
		nuclear radius using electron scattering (Hofstadter's Experiment) and the mirror nuclei method.
		Understand the concepts of mass defect, binding energy, and the variation of binding energy per nucleon with
		mass number using the Semiempirical Mass Formula, quantum numbers associated with individual nucleons,
		including principal, orbital, radial, spin, total, and isospin quantum numbers.
		Learn about nuclear angular momentum, nuclear magnetic momentum, and nuclear magnetic dipole moment,
		measure nuclear magnetic moment using Rabi's method and Block's method.
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	Acquire knowledge about nuclear forces and properties of nuclear forces, the meson theory of nuclear forces.
	Explain beta decay and nuclear models. understand the three forms of beta decay, the continuous nature of
	beta-ray energy spectrum, and the difficulties in explaining it, explore the Pauli's Neutrino hypothesis and
	Fermi's theory of beta decay, including Fermi-Kurie plots and Seargents plots.
	Demonstrate the detection of neutrinos and non-conservation of parity in beta decay.
	Gain knowledge of neutron physics, including properties of neutrons, classification according to energy,
	neutron sources, detectors, and slowing down processes.
	Learn about reactor physics, types of reactors, and reactor designs.
	Acquire knowledge of elementary particle principles, classification, interactions, and symmetries, especially
	the quark model and SU(2) and SU(3) multiplets, understand the importance of symmetry, conservation laws,
	and CP/CPT invariance in particle physics.
Opamp Theory and its	Analyze and design differential amplifier circuits, including four types and understand their DC and AC
Applications	characteristics.
	Gain knowledge about dual input balanced output differential amplifiers with inverting and non-inverting
	inputs, and understand concepts like CMRR and constant current bias level translator.
	Understand the block diagram of a typical Op-Amp and analyze open-loop configurations, inverting and non-
	inverting amplifiers.
	Explore the impact of negative feedback on closed-loop gain, input impedance, output resistance, bandwidth,
	and output offset voltage.
	Define and illustrate various practical op-amp parameters, analyze the frequency response of op-amps and
	comprehend their DC and AC amplifier applications, including summing, scaling, averaging amplifiers,
	instrumentation amplifier, integrator, and differentiator.
	Understand the principles and types of oscillators, including phase-shift oscillator, Wein bridge oscillator, and
	LC-tunable oscillators.
	Explore multivibrators and comparators, explain the applications of OPAMP as a Butterworth filter
	Acquire knowledge about analogue computation, active filters, comparators, logarithmic and anti-logarithmic
	amplifiers, sample and hold amplifiers, and waveform generators
	Explore the applications of Linear ICs, including OPAMP as an instrumentation amplifier, Digital to
	Analogue converters and Analogue to Digital converters, analyze and design various electronic circuits,
	enhancing their practical skills in using Linear Integrated Circuits for real-world applications

Condensed Matter Physics-II	Understand the mechanisms of plastic deformation in solid materials, including the role of dislocations,
Condensed Watter I Hysics-II	stress, and strain fields of screw dislocations, analyze the elastic energy of dislocations and their effects on
	slip, cross slip, and climb in crystals.
	Identify and analyze dislocation reactions, partial dislocations, and stacking faults in close-packed crystal
	structures using the Thompson Tetrahedron.
	Demonstrate proficiency in experimental techniques for observing dislocations and stacking faults.
	Comprehend the behavior of an interacting electron gas, applying the Hartree and Hartree-Fock
	approximations to calculate correlation energy and screening effects.
	Understand the concept of the dielectric function and its relation to Thomas-Fermi and Lindhard theories,
	including frequency-dependent Lindhard screening.
	Describe different types of point defects in crystals and determine their concentrations within the band model
	framework, analyze diffusion and ionic conduction processes, as well as recombination mechanisms of
	imperfections, explore optical transitions at imperfections in crystals.
	Recognize various types of lattice disorders, understand the characteristics of impurity band semiconductors
	and amorphous semiconductors, analyze transport phenomena in disordered lattices, examine conductivity in
	impurity band semiconductors and amorphous semiconductors.
	Investigate and analyze real-world materials and their properties, especially with regard to imperfections in
	crystal structures and their influence on material behavior and electrical properties.
Nano Science and	Understand the Free Electron Theory, Band Structures, and Energy Bands of Semiconductors.
Nanotechnology	Describe the concept of the Free Electron Theory, explain band structures in materials, and identify energy
	bands and band gaps in semiconductors.
	Analyze the properties of insulators, semiconductors, and conductor, understand electron transport in
	semiconductors in three dimensions (bulk), two dimensions (thin film), and low-dimensional systems.
	Explore different methods of preparing nano structured materials, including bottom-up and top-down
	processes such as sol-gel, electrodeposition, chemical bath deposition, thermal evaporation, ball milling,
	pulsed laser deposition, chill block melting, and gas quantization.
	Use various techniques to measure the properties of nanomaterials, including determining atomic structures
	through crystallography and powder diffraction methods, and analyzing particle size from XRD peaks.
	Understand microscopy techniques like transmission electron microscopy, field ion microscopy, and scanning
	microscopy.

		Explore size-dependent properties in nanomaterials, including quantum size effects in quantum dots, quantum
		wires, and quantum wells.
		Analyze mechanical and electrical properties, single electron tunneling, infrared detectors, quantum dot
		lasers, and superconductivity at the nano scale,
		Understand the nature of carbon bonds and the structure of carbon clusters, particularly C-60 carbon
		nanotubes.
		Explore applications of carbon nanotubes in computers, fuel cells, chemical sensors, and catalysis.
		Investigate single electron transistors, molecular machines, and the applications of nanomaterials in the fields
		of energy, medicine, and the environment.
M.Sc. Part-	Lab Course-I 4PHY5	Understand the principles of X-ray diffraction and its application to estimate average crystallite size.
II SemIV		Acquire the knowledge and skills to perform quantitative X-ray analysis using the Rietveld refinement
		method with MAUD or FullProf software.
		Gain theoretical understanding of Laue's pattern and its use in studying crystal structures.
		Learn to determine lattice parameters and crystallite size using powder diffraction patterns through theoretical
		concepts.
		Analyse SEM micrograph using grain intercept method for the determination of average grain size of sample.
		Acquire knowledge of analysing TEM image using ImageJ software for particle size determination and
		plotting the result in the form of histogram graph to determine average size with standard deviation.
		Develop the ability to visualize crystal structures of given samples using VESTA software.
		Apply theoretical knowledge and analytical techniques to real-world materials and samples to solve practical
		problems related to crystallography and material characterization.
M.Sc. Sem-	Project/dissertation	Acquire skills to fabricate advanced materials hypothized in first part of project.
IV	· ·	Validate fabricated material via structural characterization techniques.
		Demonstrate proficiency to collect experimental data, conduct simulations, or analyze datasets using
		appropriate methods and tools like MSexcel, Origin Lab, and image processing tools like image etc.
		Apply theoretical models to validate the experimental data.
		Communicate their research findings through written reports, manuscript, presentations, and possibly
		scientific publications.
		Exhibit strong project management skills, including time management, resource allocation, and the ability to
		adapt to unexpected challenges during the course of their project.

		Explain potential societal benefits of their findings.
Subject- Zoology		
Class	Course	Outcome (Students will be able to)
B. Sc. Part-	Life and Diversity of Non-	Get knowledge about Non Chordates, Phylum Protozoa and related specimens like Plasmodium Vivax. They
I, SemI	cordata	can also get information and knowledge about Protozoa related diseases.
,		Get knowledge about Phylum Porifera and Coelenterata including their specimens given in syllabus.
		Get knowledge about Phylum Platyhelminthes and Aschelminthes including their specimens given in
		syllabus.
		Understand the theoretical aspects of Phylum Annelida and Arthropoda their general characters with
		reference to their model organism.
		Know about the Phylum Mollusca and Echinodermata with reference to their model organism.
		Learn about General Characters of Hemichordata, Body Organization of Balanoglossus, and Affinities of
		Balanoglossus.
B. Sc. Part-	Cell and Developmental	Get knowledge about the structure of Eukaryotic Cell, Plasma Membrane and Endoplasmic Reticulum with
I, Sem-II	Biology	their functions and role in Eukaryotic Cell.
,		Get knowledge about the structure of Golgi complex, Ribosome, Mitochondria and Lysosomes with their
		functions and role in Eukaryotic Cell
		Get knowledge about the structure of Nucleus, Nucleolus, Chromosomes and Endoplasmic Reticulum with
		their functions and role in Eukaryotic Cell.
		Understand the cell cycle and various stages of cell cycle during cell division including various stages of
		mitosis and meiosis.
		Learn about General Characters of Hemichordata, Body Organization of Balanoglossus, and Affinities of
		Balanoglossus
		Know about the Placenta in mammals, Parthenogenesis, Stem cells and regeneration including its types and
		functions
B. Sc. Part-	Life and Diversity of Cordata	Learn about the characters and different levels of organization in phylum of chordates including classification
		from Protochordates upto class Mammalia.

II, Sem-III		Learn about the understand confidently explain Migration in fishes and birds, parental care in Amphibians
11, Sciii-111		and Poisonous and non-poisonous snakes
		Know Mammalian endocrine gland & their structure and significant evolution of Man, convergent and
		divergent evolution
		Classify human and human ancestry Homoerectus, Neanderthal man, Cro-magnon man and modern man. As
		well as Evolution of heart and aortic arches
		Learn Evolution with references to Meaning and scope, confidently explain Indirect Evidences of evolution
		techniques like radioactive carbon dating.
		Know Evolutionary Processes like natural selection and related theories and Understand the Population
		Genetic.
B. Sc. Part-	Advanced Genetics and	Learn Concept of genes and Mendel's Genetic with reference to different laws and process of Linkage and its
II, Sem-IV	Animal Ecology	significance.
11, Seni-1 v	Ammai Ecology	Learn Crossing Over, Darlington's theory, breakage and exchange theory and Copy choice theory as well as
		Multiple alleles concept with reference to drosophila.
		Learn about the Sex determination: Autosome, sex chromosomes and Genic Balance theory.
		Learn about the various type genetic disorders, chromosomal disorders.
		Learn about Amniocentesis, Inheritance of eye colour, Skin colour, Recessive genes, consanguineous
		marriages and Birth control measures
		Concept of ecology with reference to Abiotic factors and Biotic factors
		Know Relationship between habitat and ecological niche, energy flow in an ecosystem, food chain and food
		web.
B. Sc. Part-	Animal Physiology and	Understand the comparative respiratory organs including blood and its constituents.
III, Sem-V	Economic Zoology	Know the structure of heart and the rhythmic cardiac cycle.
,		Understand the concepts of Muscles structure, their types, functions and working. They can analyze and
		apply their knowledge in university exam as well as various competitive exams.
		Understand the concepts of Nervous System and they can analyze and apply their knowledge in university
		exam.
		Understand Oestrous and Menstrual cycle through the hormonal control of spermatogenesis and Oogenesis.
		Understand the Osmoregulation and its mechanism in aquatic and terrestrial animals.
		Understand the concepts of Agriculture Zoology and they can analyze and apply their knowledge in the life

		for farming.
		Know the definition, Scope, importance and present status of Aquaculture in India.
B. Sc. Part-	Molecular Biology and	Know about the definition of Genetic material and its basic information including Mitochondrial DNA.
III, Sem-VI	Biotechnology	Know about the RNAs and Non-Genetic RNA.
		Understand the concepts of replication, their types and various enzymes involved in DNA replication, along
		with their functions.
		Know the Genetic code and its various features, the process of transcription and Gene regulation in
		prokaryotes and Eukaryotes.
		Understand the concepts Mutations, different types and techniques like PCR, DNA Fingerprinting and related
		techniques.
		Understand the concepts of Molecular Biology Techniques like Recombinant DNA Technique, Hybridoma
		Technology, and genetic engineering etc.
		Distinguish between Innate and adaptive immunity.
		Know the types and production of immune cells, Immune system and their related organs.

## **Subject- English**

Class	Course	Outcome (Students will be able to)
B.Sc. Part-I,	Compulsory English	Inculcate the critical and analytical approach.
Sem-I		Facilitate the learners in acquiring listening and speaking competence.
		Assist the learners in independent language comprehension and production.
		Aware about the different communicative functions of English.
		Speak, write, read and listen flawlessly in person and through the electronic mode in English.
B.Sc. Part-	<b>Compulsory English</b>	Understand views of others, mediate contradictory views/ disagreements, reaching conclusion in
II, Sem-II		groups / group discussions.
,		Understand and use basic skills of the English language for applying it in the job assigned /
		employment accepted / profession undertaken.
		Understand nature and nuances of English Language used in prose lessons and poetic passages.
		Apply the knowledge of English to communicate with others on personal, social, literary and
		interdisciplinary topics.

		Compare the structure of English language to use LSRW.
Subject- Marathi		
Class	Course	Outcome (Students will be able to)
B.Sc. Part-I,	Compulsory Marathi	Examine biographies of prominent figures in Marathi literature, such as Jyotiba Phule and Abdul Kalam, and
SemI		acquire deeper knowledge of their lives and contributions.
		Enhance their language skills, including vocabulary expansion and critical thinking, enabling them to express
		their ideas effectively.
		Study "Guruvandana of Dnyaneshwar" and "Janabai's Abhanga," and explore the cultural and ethical
		principles prevalent in Marathi literature.
		Develop a sense of social consciousness, and understand the power of literature to inspire positive change.
		Learn various types of letters, and gain the ability to draft effective letters, addressing the needs of modern-
		day business communication.
		Improve their written communication skills, and convey their thoughts and ideas clearly and concisely.
B.Sc. Part-I,	<b>Compulsory Marathi</b>	Gain a comprehensive knowledge of Rajarshi Chhatrapati Shahu Maharaj's literary works and contributions.
SemII		Understand the scientific thought and research methodologies of Raghunath Mashelkar.
		Develop proficiency in applying the scientific approach learned from the articles.
		Explore the relationship between individuals and the environment, and promote empathy and environmental consciousness.
		Investigate philosophical questions related to existence, birth, and karma, analyze complex concepts and
		engage in thoughtful discussions.
		Enhance students' vocabulary and language skills, and apply them to communicate effectively, especially in
		competitive contexts like journalism, letter writing, and news reporting.
		Subject- Hindi
Class	Course	Outcome (Students will be able to)
B.Sc. Part-I,	ABHINAV	Understand the historical and cultural significance of Hindi, its origins, and its evolution as a language.

SemI		Analyze and evaluate Hindi literature, including works like "Bade Ghar Ki Beti," "Budhiya," and "Bakul
		Firana," to gain insights into societal perspectives and values.
		Demonstrate proficiency in translation skills, encompassing Hindi to English and English to Hindi and other
		languages.
		Develop fluency and competence in spoken and written Hindi, and facilitate effective communication and
		presentation skills.
		Acquire an in-depth knowledge of the 'adharbhut pathykram' and various poems by Harivanshray Bachchan.
		Understand the importance of learning Hindi in both Hindi and non-Hindi regions, and identify its potential
		to open doors to diverse opportunities.
B.Sc. Part-I,	<b>ABHINAV</b>	Understand the foundational concepts and historical development of the Hindi language, including
Sem II		its origins and evolution.
		Evaluate the significance of Hindi in literature and society, and analyze its role to foster cultural
		connections and promote social cohesion.
		Develop proficiency in using Hindi as an official language and as a second language, and empower
		himself to get employment in countries where Hindi language is recognized.
		Apply translation skills between Hindi, English, and other languages, and enables himself to get a
		job as a translator in various central government offices.
		Attain a high level of language proficiency to effectively express oneself and communicate ideas in
		both written and spoken forms.
		Explore and comprehend traditional Hindi literary forms like vrutantlekhan, ekanki, sawndlekhan,
		etc. as well as study poems by renowned authors like Harivanshray Bachchan.

## AMOLAKCHAND MAHAVIDYALAYA, YAVATMAL-445001

## COURSE OUTCOME (CO) Subjects covered under faculty of Arts/Humanities/ Social Sciences]

	Subject- Marathi		
Class	Course	Outcome (Students will be able to)	
B.A.	वैचारिक लेख	विनोबा भावे, साने गुरुजी, अभय बंग यांचे विचार लेखन.	
Part-I,		शिक्षण, संस्कृती व शारीरिक व्यायाम इ. बाबी विद्यार्थ्यांना शिकता आल्या.	
Sem-I	ललित लेख	मधुकर केचे, डॉ. मधुकर वाकोडे, अरूण जाखडे यांच्या ललित साहित्याचा अभ्यास.	
		परंपरा, ग्रामीण संस्कृती, सहिष्णू व्यक्तिमत्त्व यांचा अभ्यास विद्यार्थ्यांना करता आला.	
	कविता	ज्ञानेश्वर, सावतामाळी, केशवसुत, तुकडोजी महाराज, नामदेव ढसाळ, शंकर बडे, अजीम नवाज राही यांच्या काव्यातील आशय.	
		प्राचीन परंपरा व भाषा, आधुनिक कवितेतील बदल, व-हाडी मार्मिक वेचे व कवितेतील निवेदन शैली ओळखण्यास मदत	
	व्यावहारिक मराठी	लेखन विषयक नियम व मुद्रित शोधन.	
	,	हस्व, दीर्घ शब्द, वर्णमालेची खोलवर माहिती तसेच वाक्यातील चुका व त्याचे चिन्ह कसे लिहावेत ? ही ओळख झाली.	
B.A.	वैचारिक लेख	स्वामी विवेकानंद, नरेंद्र दाभोळकर, चंद्रशेखर शिखरे यांचे विचारांचा अभ्यास.	
Part-I, Sem-II		अध्यात्म आणि विज्ञान, विज्ञान व अंधश्रद्धा, सामाजिक प्रथा व परंपरा या विचार तत्त्वज्ञानाने आकलन शक्ती वाढण्यास मदत होते.	
	ललित लेख	केशिराजबास, बाबाराव मुसळे, मीनल येवले यांचे ललित वाङ्मय.	
		दृष्टांत, ग्रामीण व्यक्तिचित्रणे आणि महिलांच्या समस्या समजण्यास मदत होते.	
	कविता	नामदेव, जनाबाई, सावित्रीमाई फुले, बी, शिवा राऊत, मल्लिका अमरशेख, स. ग. पाचपोळ यांची काव्यरचना.	
		संतांचे समाज सुधारणा विचार, स्त्रियांची सामाजिक स्थिती, आई बद्दल कणव याची जाणीव होते.	
	व्यावहारिक मराठी	कार्यालयीन पत्र, स्व-परिचय पत्र, नोकरीसाठी अर्ज.	
		कार्यालयीन पत्र मायना, रेझुमे ( स्व- ओळख), तसेच नौकरी अर्ज करण्याची तंत्र शुद्ध माहिती इ. मिळण्यास मदत होते.	

B.A.	वैचारिक लेख	तर्कतीर्थ लक्ष्मणशास्त्री, डॉ. आ. ह. साळुंखे, श्री. म. माटे. यांचे विचार विवेचन.
Part-II,		असत्यातून सत्य शोधण्यासाठी सिंहावलोकन कसे करावे, बोली ही भाषेला समृद्ध कशी करते याचे सप्रमाण ज्ञान प्राप्त होते.
Sem-III	ललित लेख	रामचंद्र अमात्य, चिं.वि. जोशी, दया पवार यांच्या कथनात्मक लेखांचा अभ्यास.
		इतिहासातील शौर्य पूर्ण भाषा, विनोदांचा शब्दच्छल, गावकुसाबाहेरची बोली समजण्यास मदत होते.
	कविता	संत चोखामेळा, संत सोयराबाई, कुसुमाग्रज, केशव मेश्राम, श्रीकांत देशमुख, लक्ष्मण महाडिक, सिद्धार्थ भगत यांच्या काव्य
		शैलींचा अभ्यास
		समाजात स्वातंत्र्य, समता व बंधुभाव यांची असलेली असमानता, सामाजिक भान, भविष्यातील समाज स्थितीची जाणीव प्रस्तुत
		काव्य धारेतून समजण्यास सुकर होते
	व्यावहारिक मराठी	वक्तृत्व व सूत्रसंचालन
		वक्ता होण्यासाठी शब्दभांडार, हजरजबाबीपणा तसेच सूत्रसंचालन करताना घ्यावयाची दक्षता यांचे शास्त्रीय व तांत्रिक टप्पे
		समजायला माहिती मिळते. भविष्यात उत्कृष्ट वक्ता व सूत्रसंचालक झाल्यास भुकेचा प्रश्न मिटतो
B.A.	वैचारिक लेख	ताराबाई शिंदे, डॉ.बाबासाहेब आंबेडकर, जयंत नारळीकर या विचारवंतांचे विचार मंथन.
Part-II,		सामाजिक भान ठेवून वैज्ञानिक दृष्टिकोन स्वीकारण्याच्या प्रतिभेला वाव मिळतो.
Sem-IV	ललित लेख	प्रबोधनकार के. सी. ठाकरे, अण्णाभाऊ साठे, विद्युत भागवत यांचे लालित्यपूर्ण अनुभवी लेखांचा अभ्यास.
		रुढी, परंपरा, भूक, चोरी , आंतरिक वेदनेने विव्हळणारा माणूस इ. बाबींची प्रतिकात्मकता समजण्यास मदत होते
	कविता	संत एकनाथ, संत कान्होपात्रा, अनिल, शांता शेळके, भ. मा. परसावळे, मिर्झा रफी अहमद बेग, राजेश महल्ले यांच्या शब्द
		वआशय सामर्थ्यांचा अभ्यास
		जात, पंथ, धर्म, राष्ट्रीयत्व, बोलीची समृद्धता , मानवतावाद इ. भेद व वैभवशाली इतिहास समजण्यास मदत होते.
	व्यावहारिक मराठी	माहिती पत्रक, निमंत्रण पत्रिका व कार्यक्रम पत्रिका याविषयी माहिती.
		सरकारी कार्यालये, खाजगी संस्थेचे परिपत्रक, निमंत्रण, समारंभाची माहिती जनतेपर्यंत पोहचविण्यासाठी वरील साधने
		शास्त्रीय लेखनातून व्यक्त होण्यास मदत होईल. नौकरी मिळविण्यासाठी मदत होते.
B.A.	वैचारिक	भाषा विकसित करणे.
Part-III		विविध कार्यक्रमाकरिता लेखकांचे विचार उपयोगात आणले.
	ललित लेख	शब्दांचे भांडार वाढून मराठी भाषेची वृद्धी वाढविली.
	कविता	तरुणाईच्या व्यक्तित्वाला शोभेल अशी काव्यरचना.

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		अनेक सुभाषितांमधून निवेदन करण्याची कला प्राप्त केली.
	जाहिरात लेखन	जाहिरात लिखाणामुळे किंवा सादरीकरणामुळे विद्यार्थी भविष्य घडवू शकतात.
		संवादात्मक अभिनयातून जाहिरात सादरीकरण करण्याची कला शिकले.
MA	मराठी वाङ्मयाची	प्राचीन व मध्ययुगीन साहित्यातून साहित्याची रूपरेषा स्पष्ट होते.
Part-I,	सांस्कृतिकपार्श्वभूमी	साहित्याचा विकास होण्यास प्राचीन व मध्ययुगीन सामाजिक व सांस्कृतिक पार्श्वभूमीचे महत्त्वाचे योगदान आहे.
Sem-I	(आरंभ ते १८१८)	आधुनिक काळात विकसित झालेल्या साहित्याची पाळेमुळे या सांस्कृतिक पार्श्वभूमीत पाहायला मिळते.
	साहित्यविचार	साहित्याची निर्मिती प्रक्रिया साहित्य शास्त्रातून लक्षात येते.
		साहित्याच्या व्याखेचे स्वरूप कळते.
		साहित्याचे प्रयोजन लक्षात येते.
	संतसाहित्य	संत साहित्याची ओळख विद्यार्थ्याला होईल.
		मध्ययुगीन काळातील सामाजिक,सांस्कृतिक आणि धार्मिक परिस्थितीचे आकलन होईल.
	विशेष वाड्मय प्रकार - कविता	कविता वाङ्मयप्रकारची जडणघडण दिग्दर्शित करते.
	,,	महत्वाचा आधुनिक साहित्यप्रकार म्हणून या विषयाचे महत्व आहे.
		साहित्यप्रकाराचा अभ्यास लक्षात घेताना नव कवितेचा प्रवाह लक्षात येतो
MA	मराठी वाड्मयाची सांस्कृतिक	मराठी वाङ्मयाच्या संस्कृतीचा अभ्यास होतो.
Part-I,	पार्श्वभूमी (१९६०ते १८१८)	आधुनिक काळात विकसित झालेल्या साहित्याची पाळेमुळे या सांस्कृतिक पार्श्वभूमीत पाहायला मिळते.
Sem-II	समीक्षाविचार	समीक्षेची दृष्टी या विषयाच्या अभ्यासातून प्राप्त होते.
		साहित्याचे समतोल दृष्टीने आकलन करता येते.
_		तुलनात्मक अभ्यासाची दिशा प्राप्त होईल.
	महानुभाव साहित्य	महानुभाव साहित्याची ओळखहोईल.
		म्हाइंभट यांच्या साहित्याचा अभ्यास करून प्राचीन काळातीलमराठी भाषेची ओळख होईल.
		यासोबतच मराठी भाषेत म्हाइंभटयांचे योगदान लक्षात येईल.
	विशेष वाड्मय प्रकार :	आधुनिक वाङ्मयात कादंबरी हा महात्वाचा वाङ्मयप्रकार आहे.
		वाड्मयप्रकार हि संकल्पना समजून घेणे.

	कादंबरी	कादंबरी या वाङ्मयप्रकाराची अन्य वाङ्मयप्रकाराशी तुलना करणे शक्य होईल.
MA	उपयोजीत मराठी	विविध व्यवहार उपयोगी कौशल्य प्राप्त होते.
Part-II,		व्यावहारिक जीवनात मराठी भाषेच्या वापराचे महत्व लक्षात येते.
Sem-III	भाषाविज्ञान	भाषिक जाणीव समृद्ध होते.
		भाषिक कोशल्य निर्माण करून रोजगाराच्या संधी उपलब्ध होते.
	विशेष ग्रंथकार – संत	लेखकाच्या अभ्यासाची दिशा मिळते.
	चोखामेळा	विशिष्ट लेखकाचा अभ्यास करता येतो.
		एका लेखकाच्या समग्र साहित्याचा अभ्यास करता येतो.
	दलित साहित्य	आधुनिक काळात निर्माण झालेला दलित साहित्य हा महत्वाचा वाङ्मयप्रवाह आहे
	,	स्वातंत्र्य,समता आणि न्याय या मूल्याच्या जाणीवा प्रगल्भ होते.
		साहित्याची दिशा या प्रवाहाने आधुनिक काळात बदलली आहे.
MA	उपयोजीत मराठी	विविध व्यवहार उपयोगी कौशल्य प्राप्त होते.
Part-II,		व्यावहारिक जीवनात मराठी भाषेच्या वापराचे महत्व लक्षात येते.
Sem-IV	भाषाविज्ञान	भाषिक जाणीव समृद्ध होते.
		स्वन,स्वनीम या सज्ञांची ओळख होते.
		भाषिक कोशल्य निर्माण करून रोजगाराच्या संधी उपलब्ध होते.
	मराठी वैचारिक साहित्य	वैचारिक दृष्टीकोन निर्माण होतो.
		समाजसुधारकांच्या मोलिक विचारांची माहिती मिळते.
		विचार करण्याची क्षमता निर्माण होण्यास वैचारिक साहित्य मदत करते.
	मुस्लीम मराठी साहित्य	मुस्लीम साहित्य प्रवाहाची ओळख होते.
		साहित्य प्रवाह यांचा विकास लक्षात येतो.
		साहित्य प्रवाहातील वेगळेपण लक्षात येते.

Outcome (Students will be able to.....)

Class

Course

B.A.	Compulsory English	Develop the ability to read works of literary, rhetorical & cultural art.
Part-I,		Deploy ideas from prescribed texts in their own writing.
Sem-I		Gain the basic knowledge of English language and literature
		Write the News Report, Letter, Essay, Paragraph etc.
		Avail the pleasure of literary forms such as Novel, Poem, Play etc.
B.A.	Compulsory English	Develop interview technique.
Part-I,		Equipped better to understand and interpret the prose, poem, short stories.
Sem-II		Achieves and enhance the interest in English Language.
		Collaborate wherever needed and communicate with other students in English language.
		Vital part in establishing the relation between literature and real life.
B.A.	Compulsory English	Understand different types of blogs.
Part-II,		Comprehend various forms of literature like Prose, Poetry, Drama and Fiction
Sem-III		Develop the knowledge of grammatical system
		Learn different strategies for effective blogging
B.A.	Compulsory English	Develop the ability to read works of literary, rhetorical & cultural art.
Part-II,		Understand and Interpret The prose, poem and know the meaning of literature and life
Sem-IV		Develop four language skills LSRW
		Generates scope of employability and entrepreneurship, Teaching Civil Services and Creative Writing
B.A.	Compulsory English	Understand the steps of writing for websites
Part-III		Understand and interpret the prose, poem, short stories
		Read texts speedily and fluently.
		Get enrich the vocabulary from this course.
		Students will be able to register complaints, make enquiries and give opinions
MA	Paper-I, English Poetry	Acquire critical attitude and approach and gain knowledge, intellectual competence and critical
Part-I,	from Chaucer to Alexander	scholarship which would help them to improve their performance in competitive exams such as
Sem-I	Pope	MPSC/UPSC/NET/SET in the subject.
		Understand and apply evocative power of language and would be able to apply critical insight and

	judgment to form an informed and objective opinion.
	Fairly acquainted with the background and socio-political as well cultural background of the poets and
	understand the factors behind their making and evolution. Students will grasp distinctive writing style
	and technique of prescribed poets and creative writers.
	Acquire enhanced sensibility along with critical depth and maturity in his/her expression
	Understand the socio-political and cultural importance of Literature and Literary Poetic works.
	Critically appreciate unseen poetic texts by applying the methods learnt.
Paper-II, English Drama to	Prescribed portion is instrumental in providing insights on genres and conventions associated with
Shakespeare	English drama
	Understand and apply evocative power of language and would be able to apply critical insight and
	judgment to form an informed and objective opinion.
	Grasp distinctive writing style and technique of prescribed dramatist up until Shakespeare era.
	Hone their dramatic and performing skills
	Understand the socio-political and cultural importance of Literature and Literary dramatic works.
	Critically appreciate unseen dramatic texts by using the methods learnt.
Paper-III, History of	Appreciate diversity of major traditions of literature and gain knowledge of various major eras of
<b>English Literature</b>	literature.
	Help emerge as a social thinkers and critics who can take up various social problems and issues that
	ail the society and impede social change and progress thereby achieving considerable social
	transformation and progress
	Grasp distinctive writing style and technique of prescribed writers.
	Give an account of historical events related to English Literature
	Understand the socio-political and cultural importance of Literature and Literary historical works.
	Fairly acquainted with the background and socio-political as well cultural background of the authors
	and analyse the zeal behind their passions and evolution.
Paper-IV, Linguistics and	Acquire critical attitude and approach and gain knowledge, intellectual competence and critical
<b>Phonetics</b>	scholarship which would help them to improve their performance in competitive exams such as

		A DOGGA TOGGA TOTAGOTTA A A A A A A A A A A A A A A A A A A
		MPSC/UPSC/NET/SET in the subject.
		Enlightened to study and collect basic knowledge on the nature of language
		Grasp distinctive writing style and technique of prescribed writers.
		Further research and correlate the place of language in society
		Understand the socio-political and cultural importance of Literature and Linguistic and phonetic
		theories.
		Understand the relationship of language and its meaning in accordance with vocabulary, sentence &
		utterance level.
MA	Paper-I, English Poetry	Acquire critical attitude and approach and gain knowledge, intellectual competence and critical
Part-I,	from Wordsworth to	scholarship which would help them to improve their performance in competitive exams such as
Sem-II	Modern Age	MPSC/UPSC/NET/SET in the subject.
		Understand and apply evocative power of language and would be able to apply critical insight and
		judgment to form an informed and objective opinion.
		Fairly acquainted with the background and socio-political as well cultural background of the poets and
		understand the factors behind their making and evolution. Students will grasp distinctive writing style
		and technique of prescribed poets and creative writers.
		Acquire enhanced sensibility along with critical depth and maturity in his/her expression
		Students would understand the socio-political and cultural importance of Literature and Literary
		Poetic works.
		Critically appreciate unseen poetic texts by applying the methods learnt.
-	Paper-II, English Drama	Prescribed portion is instrumental in providing insights on genres and conventions associated with
	after Shakespeare	English drama
		Understand and apply evocative power of language and would be able to apply critical insight and
		judgment to form an informed and objective opinion.
		Grasp distinctive writing style and technique of prescribed dramatist up until Contemporary era.
		Hone their dramatic and performing skills
		Understand the socio-political and cultural importance of Literature and Literary dramatic works.
		r

		Critically appreciate unseen dramatic texts by using the methods learnt.
	Paper-III, History of	Appreciate diversity of major traditions of literature and gain knowledge of various major eras of
	English Literature	literature.
		Emerge as social thinkers and critics who can take up various social problems and issues that ail the
		society and impede social change and progress thereby achieving considerable social transformation
		and progress
		Grasp distinctive writing style and technique of prescribed writers.
		Give an account of historical events related to English Literature
		Understand the socio-political and cultural importance of Literature and Literary historical works.
		Fairly acquainted with the background and socio-political as well cultural background of the authors
		and analyse the zeal behind their passions and evolution.
	Paper-IV, Linguistics and	Acquire critical attitude and approach and gain knowledge, intellectual competence and critical
	Phonetics	scholarship which would help them to improve their performance in competitive exams such as
		MPSC/UPSC/NET/SET in the subject.
		Enlightened to study and collect basic knowledge on the nature of language
		Grasp distinctive writing style and technique of prescribed writers.
		Further research and correlate the place of language in society
		Understand the socio-political and cultural importance of Literature and Linguistic and phonetic
		theories.
		Understand the relationship of language and its meaning in accordance with vocabulary, sentence &
		utterance level.
MA	Paper-I,	Understand and assimilate the laws and principles of fiction writing.
Part-II,	Indian Writing in English	The Student will be able to critically appreciate and analyze a piece of fictional writing.
Sem-III		Develop a sense of history through understanding of major traditions, trends, conventions, fashions as
		well as social developments.
		Understand the factors behind the emergence of R.K. Narayan as well as other postcolonial writers
		and value the significance of their literary output.

	Gain critical understanding and insight into trends & fashion in Indian society and culture.
	Attain a sense of history and the impulses behind human actions.
Paper-II,	Literary in English and critical writing with a view to enable them to probe literary & critical theories
Critical Theory	& contexts that require substantive expertise in literature.
	Develop and foster ideological sense and a sense of social awareness and cultural understanding.
	Acquire proficiency in expression skills and critical thinking skills through exposure to various forms & genre of writing.
	Acquire knowledge to develop research, critical and analytical attitude & approach.
	Emerge as social thinkers & critics who can take up a study of various social problems and issues that
	ail the society and impede social change and progress and contribute to the process of social transformation and social progress.
	Help grow great leaders, thinkers, artists, visionaries, pundits / experts, educationists, managers,
	consultants, guides, coaches, social analysts, reformers, social activists, social pleaders & crusaders,
	think-tanks, journalists, critical and creative writers professionally in various fields of knowledge.
Paper-III,	Grasp the distinctive writing style and technique of various poets & creative writers.
(A) American Literature	Develop a sense of history through understanding of major traditions, trends, conventions, fashions as well as social developments.
	Facilitate insight into social norms and culture thus the causes and consequences of human actions and
	dispositions.
	Analyze the emergence and development of Renaissance and its influence on the American society.
	Assimilate the values and principles that lead to progress and social well-being.
	Gain critical understanding and insight into the phenomenon of Renaissance.
Paper-IV,	Appreciate diversity of major traditions of literature and gain knowledge of various major eras of
History of English	literature.
Language	Understand the factors behind the emergence of Shakespeare as a great dramatist.
	Develop critical, analytical, logical thinking and judgment.
	Give an account of historical events related to English Literature

		Critically analyze the chronology of events that led to the rise and glory of Elizabethan Literature.
		Grasp and assimilate critical temper and insight.
MA	Paper-I,	The prescribed portion is instrumental in providing insights on genres and conventions associated with
Part-II,	<b>Teaching of English</b>	teaching of English language.
Sem-IV	Language and Literature	Acquire comprehensive understanding of plot construction and art of characterization.
		Get familiarized with the theories, approaches, methods and specific techniques concerning the
		teaching of English language.
		Use English language with ease and innovative teaching techniques.
		Understand cultural and social importance of Teaching as a genre from various chronological ages of
		English literature.
		Course helps in assessing various mainstream and subaltern cultures as well as appreciates them.
	Paper-II,	Manages to enhance artistic sensibility for word-music and critical appreciation of Criticism as an Art.
	<b>Critical Theory</b>	Develop fertile imaginativeness and emotional depth and maturity.
		Perceive subtle nuances and shades of meaning in the use of linguistic theories.
		Plays an active role to appreciate and assimilate suggestive and pictorial quality of language.
		Sharpen artistic and critical skills with better grasp and acquisition of qualities like picture sequences,
		terseness, conciseness, accuracy, aptness, freshness etc. in expression.
		Better equipped to explore the subjective nature of Truth and Beauty.
	Paper-III,	Critically appreciate and interpret a piece of poetic work.
	(A) American Literature	Quote the memorable quotations in his speech and writing.
		Enhance artistic sensibility for word-music and critical appreciation of American Dramatic art.
		Understand various dramatic types and the origin of the American Theatre drama.
		Understand and assimilate the laws and principles of dramatic composition.
		Acquire insight and understanding of the mysteries and ironies of human life.
	Paper-IV,	Grasp aesthetic understanding in texts related to Indian Writing in English
	(A): Indian Writing In	Apply logic and sense of discrimination in decision-making.
	English	Write critical reviews of their own.

		Compare and contrast different ideas.
		Apply critical sense and judgment to form an informed opinion.
		Helps in acquisition of critical attitude.
		Subject- Hindi
Class	Course	Outcome (Students will be able to)
B.A.	ASTHA	Understand the grammar and standard hindi language
Part-I,		Understand the stories, poems, pad by Kabir, Surdas and Bihari
Sem-I		Adopt human approach and think critically at the same time
		Understand the kavyas and importance of hindi
		Understand the rekhachitra, Nilkanth (samsmaran)
		Evaluating the concept of hindi and students can write own poems and stories
BA	ASTHA	Understand the grammar and standard hindi language
Part-I,		Understand the stories, poems, pad by Kabir, Surdas and Bihari
Sem-II		Adopt human approach and think critically at the same time
		Understand the kavyas and importance of hindi
		Understand the rekhachitra, Nilkanth (samsmaran)
		Evaluating the concept of hindi and students can write own poems and stories
BA	ABHA	To adopt human approach and think critically at the same time
Part-II,		Understand story mitrata; bailgadi; Shiksha ka uddeshy; aadami ka baccha and gram Lakshmi ki upasna
Sem-III		Understand the Kavya; dohe; poems; ghazals and pad
		Understand grammarunvay, Sandhi,samas, vigrah and samsrut bhinnarthak shabd.
		Obtain advance level of knowledge in Hindi specialised field.
BA	ABHA	Understand the basic concept and subject of Hindi and is origin.
Part-II,		Understand the stories Karz, dukh apna apna sacche sapoot Raja ke Kailash and Sanskriti hai kya.
Sem-IV		Understand the Kavya,pad and Dohe
		Understand the grammar padnaam, paribhashik shabdawali, Samman suchak shabd and vakya Parivartan.
		Understand the vigyapan lekhan and vrutant Lekhan.

		Write the essay and known the Hindi and Marathi mein prayukt Samman shabd.
B.A.	ABHIVRUTI	Understand the Grammar and standard Hindi Launguage
Part-III		Adopt the human Approach and think critically at the same time
		Understand and apply the elements of creative writing e.g. essay, story and letter writing
		Understand the stories such as Maharaj ka Elaj by Yashpal, Chif ki Dawat by Bhism Sahani, Usne kaha tha by
		Guleri.
		Understand Ekankiutsarg by Rajkumar Varma
		Understand Amir Khusro ka sahitymeinyogdan and importance of Ahar, Bhojan and Swasth.
		The poetry section comprises of the total of Kavyas and Kavita (Mochi &Madhushala) by Maithini Sharan
		Gupta, Mahadevi Varma and Harivanshrai Bhacchan.
MA	प्राची एंव मध्यकालीन काव्य	हिंदी के आदिकालीन काव्य मुक्तक आदि काव्यरूपोका परिचय छात्रों को समझा ।
Part-I,		भक्तिकालीन काव्य और उत्तर मध्यकालीन काव्य का परिचय छात्रों को समझ मेआया।
Sem-I		विद्यापती पदावली कवीर पंचायती शामसुंदरदास गुरूदेव के अंग विरह के अग
		काल के अंग भेष के अंग आदि काव्य से छात्राओं को अवगत कराया।
		प्राचीन एवं मध्यकालीन काव्य के गद्य एवं पद्य विधा ओकी तात्विक जानकारी मिली। 5. कबीर के विचार की प्रासंगिकता
		छात्रोको समझा।
	हिंदी साहित्य का इतिहास	हिंदी साहित्य के इतिहास लेखन की परंपरा आधारभूत सामग्री और साहित्य इतिहास के पुर्नलेखन की समस्याये आदि धात्री को
		अवगत हुई।
		हिंदी साहित्य का इतिहास कालविभाजन सीमा निर्धारण और नामकरण आदि से छात्र को परिचय हुआ।
		आदिकाल के पृष्ठभूमी सिद्ध और नाथ साहित्य रासो काव्य जैन काव्य, पुर्व मध्याकाल (भक्तिकाल) की एतिहासिक पृष्ठभूती
		सास्कृतीक चेतना एवं भक्ति आदोलन और विभिन्न काव्यधाराएं आदि को परिचित हुआ।
		साहित्य विद्या की विकास क्रम समझा।
	काव्यशास्त्र एंव साहित्य लोचन	रिती सिद्धांत, रिती की अवधारणा काव्यगुण, रिती एवं शैली आदि से छात्रों को अवगत हुआ।
		वक्रोती सिद्धांत, वक्रोती के भेद, ध्वनी सिद्धांत ध्वनी का स्वरूप, अवचित्य सिद्धांत आदि से छात्र अवगत हुये। \
		पाश्चात्य काव्यशास्त्र- प्लेटो काव्यसिद्धांत अरस्तू अनुकरण सिद्धांत, त्रासदी विवेचन, लोजाइनस उदात्त की अवधारणा, वर्डस्वर्थ
		काव्य भाषा का सिद्धांत, मैथ्यु आर्नल्ड: आलोचना का स्वरूप और प्रकार्य, टी. एस. इलियट परंपरा की परिकल्पना
		और वैयक्तिक निर्वैयक्तिकता का सिद्धांत, वस्तुनिष्ठ समीकरण, संवेदनशीलता का असहाचर्य आदि से छात्र परिचित हुये।

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	विशेष अध्ययन (प्रेमचंद)	हिंदी साहित्य का इतिहास और प्रेमचंद हिंदी सम्राट के बारे में जानकारी हासील की और प्रेमचंद के उपन्यासोंपर प्रकाश डाला।
		रंगभुमी, कर्मभुमी, निर्मला और गोदान आदि उपन्यासोंकी समीक्षा करके समाजमे जागृती निर्माण की।
		कफन, पूस की रात, शतरंज के खिलाड़ी, नशा, बड़े घर की बेटी, ईदगाह, ठाकूर का कुआ, दो बैलोंकी कथा, पंच परमेश्वर आदि
		कहानीयों का अध्ययन करके कहानीयों में दी गयी समस्योंसे अवगत हुए।
		साहित्य का उद्देश, साहित्य के तत्व और साहित्य आदि से परिचित हुए।
		छात्रोंके हृदय में भाषा विषयक शुद्धता के प्रति सावधानी का भाव उत्पन्न हुआ।
MA	प्राची एंव मध्यकालीन काव्य	हिंदी भाषाओंके गणमान्य साहित्यकारो के साहित्यिक व्यक्तित्व एवं कृतित्व से परिचय और उनके योगदानपर प्रकाश डाला। 2.
Part-I,		सुफी साहित्य के माध्यम से जीवनमुल्य एवं जीवनदर्शन को समझाया।
Sem-II		तुलसीदास के रामचरित्र मानस के माध्यम से आदर्शपुत्र और आदर्शराजा के महत्व को समझने की छत्रोमें क्षमता विकसित की।
		प्राचीन एव मध्य कालीन काव्य के आस्वादन और मुल्याकनकी दृष्टीको बढ़ावा दिया। 5 द्रुतपाठको को दिये गए कवी व्यक्तित्व
		एवं कृतित्वपर प्रकाश डालकर छात्रोंमे साहित्य सृजन की अभिलाषा अंकुरित की।
		तत्कालीन संस्कृती जीवन दर्शन का परिचय समजा.
	हिंदी साहित्य का इतिहास	दलित साहित्य और आत्मा के विकास पर प्रकाश डालकर  छत्रोमे  दलित साहित्य आत्म कथा साहित्य सृजन की अभिलाषा
		अंकुरित हुई।
		नाटकों में व्यक्त कियी गयी समस्याओंका हमारे वर्तमान समाजकी समस्याओ तादात्म कर उसे हल करने के लिए छात्र प्रेरित हुये।
		अभिनय के प्रति छात्रोंके मन मे आकर्षण निर्माण हुआ।
		दृतपाठको दिये गए कविओके व्यक्तित्व एवं कृतित्वपर प्रकाश डालकर छात्रोमै साहित्य सृजन की अभिलाषा अंकुरित हुई।
	काव्यशास्त्र एंव साहित्य लोचन	सिद्धांत और वाद अभिजात्यवाद मार्क्सवाद, मनोविश्लेषण तथा अस्तित्ववाद आदि से छात्रो को अवगत हुआ।
	, ,	हिंदी आलोचना की प्रमुख प्रवृत्तीया शास्त्रीय व्यक्तिवादी, ऐतिहासिक, तुलनात्मक प्रभाववादी सौदर्यशास्त्रीय और समाजशास्त्रीय
		दृष्टीकोन छात्राओंगे अवगत करके समाज के समस्याओंपर उपाय योजना की ।
		छात्रोंकी तर्कशक्तिको बढ़ावा मिला।
	विशेष अध्ययन (प्रेमचंद)	1 छात्रोंको लोकोउक्तियों, सुकितियों एवं कथाओं के कोश का क्रमशः विस्तार हुआ।
		ज्ञान क्षेत्र एंव विवेक के विकास द्वारा चरित्र चित्रण किया।
		छात्रोंको कहानी, निबंध, जीवनी आदि विधाओंका परिचय देकर उन्हें बहुज्ञ बनाया।
		दृतपाठको दिये गए कवीओंके व्यक्तित्व एवं कृतित्वपर प्रकाश डालकर छात्रोंमे साहित्य सृजन की अभिलाषा अंकुरित हुई।
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		उन्हें गद्य साहित्य की विभिन्न शैलीओसे परिचित हुए।
MA	आधुनिक काव्य	आधुनिक काव्य के पुनर्नवा के रूप में नवीन भाव में एवं वैचारिक गतिशीलता से छात्राओं को परिचित किया
Part-II,	9	मैथिली शरण गुप्ता द्वारा साकेत जयशंकर प्रसाद द्वारा कामायनी सूर्यकांत त्रिपाठी द्वारा राम की शक्ति पूजा एवं जूही की कली
Sem. III		आदि रावण का अध्ययन छात्राओं को हुआ छात्राओं को हुआ और उन्होंने अपने लेखन में अवगत किया
		नागार्जुन की कविताएं चंदू मैंने सपना देखा, उनको प्रणाम, बादलों को चढ़ते देखा इन कविताओं में से छात्राओं को प्राकृतिक
		प्रेरणा मिली और सृजनात्मक दृष्टिकोण निर्माण हुआ
		आधुनिक कविता के प्रति छात्राओं में रुचि उत्पन्न हुई
		छात्रों को काव्य निर्मिति कीप्रेरणा मिली
	आधुनिक गद्य साहित्य	आधुनिक काल में गद्य साहित्य से छात्राओं को परिचित कराया गया
		चंद्रगुप्त जयशंकर प्रसाद, आधे अधूरे मोहन राकेश, महाभोज मनु भंडारी आदि गद्य साहित्य का अध्ययन छात्राओं ने किया और
		उन्हें पाचन कौशल्या निर्माण हुआ
		हिंदी गद्य किंग उद्भव और विकास से छात्रों को अवगत किया और उन्हें जानकारी प्राप्त हुई
		गद्य साहित्य के माध्यम से छात्रों को शब्द भंडार में वृद्धि हुई
		छात्राओं को गद्य साहित्य के विभिन्न शैली का परिचय हुआ
	भाषा विज्ञान एवं हिंदी भाषा	भाषा के उद्भव और विकास को छात्र समझ पाए
		छात्र भाषा का स्वरूप समझे
		भाषा में सामाजिक भौगोलिक रूप से जो परिवर्तन हुए उन्हें छात्रों ने अवगत किया
		विज्ञान प्रति रुचि निर्माण हुई
		छात्रों को अर्थ परिवर्तन की दिशा से अवगत करा कर शास्त्रीय दृष्टि से वाक्य निर्माण करने के लिए उपर्युक्त कराया गया
		छात्रों को हिंदी की बोली भाषाएं और वहां के क्षेत्र का परिचय हुआ
	निबंध एवं परियोजना	हिंदी साहित्य के विविध विधाओं का छात्रों को परिचय हुआ
		छात्र काल विभाजन और साहित्य के उद्देश्य और विकास को समझ पाए
		हिंदी साहित्य में आदिकाल भक्ति काल रीतिकाल इनकी संपूर्ण पार्श्वभूमी का छात्रों को परिचय प्राप्त हुआ और वह इन तीनों
		काल से अवगत हुए
		छात्रों में हाशिए के समाज के प्रति अपनत्व का भाव उत्पन्न हुआ

		नवविमर्शा साहित्य की उपयुक्तता के बारे में छात्राओं में रुचि उत्पन्न हुई
MA	आधुनिक काव्य	आधुनिक काव्य के पुनर्नवा के रूप में नवीन भाव में एवं वैचारिक गतिशीलता से छात्राओं को परिचित कराया
Part-II,	•	नागार्जुन की कविताएं चंदू मैंने सपना देखा, उनको प्रणाम, बादलों को चीर के देखा ,महादेवी वर्मा की कविताएं एवं काव्य
Sem. IV		आदि से छात्रा अवगत हुए
		आधुनिक कविता के प्रति छात्रों में रुचि उत्पन्न हुई
		कविता में आए रस ,छंद ,तुक आदि से छात्र परिचित हुए
		छात्रों को काव्य निर्मिती की प्रेरणा मिली
	आधुनिक गद्य साहित्य	छात्राआधुनिक गद्य साहित्य इस विषय से परिचित हुए
		कुछ शब्द कुछ रेखाएं विष्णु प्रभाकर द्रवारा लिखी गई नाटक से परिचित हुए
		जूठन उपन्यासऔर निबन्ध निलय आचार्य सत्येंद्र द्वारा दी गई किताब से अवगत हुए
		छात्र कथांतर किताब संपादक परमानंद श्रीवास्तव, चंद्रधर शर्मा गुलेरी ,प्रेमचंद, जैनेंद्र धर्मवीर भारती, कमलेश्व,र, उषा
		प्रियंवदा निर्मल वर्मा आदि से परिचित हुए और इनके बारे में जानकारी हासिल की
		दृत पाठक को दिए गए कवि उनके व्यक्तित्व एवं कृतित्व पर प्रकाश डालकर छात्रों में साहित्य सूजन की अभिलाषा अंकुरित
		हासिल की
	भाषा विज्ञान एवं हिंदी भाषा	छात्रा में भाषा विज्ञान के प्रति रुचि निर्माण की
		देवनागरी लिपि की विशेषताएं एवं मानकीकरण स्पष्ट करके छात्रा में विषय के प्रति रुचि उत्पन्न हुई
		हिंदी की संवैधानिक स्थिति से अवगत हुए
		भाषा विज्ञान समझने के साथ ही हिंदी भाषा के संदर्भ में मशीनी अनुवाद ,आंकड़ा संसाधन,ई मेंल आईडी ,पंजीकरण, सर्च करना
		आदि को समझने तथा सीखने का अवसर छात्रों को प्राप्त हुआ
		विविध प्रांत की भौगोलिक स्थिति वहां की बोली भाषाएं और लिपि का परिचय छात्रों को अवगत हुआ
	निबंध/परियोजना	हिंदी साहित्य के विविध विमर्श की जानकारी छात्रों को मिली
		दलिता विमर्श ,आदिवासी, बाल विमर्श,स्त्री विमर्श, किसान विमर्श आदि की जानकारी छात्रों को प्राप्त हुई
		ज्ञानशक्षेत्र एवं विवेक के द्वारा चरित्र चित्रण करना छात्रा में अवगत हुआ
		हिंदी विमर्श में आए विविध विधाओं की छात्रों को जानकारी मिली
		छात्रों को विभिन्न साहित्य की पुस्तकें संकलित करने की प्रेरणा मिली

		छात्रों में हाशिए के समाज के प्रति अपनत्व का भाव निर्माण हुआ
		छात्रों की विचारा शक्ति में वृद्धि हुई
		Subject- Marathi Literature
Class	Course	Outcome (Students will be able to)
B.A.	तहान ( कादंबरी )- सदानंद देशमुख	सामान्य समाजातील अन्न, वस्त्र, निवारा याची वाताहत व समस्या समजण्यास मदत होते.
Part-I, Sem-I	अर्वाचीन मराठी कविता - संपादित	कविता ह्या मानवी जाणिवेचे मूल्ये जोपासतात हे कळते.
B.A.	आई रिटायर होतेय ( नाटक )-	आईच्या सेवा निवृत्तीला वय नसते ती आजन्म सेवाधर्म पाळणारी एक अबला असते, याचा बोध होतो.
Part-I,	अशोक पाटोळे	
Sem-II	अर्वाचीन मराठी कविता - संपादित	समाजातील विषमतेचे दुर्भिक्ष व आत्मनिवेदनाचे शब्दजंजाळ समजण्यास सोपे जाते.
B.A.	निवडक मराठी कथा- संपादित	निवडक कथाकरांच्या कथेमधील व्यक्तिचित्रणातून मानवी स्वभाव व परिस्थिती दृष्टोत्पत्तीस आल्यावर सकारात्मक व
Part-II,		नकारात्मक मानवी मूल्यांचे ज्ञान प्राप्त होते.
Sem.III	संत तुकारामांचे निवडक अभंग -	आध्यात्मिक अधिष्ठान समोर ठेवून सामाजिक विषमतेच्या लक्षणांची जाणीव होते.
	डॉ. आ. ह. साळुंखे	
B.A.	आठवणींचे पक्षी - प्रा. प्र. ई.	गावकुसाबाहेरचे मानवी जीवन, बोली, संघर्ष व सामाजिक विषमतेच्या जाणिवेमधून आत्मभान जागृत होते.
Part-II,	सोनकांबळे	
Sem.IV	लीळाचरित्रतील निवडक कथा -	प्राचीन सामाजिक स्थिती, चमत्कार, भ्रमंती, प्रथा, तत्कालीन भाषेचे ज्ञान प्राप्त होते.
	राजेंद्र राऊत	
B.A.	बि-हाड (आत्मचरित्र )- अशोक पवार	मागासवर्गीय जातीची बोली, राहणीमान, सामाजिक स्थिती उपरोक्त आत्मचरित्रातून समजते.
Part-III	जावे त्यांच्या देशा ( प्रवास वर्णन )-	विविध संस्कृतीची जाणीव, जीवन जगण्याच्या पद्धती, मानवी मूल्ये प्रस्तुत साहित्यकृतीतून प्राप्त होते.
	पु. ल.देशपांडे	ऐतिहासिक व वर्णनात्मक भाषेची ओळख होते.भाषा उत्पत्ती, सिद्धांत , व्याकरणाची व भाषेच्य शास्त्रीय माहितीचे आकलन
	भाषाविज्ञान - संपादन	होते.
		Subject- English Literature

Class	Course	Outcome (Students will be able to)
B.A.	<b>English Literature</b>	Understand Literary Movements that existed in different ages.
Part-I,		Define Literary Theories and Terms in Criticism.
Sem-I		Develop reading, writing and analytical skills.
		Help to communicate their ideas critically and creatively.
		Gain insights in genres and conventions associated with English drama
B.A.	English Literature	Analyze various forms of literature.
Part-I,		Acquaint with the forms of structures and aesthetics of style and techniques of literary works.
Sem-II		Competence and clarity about the various elements of literature.
		Communicate in English orally and in writing.
		Kindle their critical thinking skills.
B.A.	English Literature	Evaluate and inculcate focus on 'Background To The Study Of English Literature'.
Part-II,		Identify Elements of literature, Elements of poetry and Metaphysical school of poetry.
Sem-III		Competence and clarity about the Origin and development of essay.
		Gain knowledge of 'Introduction To Literary Terms'.
		Effectively understand different kinds of Advertisement.
B.A.	<b>English Literature</b>	Evaluate and inculcate different kinds of Reports.
Part-II,		Develop their dramatic and performing skills
Sem-IV		Understand various soft skills.
		Avail the pleasure of reading English short stories
		Use soft skills in day to day life.
B.A.	English Literature	Familiarize and formulate the sentences as per situational requirement.
Part-III		Differentiate between acceptable and unacceptable sentences in English.
		Create appropriate, grammatically correct and acceptable sentences in English.
		Enhance their poetic skills, appreciate poetry as literary art, recognize rhythms and metrical aspects of
		poetry and Identify various elements of poetry, figures of speech, symbolism, themes etc

		Develop general language proficiency through listening, speaking, reading and writing.		
	Subject- Hindi Literature			
Class	Course	Outcome (Students will be able to)		
B.A.	Hindi Literature	हिंदी साहित्य के प्रति छात्र की रुची बडाना तथा साहित्यिक विविध विधाओ से परिचित हुए		
Part-I,		कहानी कविता एकांकी साक्षात्कार रेखाचित्र काव्य उपन्यास आधी विधाओके माध्यम से भवात्मक कराया गया		
Sem-I		छात्र को मानक लिपी एवं भाषा का महत्व स्पष्ट हुआ		
		कथा साहित्य के माध्यम से छात्र को विविध समस्योसे अवगत कराना और उन समस्या के समाधान के लिए प्रेरित हुए.		
		छात्र को चिंतन तथा लेखन कौशल्य विकसित हुआ		
B.A.	Hindi Literature	नाटक के प्रती छात्र मे रुची बडी, रंगमंच से संबंधित जानकारी छात्र को प्राप्त हुई		
Part-I,		अभिनय के प्रति आकर्षण निर्माण हुआ		
Sem-II		हमारे संस्कृती का परिचय छात्र को मिला		
		उपण्यास के संबंधित पढणेका कौशल्य निर्माण हुआ		
		नटरंग नाटक, अंधाधुंद उपन्यास हे अवगत हुऐ.		
B.A.	Hindi Literature	हिंदी साहित्य के प्रति छात्रों में रुचि प्राप्त हुई कथा साहित्य के विविध विधाओं से परिचित हुए		
Part-II,		कहानी कविता एकांकी साक्षात्कार रेखाचित्र का उपन्यास आदि विधाओं के माध्यम से छात्र भावात्मक हुए		
Sem-III		हिंदी साहित्य में नटरंग किताब से 10 एकांकी छात्रों को अवगत हुई		
		छात्रों को हिंदी साहित्य अध्ययन की परंपरा की जानकारी मिली		
		छात्र आदिकाल हिंदी साहित्य का काल विभाजन से अवगत हुए		
		छात्राओं ने आचार्य रामचंद्र, शुक्ला प्रेमचंद, डॉ शंकर शेष, कृष्ण सोबती आदि का परिचय प्राप्त किया		
		छंद ,अलंकार ,काव्य हेतु, काव्य प्रयोजनआदि का परिचय मिला		
B.A.	Hindi Literature	नाटक के प्रति छात्र में रुचि बढ़ी, रंगमंच से संबंधित जानकारी छात्रों को मिली		
Part-II,		अभीनय के प्रति आकर्षण निर्माण हुआ.		
Sem-IV		काव्य दर्पण से कविताएं पढ़कर उनके अर्थ से अवगत हुए.		
		छात्र रीतिकाल और भक्ति काल से अवगत हुए		

		छात्रों को रस, शब्द शक्ति, काव्य के लक्षण और काव्य के तत्व आदि की सविस्तार जानकारी प्राप्त हुई
	Hindi Literature	कथा साहित्य के माध्यम से छात्रो को समस्याओसे अवगत होता है और उन समस्याओके समाधान के लिये प्रेरित होता है
B.A.		कविता विद्या का परिचय छात्रोको देणा और कविताओसेछात्रो मे प्रकृती प्रेम, देशप्रेम जागृत होता है
Part-III		साहित्य का शास्त्रीय पद्ध्तीसे अध्ययन करके, साहित्य के प्रती शास्त्रीय दृष्ठीकोन विकसित होता है
		कौशल्य विकास के माध्यम से राष्ट्रनिर्माण मे योगदान होता है
		बदलते भाषा परिवेश मे परंपरागत भाषाई मौलिकता और लोकभावनाओ को समझता है

## **Subject- Economics**

Class	Course	Outcome (Students will be able to)
		Apply knowledge and skill in the field of Economics& will be able to have the employability in these areas.
B.A.	Micro Economics	Describe and apply the methods for analysing consumer behaviour through demand and supply, elasticity
Part-I,		Perform analysis to analyse the impact of economic events on Markets,
Sem-I		To create a new approach towards the study of Economics.
		The course will illustrate how microeconomic concepts can be applied to analyze real-life situations
		Analyze the performance of firms under different market structures,
		Evaluate the factors affecting firm behaviour, such as production and costs
		To have better awareness regarding different Factors Pricing Rent, Wages, Interest, and Profit.
B.A.	Economy of Maharashtra	Understand the geographical and economic features of Maharashtra's economy.
Part-I,		To analyse the demographic features of Maharashtra and to explain the causes and impact of population growth
Sem-II		and its distribution, translate and relate them with economic development.
		Understand the role of Agriculture in Economy of Maharashtra as well as to analyse the effects of Green
		revolution
		To explain the role of Industry and Infrastructure in Maharashtra
		To analyse various Issues in Vidarbha Region - Farmers' Suicides, Irrigation Backlog etc and to explain
		available natural recourses of vidarbha.
B.A.	Macro Economics	Explains national income, calculation methods of national income, and concepts related to national
Part-II,		income.

Sem-III		Understand the concept of money and Fishers Quantity Theory of Money
		Analyse the concept of inflation and deflation.
		Explain the meaning of consumption function, relationship between APC and MPC, consumption and
		income, concept of multiplier
		Identify the basic difference between inter-regional and international trade, understand how
		international trade has helped countries to acquire goods at cheaper cost and explain it through
		Ricardo's comparative cost theory of International Trade
B.A.	Banking	Aware of the fundamentals of banking and knowledge of banking operations
Part-II,	0	Identify types of banks, explain the meaning and function of commercial banks, illustrate how banks create
Sem-IV		credit.
		Illustrates the functions of Central bank and suggest the instruments to control credit.
		To understand the objectives and functions of Cooperative Bank and NABARD
		Analyse the role and functions of IMF and World Bank
		To understand various recent services in banking sector
B.A.	Development and	Develop ideas of the basic characteristics of Indian economy, its potential on natural resources.
Part-III	<b>Environmental Economics</b>	Understand the role of agriculture in Indian economy.
		Understand the role of industry in Indian economy.
		Create awareness among the students about internal and external issues of Indian economy
		Understand the causes of various types of environmental pollution and suggest appropriate measures to correct
		environmental degradation.
MA	Paper-I,	Cite the basic principles of microeconomics.
Part-I,	Micro Economics-I	Interpret the concepts of utility, demand-supply mechanism, and elasticity.
Sem-I		Apply these concepts to solve and analyse various problems of economic policy.
		Analyse the perfectly competitive market framework.
		Assess the framework and analyse microeconomic relationships.
		Devise pricing strategies for firms and calculate productivity and costs for the firm
	Paper-II,	Explain the evolution of money and know the concept of money and its functions.
	Macro Economics-I	Understand the national income concept
		Know about the supply of money and high-powered money.

		Gives the idea of Keynesian theory of employment.
		Understand the theories of the consumption function.
		Gives an idea about how to make a saving and investment.
		Evaluate the working and effects of monetary and fiscal policy
	Paper-III,	Describe the basic concept of statistics.
	<b>Statistics for Economics</b>	Understand the significance of statistics in Economics .
		Understand the issues regarding the survey, data collection, classification, tabulation & presentation of data.
		Understand the role of CSO & NSSO
		Calculate & apply the measures of central tendency, dispersion, skewness, correlation & regression
	Paper-IV,	Scope and subject matter of agricultural economics.
	<b>Agriculture Economics</b>	Understand the rural infrastructure and agricultural production.
	S	Analyze the issues related to agricultural and economic development.
		Deals with the farm management and types of agricultural risk.
		Understand the Labour Supply, Mobility of Labour and Segmentation in Labour Markets.
		Evaluate the problem of agricultural finance and suggestion to improve agricultural finance.
<u>_</u>		Know about agricultural growth in India and the effects of globalization.
	Paper-V,	Got idea about mercantilism and physiocracy.
	<b>History of Economic</b>	Introduced to the economic thoughts of classical economists.
	Thought	Got to know the critics of classicism.
		Noticed the modern economic thoughts.
		Understood the economic thoughts of Indian economists.
MA	Paper-I,	Report a thorough understanding of the basic principles of microeconomics.
Part-I,	<b>Micro Economics-II</b>	Interpret the Monopolistic market framework, and apply it to microeconomic situations.
Sem-II		Illustrate the features of the Oligopolistic market.
		Break down the nuances of welfare economics.
		Review the above concepts to solve and analyse various problems of economic policy.
		Devise and apply game-theoretic solutions for economic decision-making.
	Paper-II,	Course is useful for understanding various real economic issues and evaluating
	Macro Economics-II	Policy outcomes
		Gained knowledge of theory of interest rates.

		Introduced to the theory of inflation.  Realised the inflation in developing economies.  Gained knowledge of demand for money.
		Gained knowledge of demand for money.
		•
		Learned what is business cycle?
	Paper-III,	Understand the concept of Sampling & Estimation.
	Statistics for Economics-II	Use of sample survey on various issues
		Test of Hypothesis by using various statistical Test
		Understand time-series trends & calculate it for forecasting
		Understand & Uses of Probability
		Calculate Index Number
	Paper-IV	Aware about Definition, Concepts, Nature Scope of Rural development
	<b>Rural Development</b>	Explain the types of agriculture to include, horticulture, dairying and allied rural activities
	_	Aware about the Panchyat Raj, Introduction to Cooperative Movement In Rural Economy
		Understand the students about the various issues of rural labour.
		Know the various rural development programmes run by government of India.
		Know the ongoing programmes under different ministries of Govt. of India.
	Paper-V	Understand the principle of cooperation and the values of cooperative institutions.
	<b>Co-operation</b>	Understand the origin and development of the Cooperative movement.
		Know the role of NAFED & Co-operative agro-based industries.
		Examine the various types of co-operative society.
		Create awareness about the working of cooperative organizations in rural and urban areas.
		Know the role of the financial institute framework.
		Will be developing the accounting, audit & role of the cooperative auditor.
MA	Paper-I	Realised the concept of economic development.
Part-II,	<b>Economic Growth,</b>	Gained knowledge about the aspects of economic development.
Sem-III	Development and Planning-	Understand the classical theory of economic development.
	I	Get an idea of neo-classical theory of economic development.
		Introduced to the modern theory of economic development.
	Paper-II	Learned about the classical theory of international Trade.

	International Trade &	Introduced to the modern theory of international Trade.
	Finance	Realised the gains of international trade.
		Noticed the relationship between international trade and economic development.
		Came to know about balance of payment.
	Paper-III	Learn the features of Indian economy.
	Indian Economic Policy	Get an idea of Indian poverty, employment and income.
		Realised the agriculture policy.
		Understood the industrial policy.
		Know about infrastructure, social security and service sector.
	Paper-IV	Understand and comprehend the basics in research methodology and applying them in research/
	Research Methodology for	project work.
	Economics	Help them to select an appropriate research design.
		Take up and implement a research project/ study.
		Collect the data edit it properly and analyse it accordingly. Thus, it will facilitate students' prosperity
		in higher education objectives.
		Develop skills in qualitative and quantitative data analysis and presentation
		Demonstrate the ability to choose methods appropriate to research
MA	Paper-I	Get an idea about economic planning.
Part-II,	Economic Growth,	Understand the theory of economic development.
Sem-IV	Development and Planning-	Get to know the pectoral aspects of economic development.
	II	Noticed the relationship between international trade and economic development.
		Realised the economic development policy.
	Paper-II	Get to know about India's international trade policy.
	International Trade &	Get an idea of regional economic blocks.
	Finance	Came to know about WTO.
		Understood the foreign capital.
		Realised the functions of MNCs

Paper-III	Gained knowledge of balance of payment and trade policy.
Indian Economic Policy	Learned about foreign capital, exchange and multinational corporation.
	Realized the impact of globalization.
	Introduced to the monetary and fiscal policy.
	Get the idea of economic planning and policy.
Paper-IV	Understand the basics of demography.
Demography	Study established theories of population
	Understand the core social demographic variables (fertility, mortality, migration), and how these
	variables influence population growth, composition, and structure
	Critically analyse the concept of Migration and Urbanization
	Identify appropriate sources of data, perform basic demographic analyses using various techniques and
	ensure their comparability across populations.
	Explore various aspects of the population policy and to study its impact on socio economic issues

## **Subject- Political Science**

Class	Course	Outcome (Students will be able to)		
B.A.	Indian Constitutional	Understand the significance of the Indian constitution as the fundamental law of the land.		
Part-I,	Provisions and Local Self	Exercise fundamental duties and identify responsibilities in national building.		
Sem-I	Government	Analyze the Indian Political System, including the powers and functions of the Union and State Governments.		
		Analyze critically the important institutions of the Indian Union, including the Executive (President, Vice-		
		President, Prime Minister, Council of Ministers) and State Executive (Governor, Chief Minister, Council of		
		Ministers), as well as the Legislature (Rajya Sabha, Lok Sabha, State Legislature).		
		Respect India's Judiciary as a robust system that protects human rights and comprehend its functioning.		
		Develop a comprehensive understanding of the Indian political landscape, including its constitutional		
		principles, governmental structure, and the roles of key institutions in the nation's governance.		
B.A.	Indian Constitutional	Analyze the significance of the Election Commission of India and its role in ensuring free and fair elections.		
		Identify and assess the powers and responsibilities of key political figures such as the Governor, Chief Minister,		

Part-I,	<b>Provisions and Local Self</b>	and Council of Ministers.
Sem-II	Government	Describe the structure and powers of the Legislative Assembly and Legislative Council in the Indian political system.
		Evaluate the importance of Local Self-Government in Maharashtra and its impact on governance and administration.
		Examine the composition, functions, and powers of Gram Panchayat and Gram Sabha in rural local governance.
		Demonstrate a comprehensive understanding of the political processes and institutions relevant to the Indian state of Maharashtra.
B.A. Part-II,	Selected Constitutions and International Relations	Understand the significance of the Crown, Prime Minister, and Cabinet within the unwritten constitution of the UK.
Sem-III	(U,K.,U.S.A)	Explain the respective powers and roles of the House of Lords and the House of Commons in the UK's parliamentary system.
		Evaluate the functions and responsibilities of the President, Cabinet, and Vice President within the framework of the USA Constitution.
		Investigate and assess the composition and roles of the Senate and House of Representatives in the US legislature.
		Acquire knowledge about the functioning and jurisdiction of the US Supreme Court.
		Examine the structure, purpose, and function of the South Asian Association for Regional Cooperation (SAARC).
B.A. Part-II,	Selected Constitutions and International Relations	Understand the role and significance of governmental Standing Committees in China, and their impact on the overall governance system.
Sem-IV	(U,K.,U.S.A &China)	Analyze and compare the functions and powers of key institutions in China's central system, such as the State Council, Prime Minister, and Communist Party, to comprehend their roles in decision-making and policy implementation.
		Comprehend the structure and functioning of the United Nations Organization on a global scale, including its various specialized agencies, to appreciate its role in international relations.
		Explain the importance of the Security Council, Secretary-General, and International Court of Justice within the United Nations Organization, and evaluate their contributions to maintaining international peace and security and resolving disputes.
		Analyze the major issues and challenges influencing India-China relations, and identify the political dynamics

		and factors affecting bilateral ties between the two countries.
		Develop critical thinking and analytical skills to assess political developments, governmental systems, and
		international organizations in the context of political science.
B.A.	Political Science	Understand the concept of power and authority in the context of political science, and analyze the historical
Part-III		development of political theories related to these concepts.
		Compare and contrast various theories explaining the origin of the state, including divine development theory,
		social contract theory, historical idealist theory, and jurisprudential approach.
		Explain Austin's universalism and critically evaluate the implications of citizenship liberties and rights within a
		political system.
		Differentiate between the theory of natural right and the legal theory of social right, and comprehend their
		significance in shaping political ideologies.
		Describe the essential characteristics of a successful democracy, focusing on concepts of equality and justice in
		governance.
		Explore the theories of social change and evaluate the factors influencing social transformation, including the
		notions of development and the welfare state.
MA	Paper-I	Understand the contributions and ideologies of key figures in modern India's history.
Part-I,	(Political Thought in	Evaluate the diverse ideological streams in Indian Political Thought.
Sem-I	<b>Modern India</b> )	Compare and contrast the ideas and theories proposed by Indian Political Thinkers.
		Demonstrate a deep understanding of the ideological underpinnings of nation building in India.
		Acquaint with the evolution of Indian Political Thought, spanning from Ram Mohan Roy to Dr. Punjabrao
		Deshmukh.
		Analyze Critically the development of Indian Political Thought throughout history.
	Paper-II	Gain a comprehensive knowledge of India's constitutional development and the underlying principles of the
	(Indian Government and	Indian constitution.
	Politics)	Comprehend the various fundamental rights enshrined in the Indian constitution and the procedures involved in
		constitutional amendments.
		Acquire an in-depth understanding of the structure and functions of the Supreme Court of India and its role in
		the country's legal system.
		Acquaint with the intricacies of the electoral process in India, including voting procedures, representation, and

		election management.
		Analyze significant issues in Indian politics, such as caste dynamics, religious influences, regionalism, and
		language-related challenges.
		Develop the ability to critically assess the complexities and nuances of India's political landscape, integrating
		knowledge of constitutional principles and real-world political scenarios.
	Paper-III	Understand the meaning, nature, and historical development of public administration.
	(Public Administration)	Identify and compare various approaches and methods used in public administration.
	,	Comprehend the fundamental concepts and diverse types of organizations within the administrative framework.
		Analyze and describe the intricacies of administrative organization.
		Demonstrate knowledge of the concept of bureaucracy and its defining characteristics
		Evaluate the significance of bureaucracy in the context of public administration and governance
	Paper-lV	Understand the scope and subject matter of international relations, including the various theories that explain
	(Theories of International	and analyze international interactions.
	<b>Relations</b> )	Comprehend the concept of power in international relations, including the notion of national power and its
	,	significance in shaping global dynamics.
		Acquaint with the management of national power and the principles of diplomacy, exploring how nations
		engage with each other on the global stage.
		Gain insights into the critical issues of disarmament and arms control at the international level, examining
		efforts to reduce military tensions and promote global security.
		Acquire the knowledge about the concept of non-alignment, exploring the policy of remaining neutral and
		unaffiliated with major power blocs in international politics.
		Understand the idea of the New International Economic Order, examining its principles and implications for
		global economic relations.
MA	Paper-I	Comprehend the contributions and ideologies of key figures in modern Indian history.
Part-I,	Political Thought in	Evaluate the diverse ideological streams in Indian Political Thought.
Sem-II	<b>Modern India</b>	Compare and contrast the ideas and theories of prominent Indian Political Thinkers.
		Explain the ideological basis for nation-building in India.
		Familiarize with the evolution of Indian Political Thought from Mahatma Phule to Rashtrasant Tukdoji
		Maharaj.
		Develop analytical skills in examining the knowledge of various political ideologies in the context of India's

	history and contemporary challenges.
Paper-II,	Gain a comprehensive understanding of The Directive Principles of State Policy and their significance in
Indian Government	shaping the governance and policies of the Indian state.
and Politics	Demonstrate a critical analysis of Indian Federalism, including an examination of its features, strengths, and challenges, and how it influences the distribution of powers between the central and state governments.
	Develop a clear comprehension of the complex and dynamic nature of the centre-state relationship, exploring its
	multifaceted aspects, interactions, and implications for policymaking and governance in India.
	Analyze the intricate issues of religion, language, regionalism, and Naxalism within the Indian political context,
	exploring their historical roots, contemporary impact, and possible approaches to addressing these challenges.
	Acquire the ability to critically assess the dynamics of state politics in India, including the study of regional
	parties, electoral systems, and the role of local leaders in shaping state-level policies and governance.
	Identify and evaluate key issues and trends in Indian politics, and participate actively in discussions and debates
	on political matters both at the national and state levels.
Paper – III	Comprehend the mechanism and significance of budgets in administration, enabling them to effectively manage
(Public Administration)	financial resources in the public sector.
,	Acquaint with the concept of administrative accountability, enabling them to recognize and address issues
	related to responsible decision-making and transparency in public governance.
	Gain an understanding of the essential principles of personnel administration, equipping them to manage human
	resources within public organizations efficiently.
	Analyze the pivotal role of globalization and liberalization in the field of public administration, enabling them
	to grasp the implications of international trends on government policies.
	Understand the concept of governance and good governance, empowering them to assess and promote effective
	and ethical leadership in public institutions.
	Integrate the knowledge of political science with public administration concepts, fostering a comprehensive
	understanding of how politics and governance intersect in practical applications.
Paper – IV	Understand and assess the far-reaching consequences of the end of the Cold War on the dynamics of
(Theories of International	international relations, including shifts in power structures, alliances, and geopolitical landscapes.
Relation)	Gain a comprehensive understanding of the concepts of North-South and South-South dialogues, along with the
	ability to critically analyze the role of gender in shaping and influencing international relations.
	Comprehend the multifaceted impact of globalization on international relations, including economic

		interdependence, cultural exchange, and challenges to state sovereignty.
		Investigate and analyze environmental issues of global significance, including climate change, pollution, and resource management, and understand how these challenges affect international cooperation and conflicts.
		Explore and assess the complex interplay between terrorism and human rights on the international stage, fostering an understanding of the responses of states and international organizations to these challenges.
		Develop the ability to synthesize the knowledge gained throughout the course and propose comprehensive solutions to various global challenges in the realm of international relations, incorporating multiple perspectives and approaches.
MA	Paper – I	Comprehend and evaluate the significant contributions and ideas of prominent western political philosophers.
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Part-II,	(Western Political Thought	Analyze and grasp the knowledge of different ideological streams within western political thought.
Sem-III	And Theory)	Compare and critically assess the ideas and theories proposed by various Western Political Thinkers
		Develop a comprehensive understanding of the ideological foundations that underpin western political thought.
		Acquaint with the historical evolution of Western Political Thought, spanning from Plato to John Rawls and Robert Nozick.
		Examine and interpret complex political ideas within the context of Western Political Thought.
	Paper – II	Understand the significance of employing scientific methods and maintaining objectivity when conducting
	(Research Methodology)	research in political science.
	(	Demonstrate the significance of social research in the context of political science, understand its role in policy making and political analysis.
		Understand the different methodologies and techniques used in social research, enabling them to choose appropriate approaches for specific political inquiries.
		Acquaint with the process of identifying and defining research topics relevant to political science, setting the foundation for their own future investigations.
		Comprehend the concept of hypothesis formulation and its significance in guiding research questions and investigations within the realm of political science.
		Apply the principles of scientific method, objectivity, various research methods, research topics, and hypothesis formulation to conduct their own research projects in the field of political science.
	Paper – III	Comprehend diplomacy's meaning, nature, scope, and methodologies.
	(Diplomacy and Indian	Identity the significance and functions of CONSULS in international relations.
	(2-promucy und mulum	Acquire knowledge about the recruitment, roles, and essential qualities of Diplomats.

	Foreign Policy)	Gain insights into the essence and objectives of foreign policy, with a focus on Indian foreign policy's
	G	significance.
		Analyze the complex process involved in formulating foreign policies.
		Develop a critical understanding of the interactions and dynamics shaping international relations.
	Paper – IV	Demonstrate a comprehensive understanding of the meaning and nature of International Law, including its
	(International Law and	historical development and key principles.
	International	Identify and explore the diverse subjects and areas covered by International Law, such as human rights,
	Organization)	diplomacy, environmental law, and trade agreements.
	01 <b>g</b> 2	Acquire in-depth knowledge of the International Laws of War, including the principles of just war theory,
		humanitarian law, and the regulation of armed conflicts.
		Analyze the meaning, nature, and significance of International Organizations, including their roles in global
		governance, peacekeeping, and promoting international cooperation.
		Examine the evolution and development of International Organizations, tracing their historical origins, growth,
		and transformation in response to global challenges and changing geopolitical dynamics.
		Evaluate the interchange between International Law and International Organizations, and understands the
		entities interact, collaborate, and address international issues to maintain peace, security, and stability in the
		global arena.
MA	Paper – I	Demonstrate a comprehensive understanding of Democratic Socialism, its principles, and its role in
Part-II,	(Western Political Thought	contemporary political systems.
Sem-IV	and Theory)	Analyze and evaluate various political theories, including their meanings, nature, and historical context, while
		recognizing the factors that contributed to their decline over time.
		Understand the significance and implications of Behaviouralism as a key approach in the study of political
		science, and its impact on the analysis of political behavior and decision-making processes.
		Examine critically and discuss the concepts of Power, Authority, and Legitimacy in political contexts, and
		understand their interplay in shaping political structures and governance.
		Identify and analyze the essential elements of the State and Sovereignty, and how these concepts interact with
		one another to form the foundation of modern political systems.
		Develop a comprehensive knowledge base that enables the application of political science principles to real-
		world scenarios, fostering critical thinking and informed decision-making as responsible citizens.
	Paper – II	Acquaint with the meaning and characteristics of research design in political science, and comprehend the

(Research Methodology)	process of formulating effective research plans to investigate political phenomena.
	Demonstrate proficiency in data processing and sampling techniques relevant to political science research, and
	learn how to handle and analyze data in a systematic and reliable manner.
	Explore methods of data collection used in political science research. They will understand the strengths and
	limitations of different data collection approaches.
	Analyze and interpret data in the context of social research. They will learn to draw meaningful conclusions
	from data sets related to political issues.
	Identity the significance of case study analysis in political science. Additionally, they will learn the art of
	effective report and thesis writing, honing their skills in presenting research findings coherently.
	Explain the importance of ethical considerations in political science research. They will understand the need for
	conducting research with integrity and respect for human subjects, ensuring responsible scholarly practices.
Paper-III	Identify and analyze key institutions involved in foreign affairs, such as the Foreign Affairs Department and
(Diplomacy and Indian	Embassies.
Foreign Policy)	Explain the roles and responsibilities of diplomats and their significance in international relations.
	Compare and contrast the Liberal and Realist phases of Indian Foreign Policy, understanding their respective
	principles and implications.
	Analyze the post-liberalization phases of Indian Foreign Policy and their impact on the country's international
	relations.
	Evaluate the dynamics of National Security, including the factors that influence it and its significance in
	shaping foreign policy decisions.
	Develop a comprehensive understanding of the interactions between national security and foreign affairs, and
	their implications on global politics.
Paper – IV	Understand the concept of Terrorism and its implications in International Law.
(International Law and	Acquire knowledge about the structure, functions, and significance of the International Court of Justice.
International	Comprehend the principles and regulations governing Laws of Neutrality in international conflicts.
Organization)	Analyze the historical background and functions of the League of Nations.
- 9 //	Evaluate the aims, objectives, and significance of the United Nations Organization (U.N.O.).
	Demonstrate a comprehensive understanding of various aspects of International Law and International
	Organizations and their impact on global politics.

<b>Subject- Histo</b>	ry
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Class	Course	Outcome (Students will be able to)
B.A.	History of India	Analyze and interpret historical sources related to ancient India, gain insights into the socio-economic, political,
Part-I,	(From Earliest Times to	and cultural background of the era.
Sem-I	1205 A.D.)	Acquire knowledge about the rise and decline of territorial empires, with a specific focus on the Mauryan and
	·	post-Mauryan periods in ancient India.
		Acquire in-depth knowledge of the rise and growth of the Gupta Empire, its achievements, and contributions to
		ancient Indian history.
		Gather knowledge about the Vardhan Empire and major dynasties of Deccan and South India, understand their
		historical significance and cultural impact.
		Learn about the invasions by Arab and Turks and their consequences on ancient Indian society, economy, and
		culture.
		Gain insights into various aspects of ancient Indian society, such as education, the position of women, judicial
		administration, art, and architecture, social structures.
B.A.	History of India	Demonstrate a comprehensive understanding of the historical events that led to the establishment of the Delhi
Part-I,	(From 1206 A.D.to 1525	Sultanate and its subsequent expansion and consolidation under rulers like Qutbuddin Aibak, Illutmish, Razia,
Sem-II	<b>A.D.</b> )	and Balban.
		Acquire in-depth knowledge of the political strategies, administrative policies, and economic measures
		implemented by Allauddin Khilji during his reign as a Sultan, and understand their impact on the Sultanate's
		governance and society.
		Assess the various reforms introduced by Mohammad Tughluq and Firoz Shah Tughlaq, examine their
		successes, failures, and implications for the Sultanate's political and socio-economic landscape.
		Gain knowledge about the historical factors that contributed to the rise of the Bahmani Kingdom and the
		Vijayanagar Empire, and explore their respective expansion and influence in the Deccan region.
		Examine the intricate political structure of the Delhi Sultanate, including its administrative hierarchy and the
		dynamics between the rulers and their subjects, study the societal aspects of the period, including the status and
		role of women.

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		Explore the economic and technological advancements that occurred during the Sultanate Period, as well as the
		flourishing of arts and education, and the various religious movements that emerged and shaped the socio-
		cultural landscape of the time.
	History of India	Demonstrate a comprehensive understanding of the sources and historical context of Medieval India, and cquire
B.A. Part-II,	( From 1526 to 1756 A.D.)	knowledge about the establishment and consolidation of the Mughal Empire, including the key events and figures involved.
Sem-III		Develop an understanding of the Mughal political system, its structure, and functioning, dentify and analyze the various ruling classes within the Mughal Empire and their roles in governance.
		Gain insights into the dynamics of the Mughal Empire's interactions with the Rajput kingdoms, with a specific focus on the reigns of Akbar and Aurangzeb.
		Understand the factors contributing to the decline of the Mughal Empire and its eventual downfall, and analyze the economic structure of the Mughal Empire, including trade, agriculture, and revenue systems.
		Explain the society and religious diversity within the Mughal Empire during its heyday, and demonstrate educational practices and literary achievements of the Mughal era, including prominent scholars and works.
		Acquire knowledge about the sources of Maratha history and the rise of Maratha power in the region, and gain insights into the political administration, military system, judicial administration, fiscal policies, and religious policies under the Maratha rule.
B.A.	History of India	Gain knowledge about the arrival and establishment of European powers in India, with a focus on the
Part-II,	(From 1757 to 1947A.D.)	Portuguese, French, and British, understand the historical significance of their presence and the impact on
Sem-IV		India's socio-political landscape.
		Aware of the British dominion in India and the strategies employed by the British to expand their influence,
		learn about the mechanisms through which the British consolidated their rule in India and its implications on the Indian society.
		Acquaint with the causes, nature, and consequences of the Revolt of 1857, a crucial event in India's struggle against British rule.
		Explore the implications of the Queen's Proclamation and its impact on socio-religious movements and modern education in India, and understand the factors that led to the rise of nationalism in India and its significance in
		the country's freedom struggle.
		Explore the early and later phases of the Indian National Congress and gain insights into the ideologies of moderates and extremists.

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		Acquire knowledge about the early Gandhian programs, including the Rowlatt Act, Non-Cooperation
		Movement, Civil Disobedience Movement, and Quit India Movement, understand the strategies and impact of
		these movements in India's quest for independence.
		Know the information about the evolution of India's constitutional development and the role of revolutionary
		movements, and explore the significance of leaders like Subhash Chandra Bose and the Azad Hind Army in
		India's struggle for independence.
B.A.	History	Understand the key events, causes, and outcomes of the French Revolution, including the rise of Napoleon
Part-III		Bonaparte, the Congress of Vienna, and the formation of nation-states in Italy and Germany.
		Acquire knowledge about the foreign policy strategies implemented by Otto von Bismarck during his tenure as
		Chancellor of Germany and understand their impact on shaping European politics
		Know the reign of Kaiser William II, the underlying causes that led to the outbreak of the First World War, and
		the consequences it had on the global political landscape.
		Gain insights into the Russian Revolution, the outcome of the Paris Peace Conference, and a comprehensive
		understanding of Adolf Hitler's ideologies and policies that influenced Europe during the interwar period.
		Analyze the key events, turning points, and consequences of the Second World War, along with understanding
		the United States' entry into the conflict and its impact on the global balance of power.
		Acquire knowledge about the geopolitical landscape after World War II, the Cold War rivalry between the
		United States and the Soviet Union, the formation of military alliances, and the significance of the Non-Aligned
		Movement in shaping the progress of third-world nations, learn about the Suez Crisis and its implications on
		international politics.
MA	Paper-I,	Demonstrate a comprehensive understanding of the meaning of historiography, including its nature and scope,
Part-I,	Historiography	as well as the different kinds of history.
Sem-I	O 1 V	Analyze and differentiate between various historical approaches and methodologies.
		Identify and evaluate historical sources, including primary and secondary sources.
		Learn to collect relevant data for historical research and distinguish reliable information from biased or
		unreliable materials, and acquire the skills to critically analyze historical events, practices, and ideas.
		Explore the concepts of internal and external criticism to assess historical accounts' accuracy and credibility,
		and understand the importance of causation in history and its role in shaping societies and civilizations.
		Gain insights into history as both an art and a science, and learn to appreciate the creativity involved in
		interpreting historical events and the systematic approach required to conduct historical research.
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	Compare ancient Indian, Greco-Roman, and Chinese traditions, and gain a broader perspective on the diversity
	of human experiences and cultural developments throughout history.
	Demonstrate the historical thought of significant historical thinkers such as Classical Marxism, Annals-Marc
	Bloch, Fernand Braudel, Positivism-August Comte and Ranke etc, and comprehend the evolution of historical
	thought and its impact on shaping our understanding of the past.
Paper-II	Learn about the Sources of Ancient India, Pre History, Proto History and Early Historic India.
-	Understand the Later Vedic Age, Janapadas and Mahajanpadas, Religious Movements, Iranian & Macedonian
Ancient India	Invasions and it's effects.
(From Earliest Time	
to 606 A.D.)	Gather knowledge about the Nandas and Mouryas Polity, Trade and Trade routes, learn about Ashoka's
	Dhamma, Post Mouryan developments and Satavahanas Dynasty.
	Achieve knowledge about the Kushanas society, Religion, Art & Architecture. They will learn about Sangam
	Age.
	Aware about Guptas Polity, Economy and Society.
	Understand the Vakatakas, land grants; art and architecture.
Paper-III	Identify and explain the Sources, Foundation, and Consolidation of the Sultanate period in India, understand the
<b>India Under the Sultanate</b>	significance of historical figures like Aibak, Iltutmish, Razia Sultan, Balban, and the Rise of the Khilji dynasty.
Period	Gain comprehensive knowledge of the Administrative and Economic Reforms implemented by Mohammad-
(1206 to 1526 A.D.)	bin-Tughlaq and Feroz Shah Tughlaq, analyze the impact of these reforms on the governance and economy during the Sultanate period.
	Know the historical context of the Bahamani and Vijayanagar Kingdoms., understand the rise and fall of these
	kingdoms, their cultural and political contributions, and their significance in Indian history.
	Understand the Agrarian economy and its relationship with the state during the Sultanate period, analyze the
	trade, commerce, and monetary system prevalent during this era, and understand their implications on the
	economy.
	Gain insight into the social conditions prevailing during the Sultanate period, and explore topics such as the
	status of women, education, and the socio-religious reform movements that shaped society during that time.
	Develop an understanding of the Architectural traditions in India, focusing on both regional architecture and
	sculptures, and explore the distinctive features of architectural styles and analyze their cultural and historical
	significance.
Paper-IV	Explain the historical development and key features of capitalism and imperialism, and their impact on global

	Modern World	trade, power dynamics, and colonization during the specified time period.
	(form 1871 to 1945 A.D.)	Acquire knowledge of the factors that led to the outbreak of the First World War, including Bismarckian
	,	diplomacy and America's entry into the war, and analyze the long-term consequences of the war on the global
		political and economic landscape.
		Examine the peace settlements that followed the First World War and understand their significance in shaping
		the post-war world, analyze the long-term consequences of these settlements on international relations and
		regional stability.
		Explore the Russian Revolution and its impact on Russia and the world, as well as its role in the establishment
		of the League of Nations, and critically evaluate the successes and failures of the League of Nations in
		maintaining global peace and stability.
		Gain insights into the rise of fascism in Italy and the emergence of Hitler and Nazism in Germany, and analyze
		the socio-political factors that contributed to the rise of these ideologies and their consequences on domestic
		and international affairs.
		Understand the foreign policies pursued by Japan, France, and the Soviet Union during the period from 1939 to
		1945, and analyze the motivations behind these policies and their impact on the course of World War II.
MA	Paper-I	Identify and differentiate between Imperialist History Writing and Nationalist History Writing, and understand
Part-I,	<b>Trends and Theories of</b>	the key figures such as James Mill, Grant Duff, R. C. Mujumdar, and K. P. Jaiswal.
Sem-II	History	Examine and compare Orientalist History Writing and Marxist History Writing, and become familiar with
	·	influential figures like William Jones, Alexander Cunningham, R. S. Sharma, and D. D. Kosambi.
		Analyze and contrast Theological History Writing and Subaltern History Writing, and gain insights into the
		contributions of figures like Saint Augustine, Antonio Gramsci, Mahatma Phule, and Ranjit Guha.
		Explore the Cyclical Theory of History, Comparative Approach of History, and Ecological Approach of History
		to gain a comprehensive understanding of different historical perspectives.
		Evaluate critically the Themes of History, focusing on topics such as Religion and Culture, Varna, Caste, and
		Gender, to grasp the diverse aspects that shape historical narratives.
		Develop a deeper appreciation for the nuances and complexities of historical writing, enhancing the ability to
		interpret and analyze historical sources with a more discerning and informed approach.
 	Paper-II	Understand the various historical sources available to study ancient India, including archaeological, literary, and
	Ancient India	epigraphic sources, and able to critically analyze these sources to extract valuable historical information.
		Acquire knowledge about the political landscape of Post Vardhan India, including the dynasties that ruled

( 606 to 1206 A.D.)	Central, Western, and Deccan regions, and assess the impact of Arab and Turkish invasions on the Indian
	subcontinent during this period.
	Comprehend the various forms of legitimization used by rulers and understand the nature of regional policies
	that shaped the socio-political landscape.
	Acquire an in-depth knowledge of the Post Vardhan economy, including the agrarian and urban economic
	systems, and explore the significance of trade and craft guilds in the economic framework, as well as the
	functioning of coinage and currency during this period.
	Investigate the social aspects of ancient India, including the status of women, religious practices, the emergence
	of Bhakti movements, and the significance of literature, art, and architecture in shaping the society.
	Analyze the various historical developments during the studied period, connecting the political, economic, and
	socio-cultural aspects to gain a holistic understanding of ancient Indian history.
Paper-III	Identify and analyze various historical sources related to the Mughal period, enabling them to gain insights into
India Under the Mughals	the reigns of Babur, Humayun, Sher Shah Suri, and Akbar.
(1526 to 1707 A.D.)	Acquire in-depth knowledge about the prominent Mughal emperors such as Jahangir, Nurjahan, Shah Jahan,
(==== == ==============================	and Aurangzeb, and their contributions to the Golden Age of the Mughal period.
	Comprehend the complex Mughal administrative structure, including the Theory of Kingship and Mansabdari
	system, & gain insights into the revenue system and the management of water resources during the Mughal era.
	Acquire knowledge about the trade and commerce practices during the Mughal period, including the monetary
	system, and explore the growth of cities and towns and advancements in industries and production technology.
	Understand the social conditions prevalent during the Mughal period, including the status of women, religious
	movements, educational practices, and developments in art and architecture.
	Analyze critically the factors that contributed to the Golden Age of the Mughal period, examining the socio-
	political, economic, and cultural aspects that led to its flourishing and decline.
Paper-IV	Understand the ideological and political factors that led to the Cold War, including the tensions between the
Contemporary World:	United States and the Soviet Union, and how these factors shaped the global geopolitical landscape.
(1945 to 2000 A. D.)	Acquire in-depth knowledge about the challenges faced by post-war Germany and the factors that contributed
(12 10 00 100 110 10)	to the rise of communism in China, and critically examine the historical context and consequences of these
	events.
	Learn about the genesis and process of the disintegration of the Soviet Union, including the economic, social,
	and political factors that led to its collapse, and gain insights into the impact of this disintegration on the global

		orono
		arena.
		Explore the collapse of communist regimes in various East European countries and understand the social,
		political, and economic transformations that occurred during this period, and earn about the Organization of
		African Unity and its significance in the context of Africa's decolonization and post-colonial development.
		Analyze the history of civil rights movements, the apartheid system in South Africa, and the feminist
		movements, understanding their impact on society and the struggle for equality, and learn about the progress of
		science and technology and its influence on historical events.
		Explore the emergence of a unipolar world after the Cold War, the reunification of Germany, the Kuwait Crisis,
		and the implications of globalization on historical developments, and gain insights into the interconnectedness
		of nations and the dynamics of power in the contemporary world.
MA	Paper – I	Understand the historical significance of the Revolt of 1857 and its impact on the Indian National Congress, and
Part-II,	History of India	analyze the factors that led to the rise and growth of the Indian National Congress and its role in India's struggle
Sem-III	(1857 to 1947 A.D.)	for independence.
Sem III	(1057 to 1547 11.5.)	Analyze various trends of resistance that emerged in India leading up to the year 1919, and explore the different
		forms of protests, uprisings, and movements that played a crucial role in shaping India's freedom struggle.
		Gain insights into the transformative political landscape of colonial India, and explain the ideology behind
		Satyagraha movements and understand how non-violent resistance became a powerful tool for achieving
		independence.
		Delve into the intricacies of the Government of India Act of 1935, the Cripps Mission, and the Cabinet Mission
		Plan, and analyze the proposed constitutional reforms and the response of various political actors, including
		Subhash Chandra Bose and the Indian National Army.
		Investigate the divisive nature of communal politics during the struggle for independence and the eventual
		passing of the Indian Independence Act of 1947, which led to the partition of India, and gain a deeper
		understanding of the complexities of this historical event and its long-term consequences.
		Demonstrate economic organization of colonial India, the peasant movements, working class movements, and
		the status of women during the independence movement, and gain a comprehensive knowledge of the various
_		social reform movements that played a crucial role in shaping India's modern history.
	Paper-II	Understand the Sources of Maratha History and the Background of Maratha Power's Rise, including the
	<b>History of Marathas</b>	Foundation of the Maratha State under Shivaji.
		Acquire vast knowledge about Shivaji's relations with the Adilshahi Dynasty, Mughals, and Foreign powers, as

(1600 to 1707 A.D.)	well as the significance of his Coronation.
	Achieve knowledge about the internal difficulties and problems faced during Sambhaji's reign, as well as his
	relations with the Portuguese and Mughals. Also, understand the context of the Maratha war of Independence
	Gain awareness of the Maratha Administration, including the Military Organisation, Judicial System, Agraria
	and Revenue Administration, and learn about the Development of Industry during the Maratha period.
	Learn about the Religious Policies of Shivaji and Sambhaji, and explore the Social and Economic Institution
	that existed during their rule. Additionally, understand the developments in Education, Literature, Art, and
	Architecture of the time.
	Gain a comprehensive understanding of the key events, political dynamics, and socio-economic aspects of th
	Maratha history, which played a significant role in shaping the region's trajectory during that period.
Paper-III	Gain a comprehensive understanding of various approaches and sources used in the study of women's history
Women in Indian History	Explore the religious status of women and their significant contributions to philosophy and religion.
•	Examine the roles and customary status of women within family structures and society.
	Understand the educational and legal rights of women throughout the Ancient, Medieval, and Colonial perio
	including hereditary rights.
	Acquire knowledge about women's involvement in politics, household work, agriculture, industry, and vario
	formal and informal professions.
	Learn about women's participation in reform movements and their involvement in women's organizations
	during the Colonial period.
Paper-IV	Understand the geographical and political landscape of Maharashtra during the 19th and 20th centuries,
<b>History of Social Movement</b>	including its historical context and significant events.
in Maharashtra	Analyze the Sanyukta Maharashtra Movement, its origins, key players, and the impact it had on the formation
(1948 to 1980 A.D.)	of the state of Maharashtra.
	Examine the social and religious conditions prevailing in Maharashtra during the specified historical period,
	considering the dynamics of various communities and their interactions.
	Explore the background and nature of social movements in India, with a focus on methods of reforms, the
	Satyashodhak Samaj, and the social work of the Indian National Congress
	Investigate the Dalit Movement in Maharashtra, including its pre-Dr. Babasaheb Ambedkar phase, the work
	the Depressed Classes Mission, and the emergence of Dr. Babasaheb Ambedkar in the movement.
	Gain knowledge of social reforms in post-independence India, particularly those related to the welfare of trib

		communities and Other Backward Classes (O.B.C). They will also explore constitutional provisions aimed at
		safeguarding social rights
MA	Paper-I,	Understand the historical process of integrating princely states into India after independence, and gain
Part-II,	Post Independent of India	knowledge about the making of the Indian Constitution, its significance, and the principles it enshrines.
Sem-IV	(1947 to 2000 A.D.)	Comprehend the reasons behind the reorganization of states in India and its impact on the country's administrative structure, and familiar with the key features and characteristics of the Indian Constitution.
		Acquire knowledge about the inception of planned economy in India and its objectives, and understand the historical evolution of agricultural and industrial policies and their influence on the country's economic development.
		Gain insight into the historical context of education and social welfare policies in India, and understand the significance and impact of the Hindu Code Bill and the development of science and space research in India.
		Understand the historical trajectory of India's foreign policy, including its policy of non-alignment and the role played by Jawaharlal Nehru in the Third World movement, and explain India's relations with major countries like the USSR, China, USA, and Pakistan.
		Comprehend the foreign policy approach of Indira Gandhi's government, gain knowledge about the historical events surrounding the establishment of an independent Bangladesh and the emergence of national political parties, and understand the era of liberalization, privatization, and globalization in India and its impact on the economy and society.
	Paper - II History of Marathas (1707 to 1818 A.D.)	Acquire knowledge about the literary sources used to study Maratha history and will be able to describe the Civil War and the accession of Shahu as Chhatrapati, and understand the significance of Balaji Vishwanath's acquisition of Sanadas.
	(1707 to 1010 11.25)	Explain the expansion of Maratha power in North India and the dynamics of their relations with the Mughals and foreign powers during the reigns of Peshwa Bajirao I and Balaji Bajirao.
		Understand the reign of Peshwa Madhavrao I and the restoration of Maratha power in North India, and gain insight into the challenges of accession of Narayanrao and the internal feuds during that period.
		Acquire knowledge about the nature of the Maratha Confederacy and the social and economic conditions prevailing during that time, and learn about the advancements in education, literature, art, and architecture.
		Understand the administrative system implemented under the Peshwas' rule, and gather knowledge about the military organization and the judicial system prevalent during that period.
		Understand various aspects of Maratha history, its significant events, key rulers, and the broader impact of the

	Maratha Confederacy on India's historical landscape.
Paper - III	Understand the Customary Status of Women in Post-Independence and Tribal Societies in family and society.
<b>Indian Women Since</b>	Gain knowledge of Women Organizations and their role in Women's Political Participation at various levels of
Independence	governance - Panchayats, Municipal Councils, State Legislatures, and Parliament.
•	Acquaint with the Feminist Movement and comprehend Women's Representation and Participation in Financia
	activities, including Trade, Business, Banking, and Professions.
	Develop awareness of Women's Representation and Participation in Social and Cultural activities.
	Analyze Women's Pursuit of Political Power and its significance in shaping societal dynamics.
	Explore Women's Participation in Sports, Science, and Technology to understand their roles and contributions
	these fields.
Paper - IV	Identify and differentiate between prominent historical figures in the context of Indian history, such as Mahade
<b>Social Reformers of</b>	Govind Ranade, Gopal Ganesh Agarkar, Bal Gangadhar Tilak, Gopal Krishna Gokhale, and Dhondo Keshav
Maharashtra	Karve.
(1848 to 1980 A.D.)	Explore the lives and contributions of social reformers and activists like Pandita Ramabai, Ramabai Ranade,
(2010 00 27 00 1202 0)	Mahatma Phule, Savitribai Phule, Rajarshi Shahu Maharaj, and Vitthal Ramji Shinde.
	Understand the ideas and impact of notable figures in Indian history, such as Dr. Babasaheb Ambedkar,
	Prabodhankar K. C. Thakare, Kisan Fagoji Bansod, Ganesh Akaji Gawai, and Shivram Janba Kamble.
	Analyze the role and significance of V. D. Sawarkar, Vinoba Bhave, Karmavir Bhaurao Patil, and Dadasaheb
	Gaikwad in shaping India's political and social landscape.
	Learn the lives and teachings of revered personalities like Sant Gadge Maharaj, Rashtrasant Tukdoji Maharaj
	Dr. Bhausaheb Panjabrao Deshmukh, and Pandharinath Patil, and their impact on society.
	Investigate the contributions of these individuals within the broader historical, social, and cultural context of
	India, fostering a deeper understanding of the country's history and heritage.

## **Subject- Philosophy**

Class	Course	Outcome (Students will be able to)
B.A.	Moral Philosophy	Demonstrate a comprehensive understanding of the various branches of moral philosophy, including normative
		ethics, metaethics, and applied ethics, and analyze ethical dilemmas and moral theories effectively.

Part-I,		Compare the fundamental differences between ethical inquiry and scientific investigation, gaining insight into
Sem-I		the nature of ethics as a normative and value-based discipline.
		Acquire knowledge about psychological factors influencing human conduct, such as wants, appetites, desires,
		wishes, motives, and intentions, and assess how these factors shape moral decision-making.
		Gain insight into different philosophical approaches to pleasure, happiness, and the good life, fostering a deeper
		appreciation for diverse perspectives through studying Greek hedonism and its specific schools, Cyrenaicism
		and Epicureanism.
		Understand the philosophical concepts of goodwill and categorical imperatives, particularly as presented by
		influential moral philosophers like Immanuel Kant, and evaluate the moral worth of actions and principles.
		Explore the notion of duty for its intrinsic value, separate from personal interests or external consequences, and
		develop an appreciation for moral obligations and ethical principles that are valued for their inherent
		significance.
B.A.	Indian and Western Ethics	Understand the concept of Purushartha, including dharma, artha, kama, and moksha, and comprehend Gadge
Part-I,		Baba's concept of humanism, gaining insights into his philosophical ideas.
Sem-II		Acquire knowledge about the ethical principles mentioned in Hindu scriptures like the Geeta, focusing on Varna
		and ashram, and explore ethical concepts in Vedic literature, such as Ruta and Runa.
		Understand Buddhist ethics, including ashtang Marg (Eightfold Path) and the concept of Nirvana, and delve
		into Jaina ethics, focusing on the principles of mahavrat and triratna.
		Learn the various types of hedonism, including charvaka, psychological, and egoistic hedonism, and examine
		the paradoxes associated with hedonistic philosophies.
		Explore the objects of moral judgment, enabling them to critically analyze ethical situations, and acquire
		knowledge about different theories of punishment and their justifications.
		Combine the diverse ethical philosophies discussed throughout the course, and develop a comprehensive
		understanding of various philosophical perspectives on ethics and morality.
B.A.	History of Ancient Greek	Demonstrate a comprehensive understanding of the major philosophers and schools of thought during the
Part-II,	Philosophy	Ancient Greek philosophy cosmological and systematic periods.
Sem-III		Analyze and compare the beliefs and theories of monist philosophers such as Thales, Anaximander,
		Anaximenes, and Xenophanes.
		Analyze and compare the beliefs and theories of philosophers from the Elaitic school, including Parmenides,
		Zeno, and Heraclitus.

	I	Analyze and commons the heliefs and theories of plymplict philosophers such as Emmedeales. Anayaganes
		Analyze and compare the beliefs and theories of pluralist philosophers such as Empedocles, Anaxagoras,
		Pythagoras, Lucipas, and Democritus.
		Evaluate critically, the philosophies and ideas of Sophist philosopher Protagoras, with a focus on his concept of
		"man is the measure of all things."
		Integrate the knowledge gained from studying these various philosophical traditions to form a comprehensive
		understanding of the development of ancient Greek philosophy and its impact on later philosophical thought.
B.A.	<b>History of Modern Western</b>	Understand and explain René Descartes' method of doubt, and assess and apply various approaches in
Part-II,	Philosophy	philosophical inquiry.
Sem-IV		Analyze and discuss René Descartes' arguments concerning the existence of God, and understand the
		complexities and implications of theological discourse.
		Evaluate Benedict Spinoza's concept of substance, enabling them to assess and interpret foundational
		metaphysical ideas in philosophy.
		Compare and contrast John Locke's concept of matter with George Berkeley's refutation, develop skills to
		examine opposing viewpoints and discerning the strengths and weaknesses of different philosophical
		standpoints.
		Examine David Hume's theory of causation and its implications for skepticism, and analyze philosophical
		theories of causality.
		Enhance their capacity for analytical thinking, and construct well-reasoned arguments and engage in thoughtful
		philosophical discussions through various philosophical studies.
B.A.	History Indian Philosophy	Comprehend the foundational sources of knowledge theories in Indian philosophy.
Part-III		Explore the theories of relativity as expounded by prominent Indian philosophers like Charvaka, Jain,
		Vaisheshika, Samkhya, and Advaita Vedanta.
		Gain knowledge and proficiency in logic and inferences, enabling them to analyze and draw rational
		conclusions.
		Understand the concepts of truth, A-priori, A-posteriori, analytic, and synthetic, as well as delve into the study
		of Epistemology.
		Understand fundamental metaphysical concepts, including substance, causality, space and time, universal
		materialism, and idealism.
		Develop a comprehensive understanding of the interconnectedness of Epistemology and Metaphysics and their
		roles in philosophical inquiry.
		Totas in philosophical inquity.

Class	Course	Outcome (Students will be able to)
CIGS	Course	Demonstrate proficiency in playing and practicing raag based Alankar, showing improvement in their sur
B.A.		(pitch) skills.
Part-I,	Indian Vocal Music	Identify and recognize different ragas (melodies) and talas (rhythmic patterns) in the songs they listen to,
Sem-I		showcasing their enhanced musical perception.
		Acquire knowledge about the notable Music Veterans and their contributions to Indian Music, gaining a deeper
		understanding of the historical and cultural significance of the subject.
		Demonstrate their understanding and application of musical charts and patterns through assigned tasks,
		showcasing their ability to analyze and interpret musical data.
		Develop basic skills in playing Harmonium and Tanpura, enabling them to accompany themselves or others
		while singing or performing music.
B.A.	Indian Vocal Music	Demonstrate proficiency in Indian vocal music by performing raag-based Alankar with accurate intonation and
Part-I,		sur (pitch).
Sem-II		Apply foundational knowledge and skills in music theory and basic music history to analyze and understand
		various elements of Indian music.
		Acquire and exhibit basic skills in playing the Harmonium and Tanpura, essential instruments used in Indian
		vocal music accompaniment.
		Demonstrate a comprehensive understanding of prominent Music Veterans and their contributions to Indian
		Music, both in terms of historical context and musical innovations.
		Recognize different ragas (melodic scales) and talas (rhythmic patterns) in the songs they listen to, enhancing
		their musical perception and appreciation.
B.A.	Indian Vocal Music	Demonstrate proficiency in sur by revising and practicing raag based Alankar in almost daily practical sessions.
Part-II,		Develop the ability to recognize different ragas and talas in the songs they listen to during practical sessions.
Sem-III		Acquire knowledge about different musical forms, such as Hindustani and Karnataki Swarlipi and Taallipi.
		Gain an understanding of the contributions of various musicians and different types of musical instruments
		through theoretical sessions.

		Benefit from completing assignments that involve the use of musical charts and patterns.
B.A.	Indian Vocal Music	Understand the historical and cultural context of different types of music in India.
Part-II,		Analyze and critically evaluate different musical compositions and performances.
Sem-IV		Develop skills in improvisation and creativity in music.
		Learn about different instruments used in Indian music and their role in creating different sounds and textures.
		Compose their own music and perform it in front of an audience.
B.A.	<b>Indian Vocal Music</b>	Demonstrate proficiency in sur by revising and practicing raag based Alankar in almost daily practical sessions
Part-III		Learn and practice about different prevalent ragas.
		Develop ability to recognize ragas and talas in the songs they listen to.
		Develop in-depth knowledge and performance skill.
		Become Music Educator if they peruse B.Ed after Graduation in Music.

#### AMOLAKCHAND MAHAVIDYALAYA, YAVATMAL-445001

### COURSE OUTCOME (CO) [Subjects covered under Faculty of Commerce and Management]

Subject- Marathi		
Class	Course	Outcome (Students will be able to)
<b>B.Com</b>	वैचारिक	म्हाइंभट यांच्या साहित्याचा अभ्यास करून प्राचीन काळातील मराठी भाषेची ओळख होईल.
Part-I,		मराठी भाषेत म्हाइंभट यांचे योगदान लक्षात येईल.
Sem-I		भाषा व संस्कृती आणिसाहित्य व संस्कृती यांचा अनुबंध समजून घेता येतो.
		नवनिर्मितीक्षमता व अभिव्यक्तिक्षमता विकसित होते.
	ललित	ललित साहित्याची ओळख होते.
		आज्ञापात्रातून- छत्रपती शिवाजी महाराजांच्या विचाराची ओळख होईल.
		त्यांनी पर्यावरनाविषयीचीघेतलेली दखल आजच्या काळात लक्षात येईल.
		गद्य हा प्राचीन काळातील महत्वाचा लेखनप्रकर आहे.
	कविता	कविताया साहित्य प्रकारची ओळख विद्यार्थ्याला होईल.
		संत ज्ञानेश्वर यांच्या या कवितेतून मानवी जीवनाची उंची लक्षात येईल.
		संत ज्ञानेश्वर यांच्या लेखनाची ओळख विद्यार्थ्याला होईल.
		साहित्यप्रकाराचा अभ्यास लक्षात घेताना नव कवितेचाप्रवाह लक्षात येतो.
	उपयोजित मराठी	पत्रव्यवहार लेखनकौशल्य विकसित होते.
		पत्रव्यवहार क्षेत्रात नोकरीच्या संधी शोधता येतात.
		लेखनकौशल्य विकसित होऊन अर्ज लेखनकौशल्य निर्माण होते.
		सारांशलेखनाचे तंत्र अवगत होते.
B.Com	वैचारिक	राजश्री शाहू महाराज यांचे धर्मनिरपेक्षता विषयक विचार विद्यार्थ्यांना नैतिक बळ देईल
Part-I,		महात्मा गांधी यांचा आधुनिक दृष्टीकोनविद्यार्थ्यांच्या लक्षात येईल.

Sem-II		राजश्री शाहू महाराज यांच्या चौकस बुद्धीची जाणीव होईल.
		वैचारिक दृष्टीकोन निर्माण होतो.
	ललित	केशव मेश्राम यांच्या साहित्याची माहिती विद्यार्थ्याला होईल.
		ललित लेखनातून पुढे आलेले जीवनदर्शन मानवतेची शिकवण देईल.
		स्वातंत्र्योत्तर काळातील ललित लेखनाचे योगदान विद्यार्थ्याला लक्षात येईल.
		मराठी साहित्यात अर्वाचीन मराठी गद्याची भूमिका महत्वाची आहे
	कविता	बहिणाबाई चौधरीयांच्या कवितेतून कवितेची रुपरेषा लक्षात येते. त्यांच्या लेखनाची ओळख होते.
		वामनदादा कर्डक यांच्या कवितेतून मानवी जीवनातील उत्कटता लक्षात येते.
		संत नामदेव यांच्या कवितेतून मध्ययुगीन समाजाचे चित्र लक्ष्यात येते.
	उपयोजित मराठी	लेखनकौशल्य निर्माण होऊन रोजगाराच्या संधी निर्माण होते.
		निविदासूचनाचे तंत्र अवगत होते.
		भाषेवर प्रभुत्व निर्मान करता येते.
		पत्रव्यवहार क्षेत्रात नोकरीच्या संधी शोधता येतात
B.Com	वैचारिक	रा.ग.जाधव यांच्या साहित्याचा परिचय होतो.
Part-II,		या अंधारातून वाट सापडत नाही या लेखातून वैचारिक स्पष्टता निर्माण होते.
Sem-III		डॉ.वि.भि.कोलते या लेखकाच्या वैचारिक लेखनाचा स्थूल परिचय होतो.
		राष्ट्रसंत तुकडोजी महाराज यांच्या विचारातील प्रबोधन लक्षात येते.
	ललित	ललित साहित्याची ओळख होते.
		स्टीव्ह जॉब यांच्या ललित लेखनाचा घाट लक्षात येतो.
		विठ्ठल वाघ यांच्या लेखातून गाडगे बाबा यांचा विचाराचे आकलन होते.
		पारख या नरेंद्र इंगळे यांच्या लेखातून त्यांच्या लेखनाची शैली लक्षात येते.
	कविता	कविताया साहित्य प्रकारची ओळख विद्यार्थ्याला होईल .
		मधुकर केचे यांच्या कवितेचा अभ्यास होतो.
		ना.धो.महानोर यांच्या कावितून त्यांचा निसर्गाचा दृष्टीकोन लक्षात येतो.

		शशिकांत हिंगोणेकर या नवोदित कवीच्या कवितेचा परीचा होतो.
	उपयोजित मराठी	पत्रव्यवहार लेखनकौशल्य विकसित होते.
	5 1411411 17(15)	पत्रव्यवहार क्षेत्रात नोकरीच्या संधी शोधता येतात.
		लेखनकौशल्य विकसित होऊन अर्ज लेखनकौशल्य निर्माण होते.
		सारांशलेखनाचे तंत्र अवगत होते.
B.Com	 वैचारिक	महात्मा गांधी यांच्या सत्याचे प्रयोग या पुस्तकातील आधुनिक विचार  विद्यार्थ्यांच्यालक्षात येईल.
Part-II,	प पारिपर	गंगाधर पानतावणे यांच्या वैचारिक लेखनाची ओळख होईल.
Sem-IV		वैचारिक दृष्टीकोन निर्माण होतो.
		लीळाचरित्रतून चक्रधर स्वामी यांच्या विवेकी विचार लक्षात येईल.
	ललित	बाबा पाटील यांच्या ललित लेखनातील जीवनाविषयक भूमिका समजून येईल.
	· · · · · · · · · · · · · · · · · · ·	स्वातंत्र्योत्तर काळातील ललित लेखनाचे योगदान विद्यार्थ्याला लक्षात येईल.
		मराठी साहित्यात अर्वाचीन मराठी गद्याची भूमिका महत्वाची आहे
	कविता	नारायण सुर्वे यांच्या माझे विद्यापीठ या संग्रहातील एक आम्ही असे निघालो या कवितेतून गंभीर जीवनदर्शन
	171 - 1311	विद्यार्थ्यांना लक्षात येईल.
		सुरेश भट यांच्या कवितेची ओळख होईल.
		आधुनिक कविताप्रवाहाची ओळख होईल.
	उपयोजित मराठी	जाहिरात लेखनाचे कौशल्य निर्माण होईल.
		निविदासूचनाचे तंत्र अवगत होते.
		भाषेवर प्रभुत्व निर्मान करता येते.
		पत्रव्यवहार क्षेत्रात नोकरीच्या संधी शोधता येतात.
	वैचारिक	आजच्या काळात बाबासाहेबाचे पाणीप्रश्नाचे विचार किती महत्वाचे आहे याची जाणीव होईल.
		लक्ष्मणराव किर्लोस्कर यांच्या जीवनाची ओळख विद्यार्थ्यांना होऊन त्यांच्या आर्थिक विचाराची गरज लक्षात येईल.
		वैचारिक दृष्टीकोन निर्माण होतो.
	ललित	स्वातंत्र्योत्तर काळातील बाबाराव मुसळे यांच्या आधार या ललित लेखनातून माणसाच्या जीवनातील गुंतागुंत लक्षात
		येईल.
		आधार या ललित लेखातील जीवनदर्शन जीवनातील तानेबाने अधोरेखीत करून तात्विक बाजूने जगण्याची दिशा देईल

		लित साहित्याची ओळख होते.
B.Com	कविता	साहेबराव पाटील ह्या कवितेतून ग्रामीण भागातील जीवनदर्शन अधोरेखित होते.
Part-III		अविष्कार आणि देवभाताची थोंब या दोन्ही कवितेतून मानवी मनाचा अविष्कार दर्शित होतो.
		कविताया साहित्य प्रकारची ओळख विद्यार्थ्याला होईल .
	उपयोजित मराठी	लेखनकौशल्य विकसित होऊन अर्ज लेखनकौशल्य निर्माण होते.
		निविदासूचनाचे तंत्र अवगत होते.
		लेखनकौशल्य विकसित होऊन अर्ज लेखनकौशल्य निर्माण होते.

### **Subject- English**

Class	Course	Outcome (Students will be able to)
B.Com	Compulsory English	Communicate skilfully in Business correspondence
Part-I,		Acquainted with the work culture in corporate world
Sem-I		Motivated as life of great personalities and become successful
		Learn and gain fluency in the English language and conversation.
		Become efficient in reading and writing skills.
B.Com	Compulsory English	Honed the drafting skills through grammar and writing skills.
Part-I,		Become proficient in the language and thus eventually inculcate professional skills.
Sem-II		Course sheds some light on National Stock Exchange (NSE), Share Market and Systematic
		Investment Plan (SIP)
		Have some idea about the volatile nature of market and Corporate world
		Broaden the vision about Trade and Commerce
B.Com	Compulsory English	Understand and interpret any text they are reading from different perspectives.
Part-II,		Develop interest in listening to and watching good quality audio and visual media will be
Sem-III		aroused.
		Acquire proficiency in the skills of listening, speaking, reading and writing that will help them
		meet the challenges of the world.
		Develop good oral and written skills of communication in the English language.
		Develop Skills such as Skimming and Scanning, Language Structure, Note Making and

		Summary Writing.
		Develop among students Guessing Meanings of Words and Drawing Inferences
B.Com	<b>Compulsory English</b>	Establish among students Critical, Creative and Positive Thinking
Part-II,		Helps in building Commercial Relationship Skills and Problem Solving Skills.
Sem-IV		Communicate skilfully in Business correspondence.
		Students will be able to acquaint with the work culture in corporate world.
		Provides insights on how to learn and gain fluency in the English language and conversation.
		Become efficient in reading and writing skills.
B.Com	<b>Compulsory English</b>	Comprehend grammatical skills with the study of Articles, Parts of Speech and Word Formation
Part-III		Develops Communication and Writing Skills with the study of letter Writing, Report Writing and
		Resume.
		Honed the drafting skills through grammar and writing skills.
		Become proficient in the language and to eventually inculcate professional skills
		Develop perception to bring brevity in expression.

# **Subject- Hindi**

Class	Course	Outcome (Students will be able to)
B.Com	GUNJAN	Understand prose content, and poetry, and effectively grasp the ideas and concepts presented in the
Part-I,		material.
Sem-I		Apply the four essential language skills of Hindi in their daily lives, and communicate fluently and
		confidently.
		Develop advanced communication skills in Hindi, and express their thoughts and ideas proficiently.
		Gain an appreciation for Hindi poetry by studying the works of prominent poets such as Mahadevi Varma,
		Nirala, Kabir, Surdas, and Mirabai.
		Understand and use vyavharik bhasha (colloquial language) and Vyakaran (grammar) effectively,
		enabling them to engage in formal and informal communication.
		Develop their writing abilities in Hindi, including sawadlekhan (composition), letter writing, and
		manakwartani (standard dictation).

B.Com	GUNJAN	Understand and interpret prose content and poetry in Hindi.
Part-I,		Apply all four language skills (listening, speaking, reading, and writing) in composing their poetry and
Sem-II		prose.
		Capable of expressing themselves clearly and confidently in Hindi, exhibiting improved competence and
		clarity in their speech and writing.
		Collaborate effectively with their peers, and engage in linguistic communication in Hindi.
		Express their ideas, thoughts, and concepts in Hindi, and enhance their language usage and proficiency.
		Acquaint with Devnagari Script and Technical terminology, and comprehend and use formal and
		administrative language in Hindi.
B.Com	Gyanyada	Use Hindi as both an official and second language.
Part-II,		Understand and analyze the stories of "Bade Bhai Sahab," "Sahab Kab Aaenge Maa," and "Silia,"
Sem-III		developing an appreciation for Hindi literature.
		Comprehend and interpret Hindi poems and Dohas, gaining insight into the poetic elements and themes.
		Master the art of composing Hindi essays (nibandh), and enhance their writing abilities to express ideas
		effectively.
		Demonstrate proficiency in writing both vyavaharik (formal) and vyavsayik (business) letters.
		Acquire knowledge about concepts of Hindi grammar, including lokoktiya (proverbs) and muhavre
		(idiomatic expressions), and enrich language usage and expression.
B.Com	Gyanyada	Develop a human approach towards language learning while cultivating critical thinking skills in Hindi.
Part-II,		Master the elements of creative writing and apply them effectively in Hindi language expression.
Sem-IV		Gain a deep understanding of the story "Abhi Abhi To Aaya Vasant" and its themes of growth and
		promotion.
		Recognize the significance of learning Hindi alongside other languages.
		Explore and appreciate Hindi poems, kavya, and doshas, and foster a deeper connection with Hindi
		literature.
		Acquire proficiency in kana parivartan (transformation of words) and prashasnik shabdawali
		(administrative vocabulary) as well as letter writing and enhance communication skills.
B.Com	HINDI GADHYA	Understand the basic concepts and origins of Hindi as a language.
Part-III		Analyse the evolution of Hindi from the past to the present, and foster a deeper connection with society
		through literary works.

		Acquire proficiency in Hindi as an official and second language, and make themselves employable in countries where Hindi holds significance.  Practice translation between Hindi, English, and other languages, and enable themselves as a potential translator candidate in central government offices.  Develop a strong command of the language, and enhance their ability to express themselves effectively.  Comprehend and analyze various forms of Hindi literature, including stories, poems, essays, and letters, as well as important works like "Ashok ke Phool," "Ghisa," and "Khokababu," and appreciate the significance of "sansmaran" (memoirs).
Class	Course	Outcome (Students will be able to)
B.Com Part-I,	Advanced Accountancy	Understand basic accounting principles and concepts relevant to businesses, and define accountancy and demonstrate proficiency in handling various accounting transactions.
Sem-I		Learn to maintain different types of Subsidiary Books, including Purchase Book, Purchase Return Book, Sales Book, Sales Return Book, and Cash Book, and develop the skills necessary to accurately record transactions in these books.
		Prepare final accounts for individuals, including the Trading Account, Profit and Loss Account, and Balance Sheet, and understand the process of summarizing financial information and presenting it in a structured format.
		Apply different methods of depreciation, such as the Straight-line Method and Reducing Balance Method, to account for the decrease in asset value over time, and record and calculate depreciation accurately.
		Identify and rectify accounting errors that may occur during the recording of transactions, and develop problem-solving skills to ensure the accuracy of financial records.
		Differentiate between the Bank Pass Book and Cash Book, and learn to prepare a Bank Reconciliation Statement, which ensures consistency between the bank statement and cash book records, contributing to effective cash management.
	Principles of Business	Understand the meaning, scope, evolution, and impact of commerce and industries, and gain insights into
	Organization	the emergence of multinational corporations (MNCs) in India and the significance of Indian businesses in

	and pop stores, and acquire knowledge about the concepts of online trading, marketing, and cashless
	transactions in the realm of commerce.
	Explore merger and acquisition strategies, franchising, dealership, and business outlets, and gain
	knowledge about the importance of copyrights in the world of trade and commerce.
	Identify opportunities and generate innovative business ideas, and explore the role of creativity in
	business innovation and understand the process of developing a business plan and making informed
	decisions.
	Examine the significance of transport, insurance policies, and communication development in commerce,
	and explore other essential services related to import and export trade projects.
	Develop the ability to conduct trade projects effectively and present their findings in a clear and coherent
	manner, and gain confidence in discussing various commerce-related topics in a structured manner.
Principles of Economics	Demonstrate the application of knowledge and skills in Economics for employability in various areas.
	Apply microeconomic concepts to analyze real-life situations effectively.
	Analyze and compare Traditional and Modern Definitions of economics.
	Apply both Micro & Macro economic concepts to real-world scenarios.
	Conduct supply and demand analysis to assess the impact of economic events on markets.
	Apply principles of Cost & Revenue to make informed business decisions.
Computer Fundamentals &	Explain the historical development and evolution of computers, along with their various applications in
Operating System - I	the field of commerce.
	Identify and describe the key components of a computer system, such as the central processing unit
	(CPU), motherboard, storage devices, and peripheral devices.
	Differentiate between various types of computer memory, and understand the significance of each
	memory type in data storage and retrieval.
	Identity and explain various input devices, and understand the role of these devices in facilitating data
	input and output for business applications.
	Develop the necessary skills to create and format professional text documents, and apply different
	formatting styles, set margins, align text, insert headers and footers, and paginate documents
	appropriately.
	Apply their knowledge of computers and related software in real-world commerce scenarios, and
	understand to leverage technology to enhance efficiency, accuracy, and productivity in business

		operations.
B.Com Part-I,	Financial Accounting	Prepare final accounts for non-trading institutions, ensuring accuracy and compliance with relevant accounting principles.
Sem-II		Demonstrate their ability to prepare comprehensive final accounts for Co-operative societies, taking into account their unique organizational structures and financial transactions.
		Acquire the necessary skills to prepare final accounts for Agriculture business farms, considering the specific financial aspects and challenges associated with this type of business.
		Record and analyze hire purchase transactions, and competently prepare hire purchase accounts, ensuring a thorough understanding of this financing method.
		Gain an in-depth understanding of various provisions of the Insolvency Act, and navigate insolvency processes effectively.
		Demonstrate proficiency in preparing statement of affairs and insolvency accounts, demonstrating their ability to handle financial situations related to insolvency cases.
	Principles of Business	Understand the fundamentals of management, including its concepts, meanings, definitions, and significance in various organization contexts, and analyze and compare different management schools of thought, such as the contributions of Henry Fayol and Elton Mayo.
		Comprehend the concept, meaning, and importance of planning in commerce and gain insights into the nature of planning, its objectives, and the role of forecasting in the planning process.
		Explore the concept of organization, its nature, meaning, and significance in commerce and understand the principles of organization, staff organization, and departmentalization within an organizational structure.
		Acquaint with the concept of directing, its meaning, definition, and importance in commerce, and analyze the nature of direction and its advantages and disadvantages.
		Understand the concept of motivation and its significance in influencing organizational behavior, and learn principles of coordination.
		Learn about the concept, meaning, and definition of controlling in commerce, understand the importance of controlling, its advantages, and disadvantages, and explore different techniques and tools used in the controlling process.
	Computer Fundamentals &	Demonstrate a basic understanding of computer fundamentals and mobile operating systems, and identify and describe various versions of the Windows operating system.

	Operating System-II	Learn to create and delete files using File Explorer in a Windows environment, and
		organize and manage files effectively on a computer.
		Comprehend the concept of modern communication methods and network topologies, and explain the
		different types of network topologies and their functionalities.
		Create an email account and compose email messages, utilize Microsoft templates to create tables and
		customize them according to user needs, and identify the steps involved in the mail merge process and
		perform a mail merge activity.
		Develop skills in using Microsoft PowerPoint programs effectively, insert various graphical objects, such
		as images and charts, into presentation slides, and enhance presentations by adding transitions,
		animations, sounds, and timing effects to slides.
		Deliver a PowerPoint presentation on a computer screen confidently
	<b>Business Economics</b>	Examine and articulate the distinctions between Business Economics and Managerial Economics,
		understand their roles, concepts, and applications in business decision-making processes.
		Analyze and apply the concept of a monopolist's discriminative pricing strategy in various market
		scenarios, and understand how a monopolist charges different prices to different groups of consumers.
		Evaluate and apply the characteristics and implications of monopolistic competition, oligopoly, and
		perfect competition in different market structures, and gain insights into pricing, output decisions, and
		market behavior under each type of competition.
		Analyze and apply demand and supply dynamics specifically related to the determination of rent and
		wage, and understand how economic factors are influenced by market forces and how they impact
		resource allocation.
		Apply economic theories of interest and profit to real-world scenarios, and comprehend the factors
		affecting interest rates, the relationship between risk and return, and the determination of profit in various
		business environments.
		Analyze economic problems, evaluate alternatives, and recommend appropriate strategies for businesses
		to thrive in competitive markets.
B.Com	<b>Business Mathematics</b>	Understand and apply the concepts of Integers, H.C.F. and L.C.M. to solve mathematical problems related
Part-II,		to business scenarios.
Sem-III		Apply the principles of Percentage, Discount, Commission, and Brokerage in real-world business
		situations, and effectively calculate the relevant values.

	Utilize the knowledge of Average and Profit and Loss to analyze business data, make informed decisions, and evaluate the financial performance of a business.
	Calculate Simple Interest and Compound Interest accurately, and demonstrate an understanding of their applications in financial transactions and investments.
	Solve problems involving Simple and Compound Proportions, and relate these concepts to practical situations encountered in commerce.
	Apply the acquired mathematical skills and techniques to various business scenarios, and use them to make informed decisions, manage finances, and assess business performance effectively.
Information Technology & Business Data Processing-I	Explain data processing's computing significance and concept, dentify data processing advantages in business operations, and analyze data processing applications in diverse business scenarios.
	Describe database fundamentals, objectives, and significance, evaluate database systems' need in different organizations, assess data warehousing advantages for managing large datasets, and discuss data mining concept and benefits for decision-making.
	Define Database Management System and its core functions, identify DBMS characteristics, objectives, advantages, and limitations, compare hierarchical, network, and relational DBMS models, and understand DBMS architecture: internal, conceptual, and external levels.
	Introduce spreadsheet packages and applications, demonstrate MS-Excel proficiency and components usage, manipulate data in worksheets, perform basic editing, formatting, and page setup, and save and print worksheets for documentation and analysis.
	Understand formulas and functions in data manipulation, categorize common Excel functions, Create, format, and customize charts for data representation, utilize charts to display trends, comparisons, and patterns, and save, format, and print charts for reports and presentations.
	Apply data processing to solve real-world business problems, utilize database management tools for organizing business data, employ MS-Excel functions for data analysis and calculations, and create informative charts for decision-making support.
Monetary System	Analyze data insights to aid in business decisions.  Gain knowledge about the historical aspects of money, including the Barter System, its functions, and the
wionetary System	evolution of money, and comprehend the meaning, definition, and nature of money, different types of money, and the concept of demonetization.
	Analyze the significance of money in economics, along with understanding the concepts of demand and

	supply of money, and explore the determinants that influence the value of money in an economic system.
	Understand the concepts of inflation and deflation, the effects of price fluctuations and explore measures
	to address these economic phenomena, and learn about trade cycles and their significance.
	Gain insights into the money market, and learn the impact of demonetization on the Indian money market,
	providing a broader understanding of economic policies.
	Understand the concept of the capital market, and explore the role of SEBI in regulating the capital
	market, understanding its organizational structure, functions, powers, and responsibilities.
	Acquire a comprehensive understanding of various aspects of the financial system, including money and
	capital markets, economic fluctuations, and the regulatory framework, and analyze and make informed
	decisions in the realm of commerce and finance.
Company Account	Explain the different methods of issuing shares and debentures, including understanding the provisions
	related to issuing shares at a discount, utilizing the securities premium account, and conducting rights
	issues and sweat equity shares.
	Learn to reconstruct the capital structure of a joint stock company by analyzing its financial statements,
	identifying different sources of capital, and understanding the implications of various capital components
	on the company's financial health.
	Understand the concept of profit prior to incorporation and its significance in the financial decision-
	making process of a company.
	Develop a comprehensive procedure for amalgamating companies, including studying the legal and
	financial aspects involved in merging two or more companies into one entity.
	Learn the procedure involved in the absorption of companies, including the legal and financial
	considerations when one company takes over another company and assumes its assets and liabilities.\
	Apply knowledge of amalgamation and absorption procedures to real-world business scenarios.
Auditing	Gain a comprehensive understanding of auditing principles and various types of audits, and application of
	basic auditing concepts in practical scenarios.
	Acquire the necessary skills to execute an audit program effectively, including voucher checking and
	verification of assets and liabilities, ensuring accurate and reliable financial assessments.
	Develop a thorough comprehension of the roles, responsibilities, and legal liabilities of auditors, ensuring
	ethical and professional conduct in the auditing process.
	Demonstrate the ability to prepare comprehensive and well-structured audit reports, and communicate

		audit findings and recommendations effectively.
		Acquire specialized knowledge in auditing practices specific to banks, insurance companies, and educational institutions.
		Assess financial information and make informed decisions, contributing to the enhancement of auditing practices and financial governance in various organizational contexts.
B.Com	<b>Business Statistics</b>	Demonstrate a comprehensive understanding of basic statistical concepts and their relevance to business
Part-II,		applications.
Sem-IV		Acquire the ability to calculate and interpret index numbers for various economic indicators and business performance metrics.
		Gain the skills to calculate and interpret frequency distributions to organize and analyze business data
		effectively.
		Calculate and interpret both Absolute and Relative measures of dispersion to assess the variability and
		spread of data in business contexts.
		Perform calculations and interpretations of correlation coefficients to establish relationships between
		variables in business data.
		Apply statistical analysis techniques to real-world business scenarios, making informed decisions based
		on data-driven insights.
<u> </u>	Information Technology &	Understand the concept of information, its characteristics, and differentiate between data and information,
	<b>Business Data Processing-II</b>	and gain insights into the uses of information within and outside an organization, along with an introduction to information technology, its definition, and its applications in various business fields.
		Acquire knowledge of concept of computerized accounting packages, including an in-depth
		understanding of the advantages and limitations of computer accounting compared to manual methods,
		and gain proficiency in operating Tally 9.0 or higher versions, including learning about its features,
		company information management, menu navigation, button bar, status bar, and calculator.
		Gain practical skills to work with Tally 4.2, including creating and managing company accounts with or
		without inventory, and understand ledger creation, group concepts, predefined groups, the creation of new
		groups, and types of vouchers and their configurations in Tally.
		Analyze and generate reports various reports in Tally, such as balance sheets, profit and loss accounts,
		ratio analysis, stock summaries, trial balances, day books, and account books, and gain knowledge of data
		export, import, ODBC, and connectivity options.

	Understand the basics of the Indian tax system, including TDS (Tax Deducted at Source) and TCS (Tax
	Collected at Source). Moreover, they will learn about Goods and Services Tax (GST) and its computation.
Corporate Accounting	Demonstrate a comprehensive understanding of corporate accounting procedures and their application in
	recording financial transactions for companies.
	Analyze and prepare financial statements for Banking Companies, including balance sheets, income
	statements, and cash flow statements, to assess their financial health and performance.
	Explain the accounting procedures specific to fire and accident Insurance Companies, including the
	treatment of insurance premiums, claims, and reserves.
	Describe the process of company liquidation, including the legal and accounting aspects involved in
	winding up a company's affairs and distributing its assets.
	Evaluate various methods of valuation of shares, considering factors like earnings, assets, and market
	value, to determine the true worth of a company's shares.
	Understand the different methods used for valuing Goodwill in accounting, and apply them in scenarios
	where Goodwill is present as a significant intangible asset.
Indian Financial System	Understand the financial system's fundamentals, including the flow of funds and its role in economic
	development.
	Identify various financial institutions, particularly focusing on banking, and recognize their significance
	in the overall financial system along with different sources of finance.
	Comprehend the functioning and importance of commercial banks in the financial sector, emphasizing
	their role in credit creation.
	Analyze the guidelines and credit control system of the Reserve Bank of India (RBI) and recognize its
	crucial role in shaping the Indian economy.
	Explore the history, characteristics, and functioning of stock exchanges, while also understanding the
	concepts of SENSEX and NIFTY.
	Develop a comprehensive understanding of the framework and diverse financial systems, enabling
	students to make informed decisions in the field of commerce.
Income Tax	Demonstrate an understanding of the basic concepts and different heads of Income Tax in India.
	Develop the ability to compute Income from Salary and Income from House Property by analyzing
	relevant financial information and applying the appropriate tax rules and regulations.
	Calculate Gross Total Income by accurately incorporating income from various sources and deductions

		permissible under the Income Tax Act.
		Gain knowledge of the assessment procedure in Income Tax and comprehend the powers and duties of
		income tax authorities in India.
		Acquire practical skills in filing income tax returns online, adhering to the prescribed procedures and
		ensuring compliance with the Income Tax laws.
		Analyze real-life scenarios and apply the principles of Income Tax to make informed decisions related to
		tax planning and minimizing tax liabilities for individuals and businesses.
B.Com.	<b>Essentials of E- Commerce</b>	Understand the fundamental concepts of E-commerce, including its definition, scope, and significance in
Part-III		the modern business landscape.
		Identify and analyze different Internet trading relationships, such as Business to Consumer, Business to
		Business, and Intra-organization transactions, to comprehend their distinct characteristics and
		applications.
		Explain the process of consumer search and resource discovery in the context of E-commerce, and
		understand its importance in shaping consumer behavior and decision-making.
		Evaluate the complexities and nuances of Business-to-Business relationships in E-commerce, understand
		key technologies utilized in B2B transactions, and the various E-marketplace models like Supplier
		oriented, Buyer-oriented, and Intermediary oriented marketplaces.
		Acquaint with the basics of e-Payment and e-Banking, and the use of mobile applications for e-Payment,
		and understand the concept of electronic banking.
		Explore online banking services, recognize the benefits of online banking, and gain insights into the
		future of online financial services in India.
	<b>Business Regulatory Frame</b>	Describe the key laws governing commercial contracts, analyze the elements and competency to contract,
	work and Company Law	explain the rules of consideration and objects of contracts, and support legal arguments with relevant case
		laws and illustrations.
		Differentiate between a sale and an agreement to sell, identify the conditions and warranties in a sale
		contract, and analyze the rights of an unpaid seller and remedies for breach of contract of sale.
		Acquire problem-solving skills applicable to legal contexts, formulate coherent and concise legal
		arguments, and demonstrate the ability to present legal arguments effectively.
		Identify and interpret provisions related to the Negotiable Instrument Act, 1881, explain the rules
		concerning Bills of Exchange, Promissory Note, and Cheque, and understand the legal process for
		Tourstand Zine of Zinemage, Tremesory Trees, and eneque, and anderstand the regar process for

	handling Dishonored Cheques and associated penalties.
	Gain an in-depth understanding of the legal framework of Goods and Services Tax,
	examine the implementation process of GST in India, and analyze the implications of GST on businesses
	and the economy.
	Analyze the roles and responsibilities of company directors and stakeholders.
Cost and Management	Understand the fundamental concepts and methodologies employed in Cost Accounting, and apply them
Accounting	to determine the cost of production in various scenarios.
S	Demonstrate proficiency in preparing Cost Sheets for different production processe, and analyse costs
	associated with production activities.
	Apply various labor costing methods to accurately calculate labor costs, and make informed decisions
	regarding workforce management and cost optimization.
	Gain the ability to reconcile cost accounting data with financial statements, ensuring accuracy and
	reliability in financial reporting.
	Analyze and interpret cost sheets of different production processes, identify areas of potential
	improvement and cost-saving opportunities to enhance operational efficiency.
	Demonstrate a comprehensive understanding of open-cost accounting for different stages of the
	production process, enabling businesses to monitor and manage costs effectively throughout the entire
	production lifecycle.
Internet and WWW	Demonstrate a comprehensive understanding of Networking concepts, including various types, structures,
	and models, and their application in real-world scenarios.
	Acquire a strong foundation in computer systems, gain knowledge about their components, architecture,
	and functionality, and their relevance in the context of the Internet and WWW.
	Create and manage email accounts, compose and send emails, and effectively attach files to emails while
	being aware of security measures like reading captcha for enhanced privacy.
	Gain insights into the function of websites, web browsers, and the process to conduct efficient searches
	on the internet, and enhance ability to navigate and access information effectively.
	Develop a basic understanding of HTML, and employ it to create and structure web content in the context
	of building websites.
	Demonstrate the ability to design and create basic web pages, integrate the knowledge of computer
	systems, networking, and HTML, to construct functional and user-friendly websites.

	<b>Business Environment</b>	Identify and explain the internal and external components of the business environment.
		Analyze the Indian agricultural environment, including its challenges, opportunities, and key
		stakeholders.
		Evaluate the Indian industrial environment, understanding the manufacturing and production sectors, and
		their impact on the economy.
		Examine the Indian service environment, including the growth and significance of service-based
		industries in the country.\
		Familiarize with the nuances of India's domestic and foreign trade environment, including trade policies,
		regulations, and global trade relations.
		Develop critical thinking and decision-making skills by understanding the interplay of various
		environmental factors on business operations and strategy.
M.Com.	<b>Managerial Economics</b>	Gain a comprehensive understanding of Managerial Economics, its principles, and its application in
Part-I,		various business scenarios.
SemI		Develop the ability to forecast demand by considering dynamic market conditions and apply this
		knowledge to formulate effective business plans.
		Analyze the situation of market supply and demand to identify factors influencing them and their impact
		on business operations.
		Understand the process of price determination under different market forms and apply appropriate pricing
		strategies in real-world business situations.
		Describe the concepts of inflation and deflation, and their consequences on the economy, enabling
		students to assess economic challenges and opportunities.
		Apply the principles of management economics to solve real-world business problems, make informed
		decisions, and optimize resource allocation for improved organizational performance.
	Services Marketing and	Understand the fundamentals of service marketing, including its nature, types, and the factors that
	Customer	influence the service environment.
	Relationship Managements	Comprehend the service marketing process, including market segmentation, identifying customer needs,
		and determining appropriate pricing strategies for services.
		Identify and analyze various service marketing sectors and their applications, such as financial services,
		healthcare, tourism, and education.
		Gain insights into customer relationship management, including understanding the concept, assessing

		customer needs, and exploring the scope of building strong customer relationships.
		Acquire knowledge about consumer decision-making processes and their impact on service marketing strategies.
		Develop skills to effectively apply rational exchange principles in business for maintaining positive customer relationships and enhancing service marketing efforts.
		Understand and apply various accounting standards relevant to financial and cost accounting such as
	Cost Accounting	journal entries, valuation of Goodwill, and other essential accounting practices.
		Analyze and interpret financial statements, and make informed business decisions based on the financial
		health of an organization.
		Understand financial and cost accounting principles and procedures, analyze different cost components
		within an organization and identify cost-saving opportunities.
		Learn the methods and techniques for ascertaining and classifying costs in different business scenarios
		such as calculation of Machine-Hour-Rate and knowledge of Operating costing.
		Understand the concept of cost audit in organizations and the importance of cost auditing and its role in
		ensuring cost efficiency and compliance.
		Apply knowledge of advanced financial and cost accounting in practical business situations, preparing
		them for challenges in the professional world.
	<b>Banking and Insurance</b>	Comprehend commercial banking structure, principles, and functions in India's financial system, with a
	Services	focus on key components and management.
		Describe the significance of the Reserve Bank of India, its role in regulating monetary policies,
		controlling inflation, and supervising the banking sector.
		Analyze the State Bank of India's functions, methods, and importance in the Indian banking industry.
		Understand insurance companies' formation, scope, and significance in risk management across various
		sectors like life, health, property, and casualty.
		Differentiate and identify prevalent types of insurance in India, covering life, fire, marine, crop, livestock,
		motor, personal, accident, sickness, and liability.
		Explore operations and functions of Indian insurance companies, including IRDA, IDBI, IFCI, ICICI, and
		IBRD, and their role in shaping the insurance sector.
M.Com.	Accounting for	Understand and apply basic accounting fundamentals by the Indian Companies Act 2013 to prepare
		accurate and compliant vertical financial statements.

Part-I,	<b>Managerial Decisions</b>	Develop proficiency in financial analysis techniques, prepare Fund Flow and Cash Flow Statements, as
SemII		well as estimate Working Capital and effectively manage Receivables.
		Understand management accounting techniques and their application in making financial decisions within
		a business corporation.
		Analyze and interpret financial ratios and core concepts of business finance, recognizing their
		significance in efficient business management.
		Demonstrate the ability to prepare budgets and gain essential knowledge about the budgeting process,
		facilitating better financial planning and control.
		Enhance competence in utilizing accounting and financial information for managerial decision-making
		and control, fostering effective business management skills.
	Strategic Management	Understand strategic management processes, and analyze components of effective decision-making in organizations.
		Demonstrate business environmental scanning techniques, and identify opportunities and threats affecting strategic decisions.
		Value strategy formulation and implementation, aligning strategic plans with a vision for organizational goals.
		Analyze corporate, business, and functional strategies' contributions to overall success.
		Evaluate strategy effectiveness and its impact on organizational performance, and address execution challenges.
		Enhance critical thinking, decision-making skills, and formulate strategies supporting long-term organizational success.
-	Management Concept and Organizational Behaviour	Analyze leaders' role in decision-making, assess the impact of leadership styles, and improve decision-making efficiency in organizations.
	•	Execute managerial functions effectively (planning, organizing, staffing, controlling, directing) and handle diverse responsibilities proficiently.
		Understand management principles, organizational behaviour, and continuous improvement concepts for individual and group processes.
		Manage work groups, foster cooperation, and create an effective workplace environment for self and others.
		Apply management insights practically, enhance organizational effectiveness, and efficiency, and develop

		human resources.
		Contribute to the organization's overall effectiveness, identify areas for improvement, and propose strategies to achieve organizational goals.
	Computer Applications in Business	Understand business concepts and theories, and effectively apply them to real-world scenarios in both theoretical and practical contexts.
		Apply OS and MS Office applications to prepare and manage various business documents and perform mathematical computations efficiently.
		Acquire skills to determine and implement the appropriate procedures and schedules for preparing accurate and reliable financial statements.
		Understand the fundamental concepts and functions of accounting, trade, and computer software.
		Analyze and assess the potential and scope of modern technology in business practices, and understand its impact on enhancing overall business efficiency and effectiveness.
		Develop critical thinking and problem-solving abilities to address complex business challenges, particularly in the context of computer applications and technology utilization in business environments.
M.Com. Part-II	Research Methodology	Understand the fundamental concepts and principles of research, including its purpose, objectives, and methodologies.
SemIII	п	Learn the process of data collection and develop the ability to identify and define appropriate parameters for research problems.
		Acquire skills in data analysis and interpretation. such as data classification, coding tabulation, statistical analysis, and graphical presentation.
		Apply theoretical concepts effectively in practical research scenarios.
		Acquire the ability to write well-structured and comprehensive project reports and theses, supported by sound research methodologies.
		Guide and assist others in their research endeavours, offering valuable insights and practical knowledge in the field of research methodology.
	Statistical Analysis	Understand the concept of probability, sampling, and correlation, and apply them to real-world scenarios.
		Identify the applicability of various parametric and non-parametric tests in different statistical situations.
		Utilize formulae effectively to solve statistical problems and interpret the results.
		Identity the significance of statistics formulae in solving diverse statistical problems.
		Develop the ability to make informed decisions in uncertain business situations using statistical analysis.

		Enhance logical reasoning skills to analyze and interpret complex data sets within the commerce domain.
	Corporate Tax Planning	Ability to start and operate an e-commerce website.
	and Management	Distinguish between Tax Evasion, Tax Planning, and Tax Avoidance, understanding their legal and ethical
	G	implications.
		Understand various deductions, rebates, and reliefs available under the Income Tax Act to effectively
		reduce taxable income and minimize tax liability for individuals and businesses.
		Develop the skill to make informed managerial decisions considering the implications of Income Tax
		Rules on business operations, investment choices, and financial planning.
		Acquire knowledge about the concept and implications of DTAAs to prevent double taxation of income in
		international transactions.
		Acquaint the relevant provisions and procedures to compute the total income of a company, including
		understanding tax exemptions, deductions, and tax rates.
		Initiate and manage an e-commerce website, and recognize the tax implications and compliance
		requirements associated with conducting online business operations.
	E-Commerce and Legal	Operate an e-commerce website effectively, manage product listings, and orders, and provide a seamless
	Security	shopping experience to customers.
	·	Evaluate e-commerce websites, business models, and factors contributing to online business success.
		Gain proficiency in building dynamic websites with interactive interfaces for optimal customer
		engagement.
		Acquire familiarity with online payment services, cyber transaction regulations, and secure payment
		gateways.
		Understand the impact of the cyber world on e-commerce, exploring opportunities and challenges in the
		digital landscape.
		Acquire knowledge about cyber laws, legal frameworks, data protection, and intellectual property rights
		in e-commerce operations.
M.Com.	Entrepreneurship & Skill	Understand the originating theories of entrepreneurship, and gain a solid foundation in the principles that
Part-II	Development	underpin successful entrepreneurial ventures.
SemIV		Identify and evaluate various opportunities in business, equipping them with the skills to assess potential ventures for profitability and growth.
		Apply a range of tools and techniques essential for upgrading and enhancing entrepreneurship, and

	manage and expand business endeavours.
	Acquire communication skills to communicate ideas, visions, and strategies effectively, both within their organizations and with external stakeholders.
	Enhance their networking skills significantly to foster valuable connections and relationships that can support their entrepreneurial pursuits.
	Embrace entrepreneurial opportunities and contribute to the growth of the business world.
International Financing	Understand the foreign exchange system prevalent in international trade and business, and comprehend the mechanisms and processes involved in exchanging currencies and how these impact global
	transactions.
	Analyze the role played by central banks in international financial management, and learn how central
	banks influence and regulate the financial aspects of the global economy.
	Acquire knowledge about the international monetary system, and analyze changes in the international
	monetary system that affect economies worldwide.
	Gain insight into the functioning of global financial markets, such as money exchange, determination of
	interest rates, and various financial instruments operating on a global scale.
	Explore the contributions and interventions of the IMF and World Bank in stabilizing global economies.
	Evaluate the implications of effective international financing for businesses, nations, and the global economic landscape.
Sales and Distribution	Demonstrate a comprehensive understanding of sales and distribution processes within organizations.
Management	Evaluate and apply various concepts, approaches, and practical aspects of key decision-making variables
	in sales management and distribution channel management.
	Analyze different market analysis methods and selling concepts to make informed business decisions.
	Evaluate sales performance and identify trends in sales and distribution management.
	Identity and establish the connection between distribution and other essential marketing variables.
	Develop effective strategies for optimizing sales and distribution processes to achieve organizational
	goals.
Co- Operative Management	Understand the fundamental principles and characteristics of cooperation, including its significance and
	relevance in the business world.
	Analyze and interpret the functioning of different types of cooperative societies, including their
	organizational structure, decision-making processes, and member involvement.

Evaluate the operations and functions of various cooperative financial societies and banks, and
understand their role in promoting financial inclusivity and economic development.
Examine the government policies and regulations that govern the cooperative sector and understand their
impact on the functioning and sustainability of cooperative organizations.
Explore and assess the historical development of cooperative legislation in India, trace its evolution and
understand its implications on the growth and evolution of cooperative enterprises.
Identify potential challenges and opportunities in the cooperative management domain, and apply suitable
strategies to enhance the efficiency and effectiveness of cooperative businesses.