Shri Shivaji Mahavidyalaya Barshi

Program Outcomes

Program Outcomes: Faculty- Science:

At the graduation in science faculty a student should have:

- Acquired the knowledge with facts and figures related to various subjects in pure sciences such asPhysics, Chemistry, Botany, Zoology, Mathematics, etc.
- Understood the basic concepts, fundamental principles, and the scientific theories related to variousscientific phenomena and their relevancies in the day-to-day life.
- Acquired the skills in handling scientific instruments, planning and performing in laboratory experiments.
- The students will inculcate skills of observations and drawing logical inferences from the scientific experiments.
- Analyzed the given scientific data critically and systematically and the ability to draw the objective conclusions.
- Been able to think creatively (divergently and convergent) to propose novel ideas in explaining facts and figures or providing new solution to the problems.
- Realized how developments in any science subject helps in the development of other science subjects and vice-versa and how interdisciplinary approach helps in providing better solutions and new ideas for the sustainable developments.
- Developed scientific outlook not only with respect to science subjects but also in all aspects related tolife.
- Realized that knowledge of subjects in other faculties such as humanities, performing arts, social sciences etc. can have greatly and effectively influence which inspires in evolving new scientific theories and inventions.
- Imbibed ethical, moral and social values in personal and social life leading to highly cultured and civilized personality.
- Developed various communication skills such as reading, listening, speaking, etc., which we will helpin expressing ideas and views clearly and effectively.
- Realized that pursuit of knowledge is a lifelong activity and in combination with untiring efforts and positive attitude and other necessary qualities leads towards a successful life.
- Developed flair by participating in various social and cultural activities voluntarily,

in order to spread knowledge, creating awareness about the social evils, blind faith, etc.

Programme Outcomes (Undergraduate Level)

Faculty of Arts

After completing the graduation in the faculty of Arts the students have:

- Acquired the knowledge with facts and figures concerned with the subjects such as History, Geography, Economics, Languages, etc.
- Understood the basic concepts, fundamental principles, and various theories in the above mentioned subjects.
- Realized the importance of literature in terms of aesthetic, mental, moral, intellectual development of an individual and accordingly of the society.
- Understood how issues in the social science get influenced by the literature and how the literature can provide solutions to the social issues.
- Gained the analytical ability to analyze the literature and social issues to appreciate the strengthand to suggest the improvements for better results.
- Appreciated that social issues are no longer permanent and largely depend on the political and the economic changes.
- Convinced himself/herself that the study of literature and social sciences are not only helpful to evolve better individual and better society but also helpful to make the life of an individual more happy and meaningful.
- Participated in various social and cultural activities voluntarily. Written articles, novels, stories to spread the messages of equality, nationality, social harmony and other human values.
- Emerged as a multifaceted personality who is self-dependent; earning his own bread and butterand also creating opportunities to do so.
- Realized that the pursuit of knowledge is a lifelong process and one can achieve the successonly with untiring efforts and positive attitude.
- Developed various communication skills such as reading, listing, speaking, etc., which will behelpful in expressing ideas and views clearly and effectively.

U.G. Program Outcomes

DEPARTMENT OF ENGLISH

The Outcomes of UG Course, B. A. in English At the completion of B.A. in English the students are able to:

- Use correct English in oral as well as written form.
- Inculcate the human values for one's transformation of behavior.
- Interpret the literary works by critical analysis.
- Compare literary works of the great writers and philosophers by using their logic and literarycompetency.
- Nurture themselves in soft skills and develop research aptitude.
- Find jobs for their livelihood.
- Be motivated for their further education.

DEPARTMENT OF HINDI

The Outcomes of UG Course, B. A. in Hindi At the completion of B. A. in Hindi the students are able to:

- Develop competency in Literary Forms. (Hindi Poetry & Fiction) Develop Reading, Writing & Communication Skills in Hindi.
- Get information about the history of ancient, medieval and modern Hindi Literature.
- Learn the literary works on the basis of the foundation laid by the scholars.
- Get information about the Literary Theories.
- Develop Approach of Hindi Linguistics & Grammar.
- Get the jobs for their livelihood.
- Be motivated for their further education.

DEPARTMENT OF MARATHI

The Outcomes of UG Course, B. A. in Marathi

At the completion of B. A. in Marathi the students are able to:

- Develop competency in Literary Forms. (i.e. Marathi poetry, autobiography, novel, short story,drama & performing prose)
- Develop Reading, Writing & Communication Skills in Marathi. Get Information about the history of Saint Literature.
- Get Information about Literary Theories.
- Get Information about the history of MODERN Marathi Literature. Apply the study of Marathi Linguistics & Grammar in their practical life.
- Study News Writing for Media.
- Nurture themselves in soft skills and develop research aptitude.
- Find jobs for their livelihood.
- Be motivated for their further education.

DEPARTMENT OF SANKRIT

The Outcomes of UG Course, B. A. in Sankrit

At the completion of B. A. in Sankrit the students are able to:

- Students graduating in this course can understand the linguistic features and literary aspects of sanskrit language.
- Students will understand the moral and social values in ancient sanskrit literature.
- Students can develop their interest in sanskrit and thus work to rejuvenate the language.
- They can go for Postgraduate course in Sanskrit.

DEPARTMENT OF HISTORY

The Outcomes of UG Course, B. A. in History

At the completion of B. A. in History the students are able to:

- Understand the basic themes, concepts, chronology and the Scope of Indian History.
- Be Acquaint with the range of issues related Indian History and its distinctive eras.
- Understand the history of the countries other than India with comparative approach.

- Think and argue historically and critically in writing and discussion.
- Prepare for various types of Competitive Examinations.
- Critically recognize the Social, Political, Economic and Cultural aspects of History.
- To study further in the applied field of history as archaeology.

DEPARTMENT OF ECONOMICS

The Outcomes of UG Course, B. A. in Economics

At the completion of B. A. in Economics the students are able to:

- Understand basic concepts of economics.
- Analyze economic behavior in practice.
- Understand the economic way of thinking.
- Analyze historical and current events from an economic perspective.
- Write and discuss economic issues at national levels.
- Find alternative approaches to economic problems through the exposure from the coursework inallied fields.
- Develop an ability to suggest solutions for various economic problems. Prepare for the Competitive Examinations as MPSC, UPSC.

DEPARTMENT OF GEOGRAPHY

The Outcomes of UG Course, B. A. in Geography

At the completion of B. A. in Geography the students are able to:

- Study the types of land and processes.
- Understand the structure, composition of different spheres of the earth and its Atmosphere.
- Understand importance of oceans, rivers and water and find the ways of their conservation.
- Understand the Function and types of Biogeography.
- Understand the science of Remote Sensing.
- Make use of GIS & GPS software

DEPARTMENT OF POLITICAL SCIENCE

The Outcomes of UG Course, B. A. in Political Science

At the completion of B. A. in Political Science the students are able to:

- Students will understand the need for a constitution and explain the role of constitution in a democratic society.
- For the welfare of the society students can demonstrate an understanding of the concepts & central themes of the political ideologies examined
- Students will able to explain the Governmental mechanism from Gram panchayat to Parliament and can suggest solutions over various issues in its functioning and implementation.
- Students will use various political concepts and ideology to analyze new situations.
- Students can work as political analyst, political party adviser, as a research scholar or can be a freelance political thinker and writer.
- Analyse the concepts of good governance and e-governance.

DEPARTMENT OF PSYCHOLOGY

The Outcomes of UG Course, B. A. in Psychology

At the completion of B. A. in **Psychology** the students are able to:

- To familiarize students with the basic Psychological Processes.
- To enable students to acquaint with the knowledge of terms, concepts, techniques and principles relating to the subject.
- To develop the ability to apply knowledge of contents and principles of Psychology in new and unfamiliar situations.
- To prepare students to face various challenges related to life and develop proper attitude towards them.

DEPARTMENT OF MUSIC

The Outcomes of UG Course, B. A. in Music

At the completion of B. A. in Music the students are able to:

- Students will be able to make their career as a singer or perform on his/her musical instrument.
- Students will demonstrate their knowledge of instructional methods pertaining choral, instrumental and general music education.
- Students can conduct their own concerts where they can perform individually or as a group.
- Students will be eligible for posr-graduates courses in music.

DEPARTMENT OF PHYSICAL EDUCATION

The Outcomes of UG Course, B. A. in Physical Education

At the completion of B. A. in **Physical Education** the students are able to:

- Understand & differentiate the concept of History, Principles and Philosophy of physical education
- Choose the physical education as a remedial tool to inculcate values and ethics.
- Get acquainted with historical development and its impact on nature of physical education in India and abroad
- Acquaint with historical perspective as an influence on physical education, Abroad and in India.
- Identify the students with different Issues, challenges and opportunities in Physical education & sport.

DEPARTMENT OF BOTANY

The Outcomes of UG Course, B. Sc. in Botany

At the completion of B. Sc. in Botany the students are able to:

- Understand the structural organization and variation in chromosomes.
- Get self-employment in the fields as: mushroom Cultivation, organic manure preparation, the horticultural plant production, cultivation of crops in poly-house condition, plant tissue, culture laboratories etc.
- Understand plant structures in the context of physiological functions of plants. Understand lipid metabolism in plants.
- Understand the morphological and structural organization of Cryptogams and Phanerogams.
- Economics Botany and plant utilization in concern with human life.
- Diversity of plants National plant wealth.
- Developmental biology of plants. Industrial application of microorganism

DEPARTMENT OF CHEMISTRY

The Outcomes of UG Course, B. Sc. in Chemistry

At the completion of B. Sc. in Chemistry the students are able to:

- Provide a broad foundation in chemistry that stresses scientific reasoning and Analytical problemsolving with a molecular perspective.
- Achieve the skills required to succeed in graduate school, the chemical industry and professionalschool.
- Get exposures of a breadth of experimental techniques using modern instrumentation.

- Understand the importance of the Periodic Table of the Elements, how it came to be, and its rolein organizing chemical information.
- Understand the interdisciplinary nature of chemistry and to integrate knowledge of mathematics, physics and other disciplines to a wide variety of chemical problems.
- Learn the laboratory skills needed to design, safely and interpret chemical research.
- Acquire a foundation of chemistry of sufficient breadth and the depth to enable them to understand and critically interpret the primary chemical literature.
- Develop the ability to communicate scientific information and research results in written and oralformats.
- Learn professionalism, including the ability to work in teams and apply basic ethical principles.

DEPARTMENT OF MATHEMATICS

The Outcomes of UG Course, B. Sc. in Mathematics

At the completion of B. Sc. in Mathematics the students are able to:

- Learn to solve improper integrals.
- Make use of linear equations for solving any differential equations
- Understand various problems related with planar graphs.
- Understand the Concepts of Matrices and linear equations.
- Learn properties of inverse Laplace transforms

DEPARTMENT OF PHYSICS

The Outcomes of UG Course, B. Sc. in Physics

At the completion of B. Sc. in Physics students are able to:

- Demonstrate a rigorous understanding of the core theories & principles of physics, which includes mechanics, electromagnetism, thermodynamics, & quantum mechanics.
- Learn the Concepts as Quantum Mechanics, Relativity, introduced at degree level in order tounderstand nature at atomic levels.
- Provide knowledge about material properties and its application for developing technology toease the problems related to the society.

- Understand the set of physical laws, describing the motion of bodies, under the influence of system of forces.
- Understand the relationship between particles & atom, as well as their creation & decay.
- Relate the structure of atoms & subatomic particles.
- Understand physical properties of molecule the chemical bonds between atom as well asmolecular dynamics.
- Analyze the applications of mathematics to the problems in physics &develop suitable mathematical method for such application & for formulation of physical theories.
- Learn the structure of solid materials & their different physical properties along with metallurgy, cryogenics, electronics, & material science.
- Understand the fundamental theory of nature at small scale & levels of atom & sub-atomicparticles.

DEPARTMENT OF ZOOLOGY

The Outcomes of UG Course, B. Sc. in Zoology,

At the completion of B. Sc. in Zoology the students are able

- To understand the nature and basic concepts of cell biology.
- Understand the basic concepts of chordates and non-chordates.
- Understand the concepts of Goatery and Lac culture.
- Understand the various Applications of Biotechnology
- Understand the Lamarckism, Neo-Lamarckism and Darwinism.
- Understand the term ELISA technique and DNA finger printing.
- Understand the process of evolution.

DEPARTMENT OF COMPUTER SCIENCE

The Outcomes of UG Courses, B. Sc. in Computer Science, At the completion of B. Sc. in Computer Science, the students are able to:

• Improve their computer literacy, their basic understanding of operating systems and a working knowledge of software commonly used in academic and professional environments.

- Develop criteria to organize and present different type of works in academic and professionalenvironments.
- Learn to organize information efficiently in the forms of outlines, charts, etc. by using appropriatesoftware.
- Develop the skills to present ideas effectively and efficiently.
- Design and deliver an effective presentation and develop the various IT skills related electronic databases.
- Use the Systems Analysis Design paradigm to analyze a problem critically.
- Solve problems (programming networking database and Web design) in the InformationTechnology environment.
- Function effectively in teams to accomplish common goals and demonstrate professionalbehavior.
- Develop IT-oriented security issues and protocols. Able to design and implement a web page.
- Improve communication and business management skills, especially in providing technicalsupport.

DEPARTMENT OF STATISTICS

The Outcomes of UG Courses, B. Sc. in Statistics

At the completion of B. Sc. in Statistics, the students are able to:

- Students Employability increases due to various techniques covered in the papers like "Design of Experiment", "Regression Analysis", "Reliability and Survival analysis" which are the main features used in Business Analytics
- Due to the Subjects like "C Programming" and "Statistical Computing using R Software" students get exposure to computer knowledge and their use and hence their logical thinking is developed.
- Students get knowledge of basic concepts required for higher studies.
- Students starts thinking more scientifically and analytically.

P.G. Program Outcomes

Post Graduate course: M.A. in English

At the completion of PG Course i.e. M.A in English the students are able to:

- They will develop an ability to read texts in relation to their historical and cultural contexts, in order to gain a richer understanding of both text and context, and to become more aware of themselves as situated historically and culturally.
- Students will Value literature, language, and imagination, they will develop a passion forliterature and language.
- They will appreciate literature's ability to elicit feeling, cultivate the imagination, and call us to account as humans.
- They will cultivate their capacity to judge the aesthetic and ethical value of literary texts-and beable to articulate the standards behind their judgments.
- They will appreciate the expressive use of language as a fundamental and sustaining humanactivity, preparing for a life of learning as readers and writers.
- Students will develop an appreciation of how the formal elements of language and genre shape meaning.

Post Graduate course: M.A. in Marathi

At the completion of PG Course i.e. M.A in Marathi the students are able to:

- Theories and approaches to language studies and literature studies
- Marathi literature: study of development and genesis of literature
- Study of various branches and types of ancient, medieval and early literature.
- Prose literature: Ancient, medieval and modern
- Genres in Marathi literature, Study of various trends in and influences on literary study.
- The impact of Western literature on Marathi literature and the study of western literary theories
- New developments in literary studies, Literature for the media, Study of writing for films

Post Graduate course: M.A. in Hindi

At the completion of PG Course i.e. M.A in Hindi the students are able to:

- To prepare the students with skills to analyze the concept and different theories of Hindi literature and language.
- To prepare the students for pursuing research or careers in Hindi language and literature and it's allied fields.
- Imbibe the effective communication in both mediums of expression (oral and writing).
- Continue to acquire relevant knowledge and skills appropriate to professional activities.
- Create awareness to become an enlightened citizen with commitment to deliver one's responsibilities within the scope of bestowed rights and privileges.

Post Graduate course: M.A. in Geography

At the completion of PG Course i.e. M.A in Geography the students are able to:

- The courses of this program are helpful to the student for extract the knowledge of geographical aspects at local, regional, national and global level. e.g. topography, climate oceanic activities etc.
- Being as an applied earth sciences, it useful to the study of geographical elements around us.
- By getting the knowledge of geographical aspects the students will become competent to facevarious competitive examinations and build their career.
- Students should have an advanced level understanding .
- Students should enlarge their professional foundations through activities such as teaching, internships, and fellowships
- Students should be able to communicate scientific results in writing and in oral presentation.
- Computer-based techniques (RS & GIS) are incorporated in the syllabus which prepares the students for further analytical studies.

Post Graduate course: M.A. in History

At the completion of PG Course i.e. M.A in History the students are able to:

- Student will learn basic narrative of historical events, chronology, personalities and turning points of the history of the India, and World.
- Build critical ability through competing interpretations and multiple narratives of the past, offer multi-causal explanations of major historical developments based on contextualized analysis of interrelated political, social, economic, cultural and intellectual processes.
- Evaluation of historical ideas, arguments and points of view, presentation of a summary of a topic in an organized, coherent, and compelling fashion orally or written.
- Construct original historical arguments based on primary or secondary source material and ability to identify and describe the contours and stakes of conversations among historians within defined historiographical fields.
- Students will acquire basic historical research skills, including, effective use of libraries, archives, and databases.

Post Graduate course: M.A. in Political Science

At the completion of PG Course i.e. M.A in Political Science the students are able to:

- Students will be able to describe the history and making of Indian constitution with its philosophical base.
- Students will be able to explain parliamentary system in India.
- Students will be able to critically analyze and apply the basic principles of Indian and western political thinkers and scholars.
- Students will be able to understand the composition and functions of Election Commission of Indiaand other state election commissions and can work as an observer.
- Students will be able to understand the meaning, nature and scope of the International Relations.
- The programme provides the students with the capacity to identify issues and problems relating to the realization of human rights.

Post Graduate course: M.A. in Economics

At the completion of PG Course i.e. M.A in Economics the students are able to:

- Demonstrate knowledge of theories, policies, and empirical findings of economics.
- Engage in scientific inquiry, critical thinking, using quantitative and qualitative methods.
- Access and extract data from multiple sources, analyse and interpret the results using quantitative and qualitative tools.
- Demonstrate competence in written and oral communication and convincingly present arguments with virtual tools.
- Apply knowledge of economics for team building and create entrepreneurial initiatives for livelihood and social development.

Post Graduate course: M.Sc. in Microbiology

At the completion of PG Course i.e. M.Sc. in Microbiology the students are able to:

- Get ability to apply the process of science by formulating hypotheses and design experiments based on the scientific method.
- Analyze and interpret results from a variety of microbiological methods
- Use quantitative reasoning by using mathematical calculations and graphing skills to solve problems in microbiology.
- Communicate and collaborate with other disciplines by effectively communicating the fundamental concepts of microbiology in written and oral format.
- Identify credible scientific sources to interpret and evaluate the evidences
- Understand the relationship between science and society by recognizing and discussing logical, scientific and ethical issues in microbiology.

Post Graduate course: M.Sc. in Chemistry

At the completion of PG Course i.e. M.Sc. in Chemistry the students are able to:

- Demonstrate and apply the fundamental knowledge of the basic principles in various fields of Chemistry
- Create awareness and sense of responsibilities towards environment and apply knowledge to solve the issues related to Environmental pollution.

- Apply knowledge to build up small scale industry for developing endogenous product.
- Apply various aspects of chemistry in natural products isolations, pharmaceuticals, dyes, textiles, polymers, petroleum products, forensic etc. and also to develop interdisciplinary approach of the subject.

Post Graduate course: M.Sc. in Physics

At the completion of PG Course i.e. M.Sc. in Physics the students are able to:

- Apply the knowledge and skill in the design and development of Electronics circuits to fulfill the needs of Electronic Industry.
- Become professionally trained in the area of electronics, optical communication, nonlinear circuits, materials characterization and lasers.
- Pursue research related to Physics and Materials characterization.
- Demonstrate highest standards of Actuarial ethical conduct and Professional Actuarial behavior, critical, interpersonal and communication skills as well as a commitment to life-long learning.

Post Graduate course: M.Sc. in Zoology

At the completion of PG Course i.e. M.Sc. in Zoology the students are able to:

- Understand the biological diversity and grades of complexity of various animal forms through their systematic classification and comparative structural studies.
- Learn how earth was formed and how life started and evolved on the planet through process of organic evolution.
- Understand the roles of plants, animals and microbes in the sustainability of the environment and their interaction among themselves and deterioration of the environment due to anthropogenic activities.
- Understand the concepts and principles of biochemistry, immunology, physiology, ethology, endocrinology, developmental biology, cell biology, genetics, molecular biology and microbiology.
- Develop technical skills in biotechnology, bioinformatics and biostatistics.
- Delve into the wonderful world of insects, their success on the planet and their diversity.

• Acquire knowledge on harmful and beneficial insects, their adaptations for life and control measures.

Post Graduate course: M.Sc. in Botany

At the completion of PG Course i.e. M.Sc. in Botany the students are able to:

- Think Critically Get ability to apply the process of science by formulating hypotheses and design experiments based on the scientific method.
- Analyze and interpret results generated through studies in botany, taxonomical treatments, field studies, excursion tours and laboratory techniques used in the subject.
- Use quantitative reasoning by using mathematical calculations and graphing skills to solve problems in plant science (Botany)
- Effective Communication and collaborate with other disciplines by effectively communicating the fundamental concepts of Botany in written and oral format.
- Identify credible scientific sources to interpret and evaluate the evidences
- Understand the relationship between science and society by recognizing and discussing logical, scientific and ethical issues in Botany subject.
- Environment and Sustainability: Understand the issues of environmental contexts and sustainable development with respect to assessment, conservation and utilization of floral diversity

Post Graduate course: M.Sc. in Electronics

At the completion of PG Course i.e. M.Sc. in Electronics the students are able to:

- To get exposure to the recent technologies.
- To acquire the knowledge of design and implementation of instrumentation of significant preciseness.
- To complete the projects of industrial standards, which could also, ensures the interdisciplinary approach.
- To cater the needs of industrial sectors.
- To work in industrial environment a on job training and internship
- To qualify in the NET/GATE/SET etc. examinations.
- To learn through on-line short term certificate courses such as MOOC/SWAYAM/NPTEL, etc.



PRINCIPAL Shri Shivaji Mahavidyalaya, Barshi, Dist. Solapur-413411

Shri Shivaji Mahavidyalaya, Barshi. Course Outcomes Year: 2022-23

Sr. No.	Course Name	Semester	Paper No.	Subject Name	Course outcome
1	B.A.I	I	I	Introduction to English Literature	 To acquaint students with literary forms and linguistic terms. To initiate students and provide them a firsthand experience of reading and interpreting literary texts.
		Π	Ш	Introduction to English Literature (One Act Plays and Literary Terms)	 To acquaint students with structural and analytical techniques in poetry. To acquaint students with analysis of minor literary form i.e. short story.
2	B.A.I	I&II	-	English(Com)	 Understand the concepts of communication. Expand their vocabulary after reading the prescribed texts. Attain writing, speaking, reading, & listening competence. Be aware of the correct usage of English grammar Become familiar with selected literary forms, develop and strengthen their imaginative ability and the ability to analyze different literary forms.
3	B.A.II	III	III	British Literature-I	 Familiar with a few British writers Familiar with some of the dramas and dramatists Able to understand the features of the text
			IV	British Literature-II	 Familiar with a few British writers Familiar with some of the dramas and dramatists Able to understand the

Department of English



					features of the text
		IV	V	Indian Literature-I	 Acquire language skills required for day to day and specific purpose. Be able to interpret and illustrate concepts of Communication, Prose and Poetry. Be able to analyze and interpret the text prescribed. Develop certain life skills and strengthen strategies to develop vocabulary.
			VI	Indian Literature-II	 Acquire language skills required for day to day and specific purpose. Be able to interpret and illustrate concepts of Communication, Prose and Poetry. Be able to analyze and interpret the text prescribed. Develop certain life skills and strengthen strategies to develop vocabulary.
4	B.A.II	III&IV	-	English(Com)	•
5	B.A.III	V&VI	-	English (Com)	Use oral and written English effectively • Appreciate literary language • Use English language in creative writing • Apply English language skills in clearing
6	B.A.III	V	VII	Introduction to Literary Criticism	 Understand the basics of literary criticism. Have a critical approach to literature. Understand the major trends in literary criticism.



	VIII	British Literature	 Gain knowledge, stylistic strategies and diction of British literature. Be able to explore the creativity and the human experiences in fiction, poetry and drama. Be able to cultivate aesthetic and ethical values in
			life

			through literary texts.
	IX	Indian English Literature	Understand gradual development of Indian English literature from mid-twentieth century to post 2000 period. • Get acquainted with major genres/themes through the study of texts prescribed.
	X	Literatures in English	Understand Afro- American fiction Understand features of Postcolonial Fiction
	XI	Introduction to the Structure & Function of Modern English	Understand various concepts in linguists.Get acquainted with various branches of linguistics.
VI	XII	Introduction to Literary Criticism	 Understand the basics of literary criticism. Have a critical approach to literature. Understand the major trends in literary criticism.
	XIII	Indian English Literature	Understand gradual development of Indian English literature from mid-twentieth century to post 2000 period. • Get acquainted with major genres/themes through the study of texts prescribed.
	XIV	Literatures in English	Understand Afro- American fiction Understand features of Postcolonial Fiction
	XV	Introduction to the Structure & Function of Modern English	Understand various concepts in linguists.Get acquainted with various branches of linguistics.



			XVI	Literary Mindscapes	Use oral and written English effectively • Appreciate literary language • Use English language in creative writing
4	M.A.I	Ι	Ι	British Literature	 Able to understand the western culture and traditions Able to understand the British literary pieces.
			II	Indian Literature in English	• At the end of the course the students will get acquainted with later phases of development of Indian English

			T 'to an to an 1 form '1' and an '4'
			Literature and familiar with
			Indian ethos as reflected in texts
			prescribed.
			• At post-graduation level,
			students will enjoy reading of a
			number of authors and
			important literary genres as
			practiced by select Indian
			English figures.
			•As planned while designing the
			syllabus of this paper, students
			will get acquainted with
			thematic plurality, genres
			handled and style reflected in
			seminal texts of poetry, fiction
			drama and nonfiction.
	III	Introduction to	The students will be
		Language & Linguistics	interested in the language •
			Familiar with some of the
			mechanism and theories of
			linguistics



		IV	Comparative Literature	 The students are introduced to different literary expressions written in English language. The students understand thematic perspectives of the literatures written in different countries. The students develop sensitivity and balanced responses to the complexity of human nature as portrayed in literary works. The students develop understanding of the natures and functions of literatures in English. The students develop an awareness of the relationship between texts and their cultural contexts.
	II	V	British Literature	□Able to understand the western culture and traditions □Able to understand the British literary pieces.
		VI	Indian Literature in English	• At the end of the course the students will get acquainted with later phases of development of Indian English Literature and familiar with

 students will enjoy reading of a number of authors and important literary genres as practiced by select Indian English figures. As planned while designing the syllabus of this paper, students will get acquainted with thematic plurality, genres handled and style reflected in generative figures.
handled and style reflected in seminal texts of poetry, fiction drama and nonfiction.
The students will be interested in the language • Familiar with some of the mechanism and theories of linguistics



			VIII	Comparative Literature	 The students are introduced to different literary expressions written in English language. • The students understand thematic perspectives of the literatures written in different countries. The students develop sensitivity and balanced responses to the complexity of human nature as portrayed in literary works. The students develop understanding of the natures and functions of literatures in English. The students develop an awareness of the relationship between texts and their cultural contexts.
5	M.AII	III	IX	Contemporary Critical Theories	 Understand how various critical theories developed in the course of the 20th Century. Read & contextualize contemporary Theories to the best of their ability. Develop competency to mark differences and similarities in these theories and schools. Develop an ability to apply the
					critical theories to literary texts.
					•Acquire ability to understand their own theoretical/critical stance as readers.



	III	X	Postcolonial Literature	 Analyze and interpret the colonial and postcolonial texts applying the postcolonial literary theory. Define the key concepts in postcolonial studies. Read, comprehend and engage with postcolonial literary criticism. Know how race, class, gender, history and identity are presented and problematized in the literary texts, Know how a literary text, explicitly or allegorically represents various aspects of colonial oppressions.
	III	XI	Translation Studies	 Comprehend translation studies as a separate discipline of knowledge Comprehend the nature, scope and theoretical issues in translation studies Comprehend major issues and methods in literary studies
	III	XII	21 st Century Skills	 English is the world language. It is spoken worldwide. Students of the postgraduate level should use English in their future life. With the help of soft skills students can develop their personality in an effective way for better life.
	IV	XIII	Contemporary Critical Theories	 Understand how various critical theories developed in the course of the 20th Century. Read & contextualize contemporary Theories to the best of their ability. Develop competency to mark differences and similarities in these theories and schools. Develop an ability to apply the critical theories to literary texts. Acquire ability to understand
				•Acquire ability to understand their own theoretical/critical stance as readers.



Department Of Hindi

Sr.N	Cours	Se	Donor	DoporNama	Course Outcomes
	Cours		Paper	PaperName	
0	е	me	No	प्रश्नपत्र का	(पाठ्यक्रम केपरिणाम)
	(कक्षा)	ste	(नाम	
		r	प्रश्नपत्र		
			क्र		
1	B.A	I	1	साहित्य रत्न	१) छात्रहिंदी के लेखक एवं कवियों से परिचित होतेहैं।
				•	२) छात्रों में हिंदी साहित्य के प्रति अभिरुचि संवर्धितहोताहै
	-1				 छात्रों में राष्ट्र के प्रति प्रेम एवं सामाजिक प्रतिबद्धता की भावना
					विकसित होती हैं
					४) छात्रों लिंग, वचन की दृष्टि से वाक्य शुध्दिकरण की विधि से
					अवगत होतेहैं।
					५) छात्रोंहिंदी भाषा के विभिन्न मुहावरों, कहावतों से परिचितहोते हैं।
					 ६) छात्रों को देवनागरी लिपि में लिखे जानेवाले हिंदी अंको से परिचित कराना।
		11	11	साहित्य रत्न	?) छात्र हिंदी के लेखक एवं कवियों से परिचित होते हैं
					२) छात्रों में हिंदी साहित्य के प्रति अभिरुचि संवर्धित होता है
					 छात्रों में राष्ट्र के प्रति प्रेम एवं सामाजिक प्रतिबद्धता की भावना
					विकसित होती हैं
					४) छात्र साक्षात्कार प्रविधि से परिचित होते हैं।
					 ७) छात्र विज्ञापन लेखन कौशल्या आत्मसात होता है
					 ६) छात्र हिंदी भाषा के विभिन्न मुहावरों, कहावतों से परिचित होते हैं।
	B.A	111	111	आधुनिक हिंदी	1) आधुनिक वैविध्यपूर्ण हिंदी कहानियों से छात्र अवगत होते है।
		'''	111	गद्य कहानी एंव	2) आधुनिकता बोध और नए मूल्यों के प्रति छात्र अवगत होते है।
	-11			व्यवहारिक हिंदी) 3) कहानी कला के प्रति अभिरुची और समीक्षा छात्रा विकसित करते है।
					4)
		IV		मध्ययुगीन हिंदी	 सामाजिक , सांस्कृतिक पृष्ठभूमी मे कविता के अध्ययन विश्लेषण की
				काव्य, व्याकरण	जानकारी लेते है।
				एवं लेखन	2) भक्तिकालीन तथा रीतीकालीन कविता के माध्यम से शृंगार रस एवं वीर
					रस की स्थापना का महत्त्व को अवगत करते है।
				आधुनिक हिंदी	 आधुनिक हिंदी एकांकी विधा से छात्र अवगत होते है।
				गद्य-एकांकी	2) एकांकी कला के प्रति अभिरुची और समीक्षा दृष्टी छात्र विकसित करते
				एवंम	है।
				व्ययवहारिक हिंदी	
				आधुनिक हिंदी	 हिंदी साहित्य के आधुनिक काल से छात्र परिचित होते है।
				काव्य एवं लेखन	2) छायाबाद तथा प्रगतिवाद के माध्यम से प्रकृति मानवीय पीडा संवेदना से
					छात्र अवगत होते है।
	B.A	V		हिंदी विशेष	 भगवानदास मोरवाल के व्यक्तित्व से परिचित होते है।
				लेखक-	2) प्रतिनिधि कहानियों के विषय विविधता से परिचित होते है।
	-111			भगावनदास	
				मोरवाल	
		VI		हिंदी विशेष	1) भगवानदास मोरवाल के उपन्यास संसार से परिचित होते है।
				लेखक-	2) शंकुतला उपन्यास की विशेषताओं से परिचित होते है।
				भगावनदास	, , , , , , , , , , , , , , , , , , ,
				मोरवाल	
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	V		काव्यशास्त्र	1)	साहित्य निर्मिती प्रक्रिया से अवगत होते है।
	v			2)	गद्य तथा पदय तत्त्वोे से परिचित होते है।
				3)	र् शब्दों की शक्ति से परिचित होते है।
	VI		आलोचना	1)	छात्र साहित्य के उपकरणो से परिचित होते है।
	•••			2)	रसान्भूति की प्रकियों से अवगत होते हैं।
				3)	साहित्य के मूल्य, गुणों से परिचित होते है।
	V		आदिकालीन और	1)	हिंदी साहित्य के दार्शनिकि पूर्वपिठिका से छात्र परिचित होते है।
			मध्यकालीन हिंदी	2)	हिंदी साहित्य की आदिकालीन और मध्यकालीन का कालजयी रचनाओं
			साहित्य का		तथा रचनाओंसे छात्र अवगत होते है।
			इतिहास सं.		
			1050 से सं.		
			1900		
	VI		आधुनिक हिंदी	1)	आधुनिक हिंदी साहित्य की दार्शनिक पूर्वपीठिका से छात्र परिचित होते है।
			साहित्य का	2)	आधुनिक हिंदी साहित्य के इतिहास के कालानुरुप विभिन्न वाद एवं
			इतिहास सवंत		विधाओं के विकास को छात्र अवगत करते है।
			1900 से 2010		
			तक		
	V		प्रयोजनमूलक ०:०	1)	प्रयोजनमूलक हिंदी के स्वरुप एवं विकास से छात्र परिचित होते है।
			हिंदी	2)	प्रयोजनमूलक हिंदी के माध्यम से रोजगारपरक कौशल छात्र विकसित
				1)	करते हैं।
	VI		व्यवहारिक हिंदी	1)	अनुवाद का स्वरुप और महत्त्व से छात्र अवगत होते हैं।
			हिंदी भाषा	2)	अनुवाद एवं विज्ञापन लेखन की क्षमता से छात्र विकसित होते हैं।
	V		ाहदा मापा	1)	हिंदी भाषा ए वं लिपि से उद्भव और विकास से छात्र परिचित होते है। मानक हिंदी वर्तनी और व्याकरण से छात्र अवगत होते है।
			भाषा विज्ञान	2) 1)	भाषा विज्ञान से छात्र परिचित होते है।
	V		লাপা এয়াল	2)	अभा पंजान से छात्र पारायत होते है। उच्चारण की श्ध्दता के प्रति छात्र जागृत होते है।
	<u> </u>	4.4	आधुनिक हिंदी	1)	हिंदी गद्य साहित्य से छात्र परिचित होते है।
M.A.	I	1.1	गद्य साहित्य	2)	हिंदी गद्य साहित्य की विविध विधासों का अध्ययन करत है।
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	11	1.1	आधुनिक हिंदी	1)	तात्कालीन भारतीय सामाजिक सांस्कृति परिवेश से छात्र परिचित होते है।
			गद्य साहित्य	2)	छात्रों से हिंदी गद्य विधा के प्रति रुचि निर्माण होती है।
	1	1.2	भाषा विज्ञान	1)	भाषा और भाषा विज्ञान से छात्र परिचित हौते हैं।
				2)	रुप विज्ञान, अर्थ विज्ञान से छात्र अवगत होते हैं।
	П	1.2	हिंदी भाषा एवं	1)	हिंदी की ऐतिहासिक पृष्ठभूमि से छात्र परिचित होते है।
	1		लिपि	2)	देवनागरी लिपि की उत्पती एवं उसकी विशेषतासों से छात्र परिचित होते
	 				<u>اڅ</u>
	I.	1.3	प्रयोजनमूलक	1)	कामकाजी हिंदी से छात्र परिचित होते हैं।
			हिंदी	2)	राजभाषा की संविधानिक स्थिती से छात्र परिचित होते हैं।
	П	1.3	संगणकीय हिंदी	1)	संगणक में हिंदी के अनुप्रयोग से छात्र अवगत होते हैं।
	1		एंव व्यवहारिक	2)	मुद्रित और इलेक्ट्रॉनिक माध्यम से छात्र परिचित होते हैं।
			हिंदी		
	I	1.4	व्यावसायिक वर्ग-	1)	परिकारिता के स्वरुप प्रकार और महत्त्व से छात्र परिचित होते हैं।
			पत्रकारिता	2)	पत्रकारिता के मूल तत्त्वों से छात्र अवगत होते हैं।
	П	1.4	व्यावसायिक वर्ग-	1)	प्रिंट पत्रकारिता और मुद्रणकला के संदर्भ जानकारी छात्र अवगत करते हैं।
	1		पत्रकारिता	2)	भारतीय संविधान में प्रदत्त मौलिक अधिकार सूचना और मानवाधिकार
				4	से छात्र परिचित होते हैं।
	I	1.2	अनुवाद	1)	अनुवाद की सामाजिक उपदयेयता से छात्र परिचित होते हैं।
	1			2)	अनुवाद सें रोजगार के क्षेत्रो छात्र अवगत होते हैं।



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	11	1.2	हिंदी साहित्य	1)	हिंदी साहित्य एवं सिनेमा से छात्र परिचित होते हैं।
			और सिनेमा	2)	हिंदी साहित्यीक कृतियों के फिल्मांतरण की प्रक्रिया से छात्र अवगत होते
					ร้เ
M.A.	Ш	3.1	हिंदी साहित्य का	1)	छात्र हिंदी साहित्य के महत्त्व से परिचित होकर उसका विश्लेषण करते
			इतिहास		
II				2)	छात्रों को आदिकालीन, भक्तिकालीन, रितिकालीन साहित्य की जानकारी
					होती हैं।
	IV	4.1	हिंदी साहित्य का	1)	आधुनिककालीन परिवेश एवं विभिन्न दर्शनों से छात्र परिचित होते हैं।
			इतिहास	2)	विभिन्न विमर्शो से छात्र परिचित होते हैं।
	Ш	3.2	काव्यशास्त्र एवं	 काव्यशास्त्र को लेकर भारतीय चिंतन से छात्र परिचित होते हैं। 	
		•••	साहित्यालोचन	2) संस्कृत काव्यशास्त्र के विकासक्रम से छात्र परिचित हैं।	
	IV	4.2	काव्यशास्त्र एंव	 पाश्चात्य काव्यशास्त्र के इतिहास से छात्र परिचित होते हैं। 	
			साहित्यलोचन	2) पाश्चात्य काव्यशास्त्र के सिध्दांतो के स्वरुप अवधरणासें छात्र परि	
				होते हैं।	
	Ш	3.3	अनुसंधान प्रविधि	1) छात्र अनुसंधान प्रक्रिया और प्रविधी से परिचित हौते हैं।	
			और प्रक्रिया	2) साहित्यिक अनुसंधान के विभिन्न क्षेत्रों से छात्र अवगत होते हैं।	
	IV	4.3	अनुसंधान प्रविधि	 छात्र अनुसंधान परियोजना कौशल आत्मसात करने में सक्षम होते हैं। 	
			और प्रक्रिया	 2) छात्र को अनुसंधान संशोधन पध्दति और प्रविधि में रुचि निर्माण होते 	
					i
	Ш	3.1	प्राचीन एवं	1)	प्राचीन काव्य परंपरा से छात्र परिचित होते हैं।
		••••	मध्यकालीन	2)	नाथ साहित्य और सुफि काव्य से छात्र परिचित होते हैं।
			काव्य		-
	IV	4.1	प्राचीन एवं	1)	उत्त्र मध्यकालीन काव्य से छात्र परिचित होते हैं।
			मध्यकालीन	2)	छात्र बिहारी और घनानंद के व्यक्तित्व एवं कृतित्त्व से परिचित होते हैं।
			काव्य		-
		3.2	फिल्म मिमांसा	1)	हिंदी फिल्म उद्भव एवं विकास से छात्र परिचित होते हैं।
		5.2		2)	फिल्म निर्मिती एवं पात्रों से छात्र परिचित होते हैं।
	IV	4.2	दलित एंव	1)	दलित साहित्य एवं अदिवासी साहित्य से छात्र परिचित होते हैं।
			आदिवासी	2)	आध्निक हिंदी साहित्य में प्रवाहित विचारधारा से छात्र अवगत होते हैं।
			साहित्य		



Department Of Marathi

अभ्यासक्रमाची उदिष्टे :-

अ. क्र.	वर्ग	सत्र	अभ्यासपत्रिका क्रमांक आणि नाव	अभ्यासक्रम उद्दिष्टे
ę	बी. ए. भाग - १	I & II	आवश्यक मराठी - साहित्यदर्पण	१) मराठी भाषा समर्थपणे वापरण्याची क्षमता विद्यार्थ्यांमध्ये निर्माण व्हावी २) साहित्याचे विविध प्रकारांचे व प्रवाहांचे आकलन, आस्वाद, व विश्लेषण करता यावे. ३) साहित्यात मांडलेल्या विषयाच्या अनुषंगाने जीवनातील प्रश्न समजावून देणे ४) मराठी भाषेचे वैभव दृष्टीपथात यावे, व त्यातुन सामाजिक दृष्टी विकसित होण्याची प्रेरणा मिळावी
	बी. ए. भाग - १	I & II	ऐच्छिक मराठी - साहित्यरंग	१) विद्यार्थ्यांमध्ये मराठी भाषा आणि साहित्याची जाणीव समृद्ध करणे २) विद्यार्थ्यांना मराठी साहित्यातील विविध प्रकार व प्रवाहांची ओळख करून देणे. ३) विद्यार्थ्यांना कथा व कविता या साहित्यप्रकाराची संकल्पना, रुवरूप व परंपरा समजावून सांगणे. ४) विद्यार्थ्यांना भाषेचे उपयोजन शिकवताना बातमीलेखन व निबंधलेखन कौंशल्य शिकविणे
5	बी. ए. भाग - २	Ш	पेपर क्रमांक - तीन मराठी वाङ्मयप्रकार आणि उपयोजित मराठी	१) कादंबरी या साहित्यप्रकाराचे वेगळेपण लक्षात घेणे. २) कादंबरी निर्मितीतील लेखकाचे महत्व अधोरेखित करणे. ३) कादंबरीतील आशय व अनुभव समजावून देणे. ४) विद्यार्थ्यांचे व्यक्तीमत्व कलागुण संपन्न करणारी कौशल्ये विकसित करणे
	बी. ए. भाग - २	III	पेपर क्रमांक - चार कविता आणि काव्यास्वाद :-	१) कविता या साहित्यप्रकाराची ओळख करून देणे २) मराठी कवितेची वाटचाल समजून घेणे ३) मराठी कवितेतील वित्रणाचा आढावा घेणे. ४) कवितेतील प्रतिमा, प्रतिके, व मिथकांचे महत्व समजून देणे
		IV	पेपर क्रमांक – पाच आत्मकथन आणि उपयोजित मराठी	१) आत्मकथन म्हणजे काय ते समजून घेणे. २) आत्मकथनाचे साहित्यिक मूल्य तपासणे. ३) आत्मकथनाची मराठी वाटचाल समजून घेणे. ४) उपयोजित मराठीचे व्यावहारिक मूल्य समजावून देणे.
		IV	पेपर क्रमांक - सहा	१) नाटक या साहित्यप्रकाराची ओळख करून देणे.



			नाटक वाङ्मय प्रकार आणि उपयोजित मराठी	२) नाटकाचे विविध घटक समजावून देणे. ३) मराठी नाटकाची वाटचाल समजावून देणे. ४) उपयोजित मराठीतील घटक समजावून देणे.
3	बी. ए. भाग -तीन	V	पेपर क्रमांक – सात साहित्यशास्त्र	१) साहित्यलक्षणाच्या विविध सिध्दांतांचा परिचय करून देणे. २) साहित्याचे स्वरूप समजावून सांगणे. ३) साहित्याच्या विविध प्रयोजनांचा परिचय करून देणे ४) साहित्यनिर्मितीच्या कारणांची माहिती करून देणे
		V	पेपर क्रमांक - आठ भाषाविज्ञान व न्याकरण	१) मानवी जीवनातील भाषेचे स्वरूप व महत्व विद्यार्थ्यांना समजावून सांगणे २) विद्यार्थ्यांमध्ये वैज्ञानिक दृष्टीकोन विकसित करणे. ३) भाषिक संप्रेषणाचा पश्चिय करून घेणे. ४)भाषा पश्चिर्तानाचे स्वरूप स्पष्ट करणे. ९) मराठी भाषेच्या व्याकरणाचे स्वरूप समजावून सांगणे.
		V	पेपर क्रमांक - नऊ मध्ययुगीन मराठी वाङ्मयाचा इतिहास (इ. स. ११०१ ते १८००)	१) मध्ययुगीन मराठी वाङ्गयाची परंपरा व इतिहास यांचा परिचय करून देणे. २) मध्ययुगीन मराठी साहित्यातील निर्मितीच्या प्रेरणांचा परिचय करून देणे. ३) मध्ययुगीन मराठी साहित्याचे स्वरूप व वैशिष्ट्य यांचा परिचय करून देणे. ४) मध्ययुगीन मराठी वाङ्गयाची सांस्कृतिक पार्श्वभूमी समजून देणे.
		V	पेपर क्रमांक - दहा उपयोजित मराठी	१) विद्यार्थ्यांना पारिभाषिक शब्दांचा परिचय करून देणे. २) ई - मराठी लेखनाचे महत्व समजावून सांगणे ३) मुद्रित शोधनाचे महत्व सांगून त्याचा सराव करून घेणे ४) रपर्धा परीक्षेतील मराठी भाषेचे महत्व लक्षात आणून देणे.
		V	पेपर क्रमांक - ११ आधुनिक मराठी साहित्यातील विविध प्रवाह (ग्रामीण व द्रलित)	१) आधुनिक मराठी साहित्यातील प्रवाहांच्या निर्मितीची पार्श्वभूमी समजावून सांगणे. २) ग्रामीण व दलित साहित्य प्रवाहाची संकल्पना, प्रेरणा स्वरूप व वैशिष्ट्ये विशद करणे. ३) ग्रामीण व दलित साहित्यप्रवाहांचा उदगम व विकास स्पष्ट करणे. ४) ग्रामीण कवितेची आशयसूत्रे, भाषावैशिष्ट्ये विशद करणे. ४) दतित कथेचा आशय, सामाजिकता, वैचारिकता स्पष्ट करून सांगणे
	बी. ए. भाग -तीन	VI	पेपर क्रमांक – बारा	१) साहित्यलक्षणाच्या विविध सिध्दांतांचा परिचय करून देणे.



			रसविचार	२) साहित्याचे स्वरूप समजावून सांगणे.
				२) साहित्याच्या विविध प्रयोजनांचा परिचय करून देणे ३) साहित्यनिर्मितीच्या कारणांची माहिती करून देणे
		VI	पेपर क्रमांक – तेरा भाषाविज्ञान व व्याकरण DSE - 8	१) मानवी जीवनातील भाषेचे स्वरूप व महत्व विद्यार्थ्यांना समजावून सांगणे २) विद्यार्थ्यांमध्ये वैज्ञानिक दृष्टीकोन विकसित करणे. ३) भाषिक संप्रेषणाचा परिचय करून घेणे. ४)भाषा परिवर्तनाचे स्वरूप स्पष्ट करणे. ९) मराठी भाषेच्या व्याकरणाचे स्वरूप समजावून सांगणे
		VI	पेपर क्रमांक – चौंदा मध्ययुगीन मराठी वाङ्मयाचा इतिहास (इ. स. ११०१ ते १८००)	१) मध्ययुगीन मराठी वाङ्मयाची परंपरा व इतिहास यांचा परिचय करून देणे. २) मध्ययुगीन मराठी साहित्यातील निर्मितीच्या प्रेरणांचा परिचय करून देणे. ३) मध्ययुगीन मराठी साहित्याचे स्वरूप व वैशिष्ट्य यांचा परिचय करून देणे. ४) मध्ययुगीन मराठी वाङ्मयाची सांस्कृतिक पार्श्वभूमी समजून देणे.
		VI	पेपर क्रमांक - पंधरा उपयोजित मराठी	१) मराठी भाषेचे विविध क्षेत्रातील महत्व व उपयोजन विद्यार्थ्यांना समजावून सांगणे. २) जाहिरात कलेची उपयुक्तता स्पष्ट करून सांगणे. ३) विद्यार्थ्यांमध्ये निवेदन कौशल्ये विकसित करणे. ४) ग्रंथपरिक्षणाचे महत्व व स्वरूप समजावून सांगणे
		VI	पेपर क्रमांक – सोळा आधुनिक मराठी साहित्यातील विविध प्रवाह, (स्त्रीवादी, मुस्लिम)	 १) आधुनिक मराठी साहित्यातील प्रवाहांच्या निर्मितीची पार्श्वभूमी समजावून सांगणे. २) स्त्रीवादी व मुस्लिम साहित्यप्रवाहांची संकल्पना, स्वरूप, प्रेरणा विशद करणे. ३) वरील साहित्यप्रवाहांचा उदगम व विकास स्पष्ट करणे. ४) कादंबरीतील आशयसूत्रे, समाजचित्रण, घटनाप्रसंग, व्यक्तिरेखा व भाषा विशद करणे. ७) आत्मचरित्राचा आशय, जीवनसंघर्ष, सामाजिकता, वैचारिकता, भाषा स्पष्ट करून सांगणे
8	एम. ए. भाग - १	I	अभ्यासपत्रिका क्रमांक – १ साहित्यविचार	१) साहित्य निर्मितीप्रक्रियेची माहिती देणे. २) साहित्यकृती अभ्यासताना साहित्य विचाराचे उपयोजन करणे. ३) ललित साहित्याचे मूल्यमापन करणे. ४) साहित्यकृतीचे सर्वंकष समीक्षण करणे.
		Ι		१) भाषिक संवादाचे महत्व लक्षात आणून देणे.



		अभ्यासपत्रिका क्रमांक – २ मराठी भाषा संवाद व उपयोजन	२) वक्तृत्व तंत्र व कौशल्ये समजावून सांगणे. ३) वृत्तपत्रीय लेखन, बातमीलेखन, संपादकीय लेखांचे विश्लेषण करणे. ४) जाहिरात निर्मिती करता येणे.	
	I	HCT - १.३ आधुनिक मराठी वाङ्मयाचा इतिहास (१८०० ते १९२०)	१) साहित्य व साहित्यिक यांचे कालखंडानुसार ज्ञान देणे २) वाङ्मय इतिहासाची परंपरा समजून घेणे. ३) साहित्यकृतीच्या प्रभावाची कारणे समजून घेणे. ४) १८०० ते १९२० या कादंबरीतील साहित्याचे मूल्यमापन करणे.	
	Ι	पेपर क्रमांक - SCT - १.१ एका लेखकाचा अभ्यास (मध्ययुगीन संत तुकाराम)	१) मध्ययुगीन साहित्य समाज आणि संस्कृती अभ्यासणे. २) लेखक पद्धती समजून घेणे. ३) संत तुकाराम यांच्या अभंगांचा सखोल अभ्यास करणे. ४) संत तुकाराम यांच्या अभंगांचे साहित्यिक मूल्यमापन करणे.	
	Π	अभ्यासपत्रिका क्रमांक - ६ साहित्यविचार समीक्षा	१) समीक्षेच्या प्रकारांचे ज्ञान देणे २) समीक्षा संकल्पना समजून घेणे. ३) समीक्षा पद्धतीचा वापर करणे. ४) वृत्तपत्रीय समीक्षा लिहता येणे.	
	Π	अभ्यासपत्रिका क्रमांक - ७ मराठी भाषा संवाद व उपयोजन	१) आकाशवाणी उद्धोषणा, बातमी देता येणे. २) दूरदर्शन बातमी, मालिकांचे विश्लेषण करता येणे. ३) समाजमाध्यमावरील संवादाचे उपयोजन करणे. ४) youtube साठी लघुपट निर्मिती करणे.	
	Π	अभ्यासपत्रिका क्रमांक - ८ आधुनिक मराठी वाङ्मयाचा इतिहास इ. स. १९२० ते १९६०	१) साहित्य व साहित्यिक यांचे कालखंडानुसार ज्ञान देणे २) वाङ्मय इतिहासाची परंपरा समजून घेणे. ३) साहित्यकृतीच्या प्रभावाची कारणे समजून घेणे. ४) इ. स. १९२० ते १९६० या कादंबरीतील साहित्याचे मूल्यमापन करणे.	
	П	एका लेखकाचा अभ्यास आधुनिक - महात्मा जोतीराव फुले	१) महात्मा फुले यांच्या समग्र साहित्याचा सखोल अभ्यास करणे. २) महात्मा फुले यांचे सामाजिक व शैक्षणिक कार्य समजवून घेणे. ३) महात्मा फुले यांच्या कार्यकर्तृत्वाचे वाङ्मर्यीन कार्यकर्तृत्वाचे वेगळेपण लक्षात घेणे. ४) महात्मा फुले यांच्या कार्याची कालसमर्पकता समजावून घेणे.	



एम. ए. भाग - दोन	III	अभ्यासपत्रिका HCT - ३.१ आधुनिक भाषाविज्ञान	१) मानवी जीवनातील भाषेचे स्वरूप व महत्व विद्यार्थ्यांना समजावून सांगणे २) विद्यार्थ्यांमध्ये वैज्ञानिक दृष्टीकोन विकसित करणे. ३) भाषिक संप्रेषणाचा पश्चिय करून धेणे. ४)भाषा पश्चिर्तानाचे स्वरूप स्पष्ट करणे. ९) मराठी भाषेच्या व्याकरणाचे स्वरूप समजावून सांगणे.
	III	आधुनिक मराठी वाङ्मयाचा इतिहास १९६० ते १९९०	 १) मराठी वाङ्मयाची परंपरा व इतिहास यांचा परिचय करून देणे. २) मराठी साहित्यातील निर्मितीच्या प्रेरणांचा परिचय करून देणे. ३) मराठी साहित्याचे स्वरूप व वैशिष्ट्य यांचा परिचय करून देणे. ४) मराठी वाङ्मयाची सांस्कृतिक पार्श्वभूमी समजून देणे
	ш	भाषा व साहित्य : संशोधनाचे पद्धतीशास्त्र	१) संशोधनाचे महत्व समजून घेणे. २) भाषा आणि साहित्य संशोधनाचे स्वरूप व वेगळेपण समजून घेणे. ३) भाषा व साहित्याच्या संशोधनाचे पद्धतीशास्त्र समजून घेणे. ४) भाषा व साहित्य संशोधनात्मक लेखनाचा परिचय करून घेणे.
	III	अभ्यासपत्रिका OET :- ३.१मराठी भाषा व रुपर्धा परीक्षा	१) भाषेचे स्वरूप विशेष समजून घेणे. २) भाषेतील स्तरभेद व बोलीचा अभ्यास करणे. ३) लोकसाहित्याचे स्वरूप विशेष समजून घेणे. ४) लोकसाहित्याचे प्रकार भेद समजून घेणे.
	IV	अभ्यासपत्रिका HCT ४.१ समाजभाषाविज्ञान	१) समाजभाषाविज्ञानाच्या विविध सिध्दांतांचा परिचय करून देणे. २समाजभाषाविज्ञानाचे स्वरूप समजावून सांगणे. ३) समाजभाषाविज्ञानाच्या विविध प्रयोजनांचा परिचय करून देणे ४) समाजभाषाविज्ञानाची माहिती करून देणे
	IV	आधुनिक मराठी वाङ्मयाचा इतिहास १९९० ते २०१०	 १) मराठी वाङ्मर्याची परंपरा व इतिहास यांचा परिचय करून देणे. २) मराठी साहित्यातील निर्मितीच्या प्रेरणांचा परिचय करून देणे. ३) मराठी साहित्याचे स्वरूप व वैशिष्ट्य यांचा परिचय करून देणे. ४) मराठी वाङ्मर्याची सांस्कृतिक पार्श्वभूमी समजून देणे.
	IV	अभ्यासपत्रिका HCT - ४.३ शोधप्रबंध तेखन	१) भाषा व साहित्य संशोधन पद्धती समजून घेणे. २) शोधप्रबंध लेखनाचे स्वरूप लक्षात घेणे. ३) शोधप्रबंध लेखनाची शास्त्रीय माहिती देणे. ४) प्रत्यक्ष शोधप्रबंध सादर करणे.
	IV	पेपर क्रमांक - ४. ४	१) लोकप्रिय साहित्याचे स्वरूप समजून घेणे.



लोकप्रिय साहित्य	२) लोकप्रिय साहित्याचा उगम, व वाटचाल लक्षात घेणे. ३) लोकप्रिय साहित्याच्या भाषेचे वेगळेपण समजून घेणे. ४) लोकप्रिय साहित्य आणि वाचकांची अभिरूची यांचा सहसंबंध स्पष्ट करणे.



Sr. No	Year	Course Name	Sem.	Paper No.	Paper Name	Course Outcome
	1. 2021-22	B.A.I	Ι	Ι	Constitutional Government and Democracy in India	 Student understands making of Indian Constitution, It's features& Philosophy It extends the consciousness of the student about the fundamental rights & duties of citizen.
1.			П	II	Constitutional Government and Democracy in India	 Course gives analytical perspectives about federal structure of India and actual functioning of Union- State governments. Course introduces to student nature, ideology & role of national political parties in India.
				III	Introduction To Political Theory	 Students will understand certain key aspects of conceptual analysis in political theory. Students will apply concepts to contemporary political issues
		B.A.II	A.II	IV	Modern Indian Political Thought	 Students will understand to the concepts, ideas and theories that developed in India. Students will compare thinkers on similar concept
2.	2. 2021-22			IDS	Public Administration	 Students will understand the governing philosophy into programs, policies and activities and making it a part of community living. Develop a deeper understanding of the personnel public administration.
				V	Introduction To Political Theory	 Students will understand to the concepts, ideas and theories Student explains significance of liberty, equality and justice.
			IV	VI	Modern Indian Political Thought	 Students will use concepts to analyze new situations. Students will explain the nature and value of normative thinking

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				IDS	Public Administration	1) Students will understand the governing philosophy into programs,
						 policies. 2) Develop a deeper understanding of the financial administration. 1) Students will have a summary understanding of formation of a summary and statement of the summary of the summ
				VII	Government & Politics of Maharashtra	 understanding of formation of Sanyukta Maharashtra& determinants of politics of Maharashtra. 2) Develop a deeper understanding of the structure and policy of Maharashtra Government.
			V	VIII	Political Sociology	 Develop a deeper understanding of the concepts in modern political theory. Students will apply certain key aspects of conceptual analysis in modern political theory.
3.	2021-22	2021-22 B.A.III		IX	Introduction to International Politics	1) To understand some important theoretical approaches in international relations & a history from 1945 onwards to the present. 2) To evaluate the foreign policy of Indian since independence and its possible future trajectory.
			X	Comparative Government & Politics	 Develop a deeper understanding of the structures and politics of United Kingdom, USA and Switzerland. To understand the politics in United Kingdom, USA and Switzerland government comparatively and to know the principles of good governance. 	



		XI	Western Political Thought	 Develop consciousness of the concepts, ideas and theories that developed in Western country. &western political tradition. To understand seminal contribution of western political Thinker to the evolution of political theorizing in western country. To understand concepts of classical political thinker.
	VI	XII	Government & Politics of	1) Develop a deeper understanding of the structure and policy of Panchyat Raj

	Maharashtra	Sansthas and Local Self Government. 2) Develop a deeper understanding of the structure and policy of Maharashtra Government, Panchyat Raj Sansthas and Local Self Government.
XIII	Political Sociology	 Develop a deeper understanding of the concepts in political theory. Students will apply certain key aspects of conceptual analysis in contemporary political theory.
IVX	Introduction to International Politics	 To understand some important theoretical approaches in international organization & a history from 1945 onwards to the present. To evaluate the foreign policy of Indian since independence and its possible future trajectory.
XV	Comparative Government & Politics	 Develop a deeper understanding of the structures and politics of United Kingdom, USA and Switzerland. To understand the politics in United Kingdom, USA and Switzerland government comparatively and to know the principles of good governance.



				XVI	Western Political Thought	 Students will explain their relevance of Classical Political Thoughts to contemporary times. Students will explain their relevance of Western Political Thoughts to contemporary times.
				HCT- 1.1	Political Theory	 Student explains nature & significance of political theory. To understand modern theories of state & democracy.
4	2021-22	M.A. I	Ι	HCT- 1.2	Major Ideas in Public Administration	 To understand some important theoretical approaches& views in Public Administration. To deeper understanding the bases of organization. To understand the principles of organization.
				HCT- 1.3	Constitution of India	 Student explains understanding making of Indian Constitution, its features&

				2)	Philosophy. Student explains understanding making of Indian Constitution, its features& Philosophy.	
		DSC- 1.2	Modern Indian Political Thought	1) 2) 3)	Student explains the concepts, ideas and theories that developed in Modern India. To understand history of Indian Renaissance. Students will have a summary understanding of New Humanism, Communism & Socialism in the view of Indian Thinkers.	
		SCT- 1.2	Financial Administration in India	1) 2)	Student explains nature & significance of financial Administration. Develop a deeper understanding of the personnel& financial administration.	
		HCT- 2.1	Contemporary Political Theory	1) 2)	Student explains nature & significance of contemporary political theory. Deeper understanding of the liberalism.	
	Π	II	HCT- 2.2	Issues in Public Administration	1) 2)	Develop a deeper understanding of the Issues in Public Administration. Develop a deeper understanding of the Good Governance, E-Governance



				HCT- 2.3	Political Process in India	 To understand theories of federalism. Develop a deeper understanding of the various ideologies of political party.
				DSC- 2.1	Electoral Politics in India	 To understand Electoral Politics unde Colonial Rule. Develop a deeper understanding of the Electoral System in India since 1950
				SCT- 2.1	Human Rights	 Students will explicate analyze concepts & some Theories of Human Rights. Develop a deeper understanding of the Women's and Child Rights, Rights of Minorities and Rights of SC and ST.
				HCT- 3.1	International Relations	 Students will explicate analyze concepts & some Theories of International relations. Students will explicate analyze key concepts of International relations.
5.	2021-22	M.A. II	III	HCT- 3.2	Government & Politics of Maharashtra	 Maharashtra& determinants of politics o Maharashtra. Students will analyze and critically assess the Demand for separate Vidarbha State
				HCT-	Research	1) Students will learn research methods and
				3.3	Methodology	 hypothesis writing, testing. Demonstrate critical thinking and writing skills related to Report Writing.
				DSC- 3.1	Western Political Thought	 Develop consciousness of the Classical& Christian political thought. Student will demonstrate understanding of secularization of political thought.
				SCT- 3.1	International Organizations	 Students will explicate analyze concepts & some Theories of International organizations. Student will demonstrate understanding Regional Organizations
				HCT- 4.1	Indian Foreign Policy	 To understand the nature, scope an objective of foreign policy To understand the India's Relations with South Asian Countries.
			IV	HCT- 4.2	Local Self Government in Maharashtra	 Student explains the composition and policy making of Maharashtra Government. Student explains the composition and policy making of Panchyat Raj Sansthas and Local Self Government.



HCT- 4.3	Dissertation	 Students will have a stronger and more informed perspective on Research Methodology in Political Science. Demonstrate critical thinking and writing skills related to Report Writing.
DSC- 4.1	Western Political Thinkers	 To understand theories of Social Contract. Develop a deeper understanding of the various ideologies.
SCT- 4.1	Foreign Policy & Diplomacy	 To understand the Foreign Policy & Diplomacy. To understand the Process and Administration of Foreign Policy



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Sr. No	Course Name	Sem. No.	Paper No.	Paper Name	Course Outcome
1	B.A.I	Ι	Ι	ChhatrapatiShiv aji and his Times	 Students will be able to examine institutional basis of Maharashtra. Students will be able the real history of Chh. ShivajiMaharaj and his Times.
		Π	II	ChhatrapatiShiv aji and his Times	 Students will be able to examine social, economic and religious condition in Medieval Maharashtra. Students will be able to analyse civil administration, military administration and judicial system during the 1630-1707 A.D.
2	B.A.II	III	III	History of Modern Europe	 Students will be able to understand the contemporary Europe in the light of its background history. Students will be able to understand the various Revolutions and basis of development of European countries.
			IV	History of Indian Freedom Movement	 Students will be able to understand the major events of India's freedom struggle. Students will be able to understand rise and growth nationalism in Europe.
		IV	V	History of Modern Europe1.Students will be able to understand rise a growth nationalism in Europe. 2.Students will be able to understand main personalities, events and movements t shaped the Modern Europe.	
			VI	History of Indian Freedom Movement	 It will increase the spirit of healthy Nationalism, Democratic values and secularism among the student. Students will be able to understand and assess the contribution of national leaders.
	IDS	III	IDS	History of Social Reforms in Maharashtra	 Students will be able to examine social background of Maharashtra. Understand various social reform movements and contribution of social reformer in Maharashtra.
		IV	IDS	History of Social Reforms in Maharashtra	 Identify the different types of social problems in our society. It will increase the spirit of humanity, secularism, gender equality among the students.
3	B.A.II I	V	VII	Ancient India 1.Students will be able to examine institution basis of India. 2.Identify the rules and their administration.	



	VIII	Mughal India	 Students will be able to examine social, economic and religious condition in Medieval period. Analyse the impact of various rule on Indian polity and society.
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			IX	Expansion and	1.Students will be able to analyse the Marathas policy of expansionism.
				Downfall of the	
				Maratha Power	2.Understand the role played by the Marathas in the 18 th century polity.
			Х	Modern World	1.Students will understand the relations between
					the nations in the world.
					2. Students will study the political, social and
					economic challenges in the Modern World.
			XI	Historical	1.Students will be able to explain the what is
				Sources,	history and importance of history.
				Research and	2. Students will be able to examine sources of
				Places	history.
		VI	XII	Ancient India	1.Evaluate the legacy of Shaivism, Vaishnavism
					,Buddhism and Jainism.
					2. Analyze the features of Indian art and
					architecture.
			XIII	Mughal India	1.Students will be able to explain our heritage
					through culture aspects of India.
			11/12/	Г ¹ 1	2. Assess the economy and religion of various rule.
			IVX	Expansion and	1. Students will be able to analyse the civil,
				Downfall of the	military administration and judicial system during
			3/37	Maratha Power	the Peshwa period.
			XV	Modern World	1.Students understand the consequences of the World War-I,II and Cold War regarding the
					present global crises.
					2.Analyze the streamline the role of League of
					Nations.
			XVI	Historical	1.Students will understand the Museum and
				Sources,	Historical Tourism.
				Research and Places	2.Identify the different types of primary and secondary sources.
4.	M.A.I	Ι	HCT	Historiography	1.Understand about the Research process in
			-1.1		Historical research
					2.Know the relationship of history with its allied
					disciplines.
			HCT	Ancient India up	1.Student will able to gather knowledge about the
			-1.2	to 650.	society, culture, religion and political history of
					ancient India.
					2. The Student will able to acquire knowledge about Indus civilization and Vedic Period.
			UCT	Listomy of	
			HCT	History of	1.Students will understand the relations between the nations in the world.
			-1.3	World (1900-	2.Students will study the political, social and
				1970)	economic challenges in the Modern World.
					conomic chancinges in the Wouldern world.



	DSE-	Medieval India	1. The political and administrative conditions during
	1.1	(1200-1700)	the Delhi Sultanate period.
			2. The social and economic conditions prevailing
			during the time of Delhi Sultanate
	SCT-	History of India	1.Identify the strategies of British for Imperial
	1.1	(1757-1857)	control
			2. The student will become familiar with the
			foundation & Administration of Modern India

		Π	HCT -2.1	Historiography	 As a history student will learn about the historiographical trends, interpretation of the historical sources of India as well. Students will be able to explain the what is history and importance of history.
			HCT -2.2	Ancient India up to 650.	 The student will understand the changing sociocultural scenarios of India. The student will become familiar with the foundation & Administration of ancient India
			HCT -2.3	History of World (1900- 1970)	 Students understand the consequences of the World War-I,II and Cold War regarding the present global crises. Analyze the streamline the role of League of Nations.
			DSE- 2.1	Medieval India (1200-1700)	 Student will learn and analyse about the transition from historic centuries to the early medieval. The student will become familiar with the foundation & Administration of Medieval India
			SCT- 2.1	History of India (1757-1857)	 Students should be to Know about the thoughts of ancient, middle and Modern period It will increase the spirit of healthy Nationalism, Democratic values and secularism among the student
5.	M.AII	III	HCT -3.1	Maratha History (1600-1818)	 Grasp the details about different sources and various trends in Maratha history. Students will be able to analyse the Marathas policy of expansionism
			HCT -3.2	Modern Maharashtra (1818-1990)	 Students can able to get the Knowledge of Social Movement. Understand various social reform movements and contribution of social reformer in Maharashtra.



	HCT -3.3 DSE- 3.1	Research Methodology Women in Indian History	 1.Understand about the Research process in Historical research. 2.Students will be able to examine sources of history. 1.Analyse and compare the customary and legal status of women in Ancient, Medieval and colonial India 2.Student will able to gather knowledge about the society, culture ,religion and political history of
	GET	History of India	ancient India 1.Identify the strategies of British for Imperial
	-3.1	(1858-1964)	control. 2.Grasp the details of freedom movement under the Mahatma Gandhi's leadership.
IV	HCT -4.1	Maratha History (1600-1818)	 Understand the role played by the Marathas in the 18th century polity. Students will be able to understand and assess the contribution of national leaders
	HCT -4.2	Modern Maharashtra (1818-1990)	 Understand about the Development of Modern Maharashtra. Identify the reforms movements in Maharashtra.
	НСТ -4.3	Dissertation	 Students will be able to dissertation writing skill. Students will be able to viva-vice skill.
	DSE- 4.1	Women in Indian History	 The student will become familiar with the emergence and spread of Bhakti movement Understand the issues in representing woman in History.
	SCT- 4.1	History of India (1858-1964)	 Understand various phases of the national movement. It will increase the spirit of healthy Nationalism, Democratic values and secularism among the student.



Sr.	Course	Sem.	Paper No.	rtment of Geograph	Course outcomes
No.	Course	Sem.		Subject	Course outcomes
1	FYBA	Ι	I	Geomorphology	 The student learns about the knowledge of Geomorphology. The student were understand geomorphological concept and process takes place on the earth surface and within the earth crust. The Student were familiar the knowledge about interior structure of the earth, formation of continent and types of rock. Student understands about endogenetic and exogenetic forces and their effect in the creation of different landforms on the surface of the earth.
		Π	Π	Human Geography	 The students were known the importance of Human Geography. The students understood the concepts, Theory, population growth and composition, settlement and detailed knowledge of Human Geography. The students were familiar with basic development Human Geography. The students are developed as good environmental conservator
2	SYBA	III	III	Climatology-III	 To make the students familiar with new terms and concept ofclimatology. To know the constituents of atmosphere and its dynamic nature To know the contribution of atmosphere in the making of earth habitable.

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	IV	Geography of India-IV	 To synthesize students with various facts of India viz. Physiography, Climate, Soil, Vegetation and Resources To synthesize students with various facts of India viz. Agriculture, Industries, Population, Social and Regionalization of India
IV	V	Economic Geography-V	 To acquaint the students with economic activities i.e. Agriculture, Manufacturing, Transport, Trade and Services. To acquaint the students with economic activity models.
	VI	Environmental Geography-VI	 □ • To acquaint students with concept of environmental geography. • To study the relation between human and environment. □□To introduce thestudents with environmental problems, programmes and policies.



3	TYBA	V	VII	Regional Planning	• The students were known the
				and	importance of regional
				Development-VII	planning.
					• The students understood the
					concepts of region,
					regionalization, regional
					planning & development and
					detailed knowledge of region.
					□□The students were familiar
					with indicators of measurement
					of development.
					• Detail understanding of Growth
					Pole Model, Center

				place Theory and Growth Foci
				Model in Indian context.
		VIII	Urban Geography-VIII	 The students were known the importance of urban settlements through urban geography. The students understood the types of urban Settlements, Site and situations. The students were familiar with an idea of relationship between human activities and urban development.
		IX	Population Geography-IX	□□This paper would bring an understanding of population geography along with relevance of demographic data.
	VI	X	Evaluation of Geographical Thought	 Students were able to visualize the basic theme, ideas and approaches of geographic knowledge with relation to historical juncture, varying schools and era of their emergence. Detailed knowledge about the debates in the geographical studies. Understanding of recent trends in Geography.



XI	Political Geography	 Student will understand the history and development of political geography. Get knowledge about evaluation of state and nation. Get knowledge of Geopolitical theories. Investigates problems and disputes of India with the most current research topics in political geography.
XII	Social Geography	 In depth understanding the problems and prospects of society in India. The students are fully aware

		about the technological, occupational and migration changes of peoples in India. DDetailed knowledge about the social categories and their spatial distribution. DUnderstanding concepts of social wellbeing, welfare and social problem in India.
Ι	Map Making and Map Interpretation P-I	 In depth understanding the map, concept of scale and projection. Detailed knowledge about the analysis of landforms and its identification. The students are deeply aware about basic information to the students about S.O.I. toposheets and I.M.D. weather reports and obtained the skills about map interpretation



			II	Advanced Tools, Techniques (Computer, Remote Sensing, GIS, GPS) & Field Work P-II	 In depth understanding the importance of field work and advanced Techniques in Geography. The students are trained to implement modern tool and techniques in Geography. The students are deeply aware about the basics and trained in instrumental survey. The students are deeply familiar with computer, GIS, GPS and Remote Sensing.
1	M.A.I	Ι	Ι	Geomorphology I	1) To familiarize the students with certain fundamental Geomorphological concepts interior of the Earth, mountain building theories and movement of the Earth.

M.A.I	I	II	Climatology I	 To acquaint the student with weather phenomena, pressure belts and winds, air masses, atmospheric disturbances.
M.A.I	Ι	III	Oceanography and Geohydrology	 To know many acts of oceans such as properties of sea water, water circulation, structure of ocean basin, evolution of oceans, characteristics of marine environments.



		1			
	M.A.I	Ι	IV	Economic Geography	 To acquaint the students with the nature and scope of Economic geography, basic economic process and economic activities. To familiarize the students with the principles of industrial location and industrial theories. To acquaint the students with the resources, transportation, connectivity and trade.
	M.A.I	Ι	Ι	Representation of landform and topographical map	1) To familiarized the students the identification of different landforms on the topographical maps.
	M.A.I	Ι	II	Study of weather maps	1) To understand the method of collection and analysis of the climatic data and interpret the same.
	M.A.I	Ι	III	Analysis of climatic data	 To understand the student with the interpretation and construction of climatic graphs and diagram.
	M.A.I	Ι	IV	Analysis of socioeconomic data	 To familiarize the students various techniques of analysis of socio economic data.
2	M.A.I	II	V	Geomorphology	1) To acquaint the students
				II	with the theories of

	II	with the theories of
		evolution of continents
		and ocean basin.
		2) To familiarize the students
		with the concept of
		erosion and applied
		geomorphology.



M.A.I	Π	VI	Climatology II	 To provide an understand of classification of climate and climate regions. To acquaint the students with the climate and clothing, climatic problem.
M.A.I	Π	VII	Population geography	 To understand the students with the nature, scope of population geography and sources of population data, population distribution and composition. To acquaint the students with fertility and mortality, population growth theory, population and recourses.
M.A.I	Π	VIII	Regional geography of India	 To understand the students India in terms of various regional divisions, their important characteristics. To acquaint the student with agriculture and industries in India.
M.A.I	II	V	Study of landforms analysis techniques	 To identify the different landforms on the topographical maps. To identify the different drainage patterns and types o slopes.
M.A.I	II	VI	Statistical techniques in geography I	1) To introduce some basic statistical techniques to the students to be applied to various themes in geography.



	M.A.I M.A.I	II	VII	Statistical techniques in geography II Representation of	 To introduce the relative measures and co-efficient of correlation techniques to the students to be applied to various theme in geography. To understand the
				Socio-Economic data II	students various cartographic techniques of analysis of socio-economic data
	M.A.I	Π	IX	Geomorphology II	 To acquaint the students with the theories of evolution of continents and ocean basin. To familiarize the students with the concept of erosion and applied geomorphology.
3	M.A.II	III	X	Agricultural geography	 To familiarize the students with concept origin and development of agriculture: and to examine the role of agricultural determinants. The course further aims to make familiarize the students with the application of various theories, models, agricultural system and productivity. To reexamine green revolution in India, contemporary issues and agricultural problems in solapur district.
	M.A.II	III	XI	Settlement geography	 To familiarize the students with conceptual, theoretical and empirical development in settlement studies in geography 2)To provides an idea to the students about the national issues of settlements



M.A.II	III	XII	Biography	1)To introduce the students the
			geography	concept of the biography and
				it's interpretation
				2)To introduce the students the
				climate ,physical environment
				and their interaction with the
				living organisms
				3) To introduce the student with
				the living and nonliving
				environments and their
				interaction with the special
				reference to India
				4)To make aware about
				conservation of biodiversity and
				biotic resources
M.A.II	III	XIII	Cultural	1)To understand diversity of
			geography	culture in the world as well as in
				India
				2) To comprehend the diffusion
				of various ethnic traits and
				religions.
				3)To understand the relationship
				between culture and pattern of
				living and economic
	***			development
M.A.II	III	IX	Quantitative	1)To understand the
			techniques in	students to the
			Economic	quantitative techniques in
			geography	agricultural geography 2)To acquaint the
				2)To acquaint the students to the
				quantitative techniques
				applied in marketing
				geography
 M.A.II	III	X	Introduction to	1) To understand the terms,
191.74.11			computer	concepts involved in
			computer	computer
				2) To familiarize the student
				s with internet ,browser
				and web page
 L	I			and web page



M.A.II	III	XI	Applications of Computer in geography	 To families with geographical data and data structure To acquaint the students to the computer cartography
M.A.II	III	XII	Quantitative techniques in population and settlement	 To understand the student s to the quantitative techniques in population geography

				geography	2) To acquaint the student to the quantitative technique applied in settlement geography
4	M.A.II	IV	XIII	Regional planning and development in India	 To understand and evaluate the concept of region in geography To understand the role and relevance of region in regional planning To identify the causes of regional differences in development ,perspectives and policy imperatives To understand the problems of regional development
	M.A.II	IV	XIV	Development of modern geography	 To introduce the students to the philosophical and methodological foundations of the subject and it's place in the world of knowledge To familiarize student with the major land marked in development of geographic thought at different periods of time.



M.A.II	IV	XV	Political geography	 To understand the basic concepts in political geography To enhance awareness o Multi-dimensional nature of geo-political space To make acquaint the students with nature of geographical factors influencing the geopolitical situations in India and world
M.A.II	IV	XVI	Geography of Tourism	 Acquiring the knowledge of different tourist places in the world To understand emerging developing tourism
				 industry 3) To understand the scope and role of tourism in world as well as Indian Economy 4) To familiarize students with tourism industry 5) Encouraging the students to involve in tourism industry
M.A.II	IV	XIII	Introduction to remote sensing GIS	 Make students familiar with concept of Remote sensing and its use in present Geographic studies To give detailed knowledge about aerial photography Make students familiar with concept of Geographical Information System



M.A.II	IV	XIV	Application Remote sensing	1)	Make students familiar with concept of Remoter sensing and its use in present geographic studies
				2)	To give detailed knowledge about aerial photography
				3)	Make student familiar with concept of geographical information system
M.A.II	IV	XV	Research Methodology a project report	1)	Student will explain field work, techniques of data collection and its presentation
				2)	Student s will describe importance of sampling in research hand skill of report writing
				3)	Students will express knowledge about format of project report

Department of Physical Education

Sr. No	Course Name	Semester	Paper No	Paper Name	Subject Outcomes
1	B.A.I	Ι	Ι	Principles of Physical Education	-To understand meaning, need and importance of physical education To understand the Growth and development.
		II	II	Principles of Physical Education	-To understand the body system and play theory -To understand the aim and objectives of physical education
2	B.A.II	III	III	History of Physical Education	 -To acquire knowledge about Ancient Olympic movement -To acquire knowledge about Different Institution for training in Physical Education in India



		IV	IV V	Organization & Administration in Physical Education & Sports History of Physical Education	 -To understand the meaning, importance and scope of organization, administration and sports management in physical education To understand office Management, Record, Register & Budget. -To acquire knowledge about Modern Olympic movement -To acquire knowledge about Different Institution for training in Physical Education in India
			VI	Organization & Administration in Physical Education & Sports	-To understand the meaning, importance and scope of organization, administration and sports management in physical education To understand office Management, Record, Register & Budget.
3	B.A.II I	V	VII	Health Education	 Health education strives to provide accurate and relevant information about various health topics. knowledge and understanding of health issues, including factors that contribute to good health and those that can lead to illness or disease. The ultimate goal of health education is to influence positive health behaviors. This might include encouraging individuals to adopt healthier eating habits, engage in regular physical activity, practice safe sex, avoid tobacco and substance use, and take preventive measures to reduce the risk of various diseases.
			VIII	Rhythms and Recreation in Physical Education	-Incorporating a variety of rhythmic activities and recreational games into physical education curricula can lead to a well-rounded set of outcomes that benefit students physically, mentally, and socially
			IX	Applied Yoga	-The combination of physical movement, breath control, and meditation in yoga can have a calming effect on the nervous system, helping to reduce stress and anxiety.



 - I				
		Х	Anatomy Physiology	-knowledge of the human body's structure and
			and Physiology Of	function to applications in healthcare, sports,
			Exercise	research, and the development of medical
				interventions.
		XI	diet and Hygiene	-It seems like your question is a bit unclear. If
				you're asking about the outcomes of
				maintaining a healthy diet and good hygiene
				practices, a be happy to provide some
				information
	VI	XII	Health Education	-Health education aims to boost individuals'
				confidence in their ability to make healthy
				choices and manage their own health. When
				people feel empowered to take control of their
				well-being, they are more likely to engage in
				health-promoting behaviors.
				- Effective health education programs can lead
				to measurable behavioral changes. For
				instance, participants might start eating more
				fruits and vegetables, exercising regularly, or
				using seat belts consistently after receiving
				relevant education.
		XIII	Rhythms and	-Recreation helping students manage stress and
			Recreation in	anxiety. Recreation also provides an outlet for
			Physical Education	relaxation and enjoyment.
		XIV	Applied Yoga	-Yoga involves a range of stretching and poses that
				can gradually increase flexibility and range of
				motion in your joints and muscles.
		XV	Anatomy Physiology	-Knowledge of exercise physiology helps in
			and Physiology Of	designing personalized and effective training
			Exercise	programs that target specific fitness goals.
		XVI	diet and Hygiene	-Both a healthy diet and good hygiene practices
				play crucial roles in maintaining your overall
				health and well-being.
				-They are interconnected and contribute to a higher
				quality of life and a reduced risk of various health
				issues.



Department of Psychology

Sr. No	Course Name	Sem. No.	Paper No.	Paper Name	Course Outcome
1	B.A.I	Ι	Ι	Introduction to Psychology	 Students can apply the psychological principles in their real life situations and to learn more effectively about life span development. Students to develop better physical, social, cognitive and personality perspectives. 3) Students opting for competitive examinations are benefited
		II	Ш	Fundamentals of Psychology	 Students can apply the psychological principles in their real life situations and to learn more effectively about life span development. Students to develop better physical, social, cognitive and personality perspectives. 3) Students opting for competitive examinations are benefited.
2	B.A.II	III	III	Psychology of Adolescent and early Adulthood	To students able to familiarize with the basic developmental process of Adolescence to Early Adulthood. 2. Students understand with the knowledge of physical, Cognitive, Social and Personality development to the relating Adolescence and Early Adulthood stages of life
			IV	Psychology of Adjustment	Students able to understand Psychological adjustment to modern life. 2) Students learn adjustment in various life situations in 21 Century
		IV	V	Psychology of Middle and Late Adulthood	Student know the basic developmental process of middle and late adulthood 2) Students learn knowledge of physical, cognitive social and personality development middle and late adulthood.
			VI	Psychology of Modern Life	 Students Learn Psychological applications in modern life. Student Know the Presses of Psychological interpersonal, intimate relationship with Health and work.
	IDS	III	IDS	Modern Logic (IDS) Propositional Logic	 Students will be able to examine Propositional Logic Understand various Modern Logic & symbolic logic
		IV	IDS	Modern Logic (IDS) Predicate Logic	 Students will be able to examine Predicate Logic Understand various Modern Logic & symbolic logic.



Γ	B.A.I	Ι	Ι	Outlines of	To acceptance of self and others with tolerance and
				Indian	understanding.



				philosophy	 II) To inspire the student to confront the philosophical problems implicit in the experience of self, others and the universe, together with the question of their relations to ultimate transcendence (God and immortality) III) Clarity and coherence in explaining philosophical basic concepts and theories. IV) Ability to criticize assumptions and arguments.
		Ι	Π	Outlines of Indian philosophy	To acceptance of self and others with tolerance and understanding. II) To inspire the student to confront the philosophical problems implicit in the experience of self, others and the universe, together with the question of their relations to ultimate transcendence (God and immortality) III) Clarity and coherence in explaining philosophical basic concepts and theories. IV) Ability to criticize assumptions and arguments.
	B.A.II	III	III	Indian Ethics	i) To acquaint the students with the Indian and Western perspectives on good life. ii) To create an awareness about philosophical significance of some of the contemporary problems/issues.
		III	IV	Ancient Greek philosophy	 i) To acquaint the students with the Indian and Western perspectives on good life. ii) To create an awareness about philosophical significance of some of the contemporary problems/issues.
		IV	V	Western Ethics)To acquaint the students with the Indian and Western perspectives on good life. ii) To create an awareness about philosophical significance of some of the contemporary problems/issues
		IV	VI	Modern Western philosophy	 i) To acquaint the students with the Indian and Western perspectives on good life. ii) To create an awareness about philosophical significance of some of the contemporary problems/issues.



Department of Music

Sr. No.	Course Name	Semester	Paper No.	Paper Name	Subject Outcomes
1	B.A.I	Ι	Ι	-	 Introduction to the basic Principles of Music as sound, rhythm. Introduction to classical ragas, taalas. Introduction to the life sketch of Pt. V. N. Bhatkhande.
		Π	Π	-	 Introduction to the basic Principles of Music as sound, rhythm. Introduction to classical ragas, taalas. Introduction to the life sketch of Pt. V. D. Paluskar.
2	B.A.II	III	III	-	 The three aspects of Naad. Musical forms as classical and light classical. Ragas and talas. Introduction to the life sketch of Swami Haridas
			IV	-	 The three aspects of Naad. Musical forms as classical and light classical. Ragas and talas. Introduction to the life sketch of Tansen
		IV	V	-	 The three aspects of Naad. Musical forms as classical and light classical. Ragas and talas. Introduction to Musical forms life sketch of Kishori Amonkar
			VI	-	 The three aspects of Naad. Musical forms as classical and light classical. Ragas and talas. Introduction to the life sketch of Lata Mangeshkar
3	B.A.III	V	VII	-	 Development of musical abilities. History of Indian Music Ragas and talas



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		VIII	-	1) Understanding the importance of music. 2)
				Introduction to Smruti, Gram, Murchana
				etc.
				3) Ragas and talas
		IX	-	1) Loksangeet
				2) Ragas and talas
		X	-	1) Life sketch of Pt. Bhimsen Joshi, Pt. Ravi Shankar
		XI	-	1) Granth and its contribution to music.
				2) Ragas and talas
	VI	XII	-	1) Karnatic music.
				2) Ragas and talas - practical.
		XIII	-	1) Western music.
				2) Ragas and talas - practical.
		XIV	-	1) Prasar Madhyame – T.V., Radio,
				Internet, Computer etc.
				2) Ragas and talas - practical.
		XV	-	1) Musical gharani and its contribution. 2)
				Ragas and talas - PPT presentation.
		XVI	-	1) History of Bhakti sangeet.
				2) Ragas and talas - Concert Paper.



			1	tment of Chemistr	
Sr.	Course	Semester	Paper	Paper Name	Course Outcome
No.			No		
		Ι	Ι	Physical Chemistry	Students are expected to learn about -i)Understanding and significancei)Understanding ratesofChemical Reactions ii)Understanding to second Law of Thermodynamics andCarnot's cycle etc.
			II	Inorganic Chemistry	Students are expected to
1.	B.Sc I				understand about- i) The atomic structure and periodic properties of elements, types of chemical bonding ii) Basic knowledge about VBT and MOT as well as key knowledge of Ionic bonding and crystal structure
			III	Organic Chemistry	Students are expected to - i) To able to think and predict the possible mechanism of various critical organic reactions. ii) Able to imagine 3D structure of organic molecules. iii) Understand the basics of bonding and able to draw correct structure of any organic molecule and comment on its stability
		Π	IV	Analytical Chemistry	Students can - i) Understand the basic elements present in the organic compounds also able to understand the qualitative analysis methods of C, H, N, S and halogen ii) Easily understand the basic principle and classification of chromatography and also able to know paper chromatography and its applications.
2.	B.Sc II	III	V	Organic Chemistry	Students can get to know about - i) various spectroscopic methods

Department of Chemistry



Image: Second strict strist strict strict strist strict strict strict strict strict strict					and knowledge about the stereochemistry ii) Various synthetic approaches for Alcohols, Phenols,
VI Inorganic Chemistry Students can get to know about - i) Knowledge of Co-ordinatio Chemistry, complex formation, Werner's Theory, concept of chelation etc. ii) Lewis concept of Acid and Bases, HSAB concept, Pearson concept, study of <i>d-bloc</i> elements <i>etc.</i> VII Physical Chemistry Students can get to know about - i) Various Laws of thermodynamics, study of electrochemical reactions, terms involved in electrochemistry. ii) Chemistry of solid state substances, distributions Law, and related numerical problems VIII Analytical Industrial Inorganic Chemistry Students can get to know about - i) Details knowledge of volumetric analysis, various terms involved in electrochemistry canalysis, distributions Law, and related numerical problems					
IV VII Physical Chemistry Students can get to know about - i) Viiii Viiii VIII VIIII VIIII VIIII <			VI	Inorganic Chemistry	
IV VII Physical Chemistry Students can get to know about -					0
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IV VII Physical Chemistry Students can get to know about -					
IV VII Physical Chemistry Students can get to know about - i) Various Laws of thermodynamics, study of electrochemical reactions, terms involved in electrochemistry. IV VIII Analytical & Industrial Inorganic Chemistry VIII Analytical & Students can get to know about - i) Various Laws of thermodynamics, study of electrochemical reactions, terms involved in electrochemistry. ii) Chemistry of solid state substances, distributions Law, and related numerical problems 					· · · · · ·
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IVabout - i) Various Laws of thermodynamics, study of electrochemical reactions, terms involved in electrochemistry. ii) Chemistry of solid state substances, distributions Law, and related numerical problemsVIIIAnalytical Industrial Inorganic ChemistryStudents can get to know about- i) Details of volumetric and gravimetric analysis, various terms involved in youmetric analysis, volumetric analysis etc.			VII	Physical Chemistry	Students can get to know
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IV IV electrochemistry. ii) Chemistry of solid state substances, distributions Law, and related numerical problems VIII Analytical & Industrial Inorganic Chemistry Students can get to know about- I) Details knowledg of volumetric and gravimetric analysis, various terms involved in volumetric analysis etc.					
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Chemistry i) Details knowledg of volumetric and gravimetric analysis, various terms involved in volumetric analysis etc.			VIII	-	0
of volumetric and gravimetric analysis, various terms involved in volumetric analysis etc.				•	
gravimetric analysis, various terms involved in volumetric analysis etc.				Chemistry	,
various terms involved in volumetric analysis etc.					
ii) Knowledge of synthesis					-
of industrially important					
heavy chemicals,					•
metallurgy meaning, steps in					
metallurgy <i>etc.</i>			AECO	Densing F 1'1	
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					English, improvement in English
speaking through syllabi					0 1 0



Í	1	1			Γ
			DSE1A	Physical Chemistry	Students can get to know about- i) Introduction to Quantum mechanics, Gibb's phase rule, phase diagram <i>etc</i> .
	1	1	1	1	
3.	B.ScIII	V			ii) Basic understanding of EMF, reduction potentials, oxidation potentials, knowledge about various electrode and photochemistry <i>etc</i> .
			DSE- 2A	Inorganic Chemistry	Students can get to know about- i) Bonding in complexes, detail knowledge of CFT, MOT and their applications in complex study ii) Basic concept of Nuclear Chemistry, theory of catalysis, and details of fertilizers and their role in plant growth <i>etc</i> .
			DSE- 3A	Organic Chemistry	Students can get to know about- i) Detail study of various Name reactions, knowledge of organic synthesis. ii)Detail knowledge of various spectroscopic methods such as mass, NMR, IR etc.
			DSE- 1B	Physical Chemistry	Students can get to knowabout-i)Types of Solutions, variousspectroscopiessuch as Raman

also vibrational and rotation

kinetics with examples and

Detail study of chemical

study of molecules.

thermodynamics etc.

ii)



	VI	DSE2B	Inorganic Chemistry	Students can get to know about- i) Introduction and study of Ffblock elements, concept of metal and semiconductor and their applications. ii) Introduction and detail study of corrosion and passivity and also the knowledge of metal carbonyl involed structural chemistry <i>etc</i> .
		DSE-	Organic Chemistry	Students can get to know

			3B		about- i) Study of various Heterocyclic Compounds, carbohydrates etc ii) Introduction to Hormones and Vitamins, and also the study of various Pharmaceuticals, Agrochemicals etc.
1	M.Sc. I	Ι	DSC-1	Physical Chemistry-I	 Thorough knowledge of macroscopic as well as microscopic system. Understand the idea of wave function. Applications to conjugated systems, zeropoint energy and quantum tunneling. Learn to calculate excess thermodynamic properties.
2			DSC-2	Organic Chemistry- I	 Understand the reactions and mechanisms with knowledge of stereochemistry. Study the stability, structure and reactions of reactive intermediate.



3		DSE-1	A.Inorganic Chemistry-I	 Students learn chemistry of transition element. LearnVSEPR theory and properties of semiconductors with applications. Students should know radioactive decay and techniques like GM counter, tracer technique. Aware about applications of radioisotope.
4		RM	Research Methodology	Student learn basic concept of referencing.Able to understand data

			interpretation. Aware about concept of plagiarism and selfplagiarism Students will understand the principle of NMR spectroscopy and analysis of spectral data.
		Practicals	
	DSC- 1P	Practical-I	Students learn to apply theoretical knowledge for study kinetics phenomenon, determination of radius, as well as adsorption. Students getting skill to handle instruments like Conductivity meter, Refractometer, Potentiometer and pH meter.
	DSC- 2P	Practical-II	Students are made aware of safety techniques and handling of chemicals.



					 In qualitative analysis students getting skillful hand in separation and identification of two component mixture. Students learn vacuum and steam distillation technique.
			DSE- 1P	Practical-III	 In ore and alloy analysis student getting tremendous knowledge about oxidation and reduction phenomenon. Greener approach in preparation and purification of inorganic compounds.
1	M.Sc. I	Π	DSC-3	Physical Chemistry-II	 Students learn photochemical reaction with phenomenon like fluorescence and phosphorescence. Students learn evaluation of mean activity coefficients of ions from E.M.F. data. Study fractional and higher order kinetics. Study kinetics of polymerization and determination of molecular weight from different methods.
2			DSC-4	Organic Chemistry- II	Student confronted with oxidation and reduction reactions using knowledge oxidizing and reducing agents.



				Learn the Electrophilic and Nucleophilic substitution reactions of aromatic compound.
3		DSE-2	Inorganic Chemistry-II	Learn properties of transition and inner transition elements. Learn about extraction
				and applications of metals.
				Getting awareness about role of inorganic chemistry in biological processes at inter and intracellular level.
4		OJT	OJT/In-house Project/ Internship/	Students get awareness about efficiency in specific industries.
			Apprenticeship	Students aware about adequate knowledge about industrial processes.

		Practicals	
	DSC- 3P	Practical IV	Understand kinetics of reaction by differential methods.
			Students getting skill to handle instruments like Polarimeter, Refractometer, and Potentiometer to see solute and solvent behavior in aqueous phenomenon.
	DSC- 4P	Practical V	Learn one and two stage preparations.



					 Students are trained to different purification techniques in organic chemistry like recrystallization, distillation, steam distillation and extraction. Students learn to keep work-up procedure more eco-friendly.
			DSE- 2P	Practical VI	 Students getting awareness of green chemistry and role of green chemistry in pollution reduction. Apply greener approach while ore and alloy analysis. Learn to determine purity from prepared inorganic compound.
			(Anal	M.Sc. II lytical Chmistry - III)	
1	M.Sc. II (Analytical Chmistry)	ш	HCT- 3.1	Advanced Separation Techniques	 Students confronted with advanced chromatographic techniques. Learn dialysis and
					 filtration methods and applications. Students getting enough knowledge about solvent extraction processes and role of equilibrium for solvation.
2			HCT- 3.2	Instrumental Methods of Analysis-I	 Students learn thermal techniques like TGA, DTA and DSC. Getting awareness about radio analytical techniques.



				Getting knowledge about titration methods like radiometric titration, High frequency titration, amperometric titration, electro gravimetric titrations.
3		SCT- 3.1	Applied Analytical Chemistry	Student getting awareness about analysis of agricultural feeds, soil as well as fertilizers and pesticides. Students confronted with key role of chemistry in analysis of mineral, ore and alloy as well as cosmetic product analysis
4		OET- 3.1	Analytical Spectroscopy	Understand various spectroscopic methods for structure determination. Explain instrumentations and methodology in spectroscopy like Raman spectroscopy, Mossbauer spectroscopy. Students confronted with electron spin resonance techniques like SEM, STM, and AFM

		Seminar/ Tutorial/Industrial Visit / Field Tour Practicals	Seminaractivity increases the presentation and discussion skills in students. Helps to improve communication skill.
	HCP- 3.1	Physical Analytical Chemistry	Learn method to prepare solutions at milimolal and ppm scale



			Students getting skill to handle instruments like spectrophotometer, colorimeter, and pH meter.
	HCP- 3.2	Inorganic Analytical Chemistry	Confronted with laboratory procedures like estimation of inorganic content from fertilizers and dairy products.
			Learn application of electrochemistry by estimating dissociation constant potentiometrically
	SCP- 3.1	Organic Analytical Chemistry	The course includes synthesis of some derivatives and organic compounds, which will help them while working in research laboratory in future.
			Analysis of drugs, chili powder, and moisture content determination from food sample
	OEP- 3.1	Spectral Problems	Learn to apply theoretical knowledge of spectroscopic techniques like IR, NMR, ¹³ C-NMR, Mass spectrometry etc.
			Learn to interpret data of thermogram, differential
			thermogram and DSC thermogram.

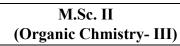
1	M.Sc. II	IV	HCT-	Advanced	Confronted with
	(Analytical		4.1	Analytical	hyphenated techniques
	Chmistry)			Techniques	like GC-MS, LC-MS and
				_	various applications.



				Learn technology used in automated system and flow injection analysis. Able to solve numerical problems on chromatography.
2		HCT- 4.2	Instrumental Methods of Analysis-II	Students getting thorough knowledge about X-ray methods, Nephelometry, turbidometry, flame photometry and emission spectroscopy. Learn to analyze surface characterization by spectroscopy.
		HCT- 4.3	Biochemical and Food Analysis	Understand various terms in food analysis techniques and methods, forensicscience and drug substances. Able to solve numerical problems on analysis food and drug substances. Learn to analyze drug samples to check out for impurities and contaminants.
4		SCT- 4.2	Pharmaceutical Analysis	Learn theory to estimate moisture from biological sample by using karlfischertitrator. Awareness about source of impurities in pharmaceutical materials. Learn standardization and quality control
				methods of drug to maintain standard value. understand various terms in pharmaceutical raw



		material and finished productanalysis
	Seminar/ Tutorial/Industrial Visit / Field Tour	 Seminar activity increases the presentation and discussion skills in students. Helps to improve communication skill.
HCP- 4.1	- Physical Analytical Chemistry	 Maintain proper record of analytical data in notebook Learn method to prepare solutions at milimolal and ppm scale.
HCP- 4.2	- Inorganic Analytical Chemistry	 To describe basic principles techniques / methods of ore analysis, alloy analysis. Determine the capacity of cation and anion exchange resin.
HCP- 4.3	- Organic Analytical Chemistry	 Learn techniques to estimate and determinate biological component from food and beverages. Students carried out different purification techniques in organic samples like recrystallization, distillation, steam distillation and extraction.
SCP- 4.1/4.	5	 Students getting awareness about research field. Insight in to referencing and literature review.





2	M.Sc. II (Organic Chmistry)	III	HCT- 3.1 HCT- 3.2	Advanced Organic Chemistry-I Chemistry of Bioactive Heterocycles	Understand various methods for determining reaction mechanism. Learn various oxidizing and reducing reagents Name reactions with applications Understand the stereochemistry, reactivity and
					conformational effects of six membered rings. Understand the stereochemistry, shapes of rings other than six membered rings.
3			SCT- 3.1	Photochemistry and Pericyclic Reactions	Introduction to pericyclic and photochemical reactions. Understanding of how light energy influences chemical reactions. Students will aware of principles of chemical reactions including cycloadditions.
4			OET- 3.1	Applied Organic Chemistry	Learn the basics of carbohydrates, its physical properties and application. Learn Concept of supramolecular chemistry Application of supramolecularcatalysis.
				Practical	
			HCP- 3.1	Organic Ternary mixtures	In qualitative analysis students getting skillful hand in separation and identification of three





					Understand the separation technique of ternary mixture and the analysis of separated components. Students might explore principles of extractions of ternary mixtures.
			HCP- 3.2	Organic Preparations	To provide laboratory experience to the students by performing experiments based on topics taught in theory. Knowledge to build up small scale industry for developing various products.
			SCP- 3.1	Spectral analysis	Learn to apply theoretical knowledge of spectroscopic techniques like IR, NMR,13C-NMR, Mass spectrometry etc. Learn and become proficient in interpretation of spectral data.
			OEP- 3.1	Column Chromatography	Students confronted with advanced column chromatographic techniques. Students will aware factors affecting on retention time and selectivity.
			OEP- 3.2	Review Work	
1	M.Sc. II (Organic Chmistry)	IV	HCT- 4.1	Advanced Organic Chemistry-II	Students aware about protecting and deprotecting concept in organic synthesis.



2	HCT- 4.2	Modern Organic Chemistry	 Study asymmetric synthesis of chiral compound. Students get proficiency to tackle multicomponent reactions. Aware about applications of metal-organic framework.
3	HCT- 4.3	Chemistry of Natural Products	 Understand various extraction techniques for isolation of natural product. Learn purification of natural product and its characterization by different spectroscopic methods.
4	SCT- 4.1	Medicinal Chemistry	 Confronted with various drug used in medicinal chemistry. Students gain skills in rational drug design Getting awareness about drug interactions with biological system.
		Practical	
	HCP- 4.1	Organic Synthesis	 Understand different name reactions using green method. Learn monitoring of
			Learn monitoring of reactions, purification and characterization of products.
	HCP- 4.2	Organic chemistry	 Student getting practical techniques to isolate constituents from natural sources.
			Understanding the principles behind



			choosing appropriate solvents.
	HCP- 4.3	Project work/ In plant training	Studentsgettingawareness about researchfield.Insight in to referencingand literature review.
	SCP408	Pharmaceutical Formulation/ Medicinal chemistry	Confronted with various drug used in medicinal chemistry. Students gain skills in rational drug design Getting awareness about drug interactions with biological system.
	T4	Seminar/ Tutorial/Industrial visit/ field Tour	Seminar activity increases the presentation and discussion skills in students. Helps to improve communication skill.

Department of Microbiology

Sr. No.	Course	Semester	Paper No.	Paper Name	Outcome
1.	B.Sc. I	I	Ι	Introduction to Microbiology & Microbial diversity	Have developed good knowledge about the development of the discipline of microbiology & contributions made by various scientists
			II	Cell cytology & Microbial Techniques	Have developed good understanding about the cellular organization and techniques to observe microorganisms
		Π	III	Microbial Metabolism & cultivation	 Developed good understanding of basic biomolecules like DNA, RNA, Proteins, carbohydrates etc. Have learned basic thing necessary to cultivate/grow microorganisms



			IV	Applied Microbiology	Got understanding of various applied branches of microbiology like Air microbiology, Water microbiology
2	B.Sc. II	III	V	Bacterial cytology & Physiology	Have developed good understanding of bacterial cell structure, various parts/components & their ultra- structures
			VI	Bacterial Genetics	 Understand genome organization in microrganisms Got good knowledge about basic life related processes like replication
		IV	VII	Immunology & Medical Microbiology	1.Have developed understanding of Immunity, Antigen, Antibody2.Got good understanding of pathogen, diseases diagnostic measures/methods
			VIII	Industrial Microbiology	 Acquired basic knowledge regarding different microbial processes in industries. Understood concept of fermentation
3	B.Sc. III	V	IX	Virology	 Understood what viruses are and their structure, life cycle Gained good knowledge of various plant & animal viruses
		, 	X	Agricultural Microbiology	1. Have developed basic understanding of role of microorganisms in agricultural processes.

			2. Understood various elemental cycles and their importance
	XI	Immunology	 Developed knowledge about different hypersensitivity types & related diseases Understand concept of Monoclonal antibody
	XII	Industrial Microbiology	 Developed knowledge of different types fermentations Aquired knowledge of various products produced from fermentation process
VI	XIII	Microbial Genetics	 Understand genetic organization in microbes Able to understand three basic genetic material transfer processes Understood basics of Bioinformatics



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			IVX	Microbial Biochemistry	 Students understood basic concepts involved in biochemistry of microorganisms. Various pathways that are very basic in every living being.
			XIV	Clinical Microbiology	 Got good knowledge regarding chemotherapeutic agents, their types & mechanisms of action Understood types of biomedical waste & their disposal
			XVI	Environmetal Microbiology	 Have developed good knowledge regarding different types of environments and habitats 2. Understand importance of BOD/COD Developed practical skills to calculate BOD/COD values
4.	M.Sc. I	Ι	HCT 1.1	Cytology & Taxonomy of Microorganisms	 Have developed knowledge regarding diversity of organisms & need of taxonomy. Learned about various criterion used in taxonomy Aquired good knowledge of microbial classification
			НСТ 1.2	Microbial chemistry, Physiology & Enzymology	 Understood basic biological chemistry of organisms Learned about enzymes, their structure & their role in metabolic processes.
			HCT 1.3	Recent trends in Virology	 Understood Virus, their structure, various techniques for their detection Understood recent developments

			in the field of virology
	SCT 1.1	Research Methodology & Scientific writing	1. Aquired knowledge about research ,its planning & execution 2. Learned basic concepts of research, types of scientific documents & how to write scientific papers
II	HCT 2.1	Microbial Genetics	1. Acquired knowledge of gene, their expression and regulation 2. Understood concept of Operon
	HCT 2.2	Microbial Ecology & Diversity	Good understanding of microbial diversity Understood microbial interactions with ecosystem
	SCT 2.2	Medical Microbiology	 Good knowledge of normal flora of human body Understood components of Immune system



			OET 2.1	Bioinformatics & Biostatistics	 Have acquired knowledge of various databases & basic tools used in bioinformatics. Able to search literature data for their project work Understood basic concepts of statistics
5.	M.Sc. II	III	HCT 3.1	Molecular Biology & Genetic Engineering	 Understood biology at molecular level. Aquired knowledge of various tools used in GE Understood the process of making rDNA
			HCT 3.2	Bioprocess Technology & Fermentation Technology	 Have learned various biological processes & their manipulation for the human benefits. Understood importance of microorganisms in fermenting various products
			SCT 3.3A	Immunology & Immunotechnology	1. Understood Immunity, Immune system & Immune responses. 2. Aquired various basic immunological techniques.
			OET 3.4A	Agricultural Microbiology	Developed understanding of multifarious roles of microorganisms in soil, in association with plants.
		IV	HCT 4.1	Pharmaceutical Microbiology	 Aquired knowledge of antimicrobial agents, their nature & mechanism of action Acquired skills for testing pharmaceutical products for their efficiency & safety
			НСТ 4.2	Food & Dairy Microbiology	 Have developed role of microbes in making & spoilage of foods. Acquired knowledge of various processes of dairy industries & role of microbes in making dairy products
			НСТ 4.3	Principles of Bioinstrumentation & Techniques	 Developed understanding of various techniques Understood principles of various instruments
			SCT 4.1	Healthcare & Diagnostic Microbiology	1. Have acquired good understanding of practical aspects of collection of clinical samples, their transport 2. Good understanding of antibiotic sensitivity



DEPARTMENT OF PHYSICS

Sr. COURSE SEMISTER PAPER PAPER NAME	
No. NO.	
1 B.ScI SEM-I PAPER NO-I MECHANICS AND PROPERTIES OF MATTER	 Understanding the concept of Moment of Inertia and applying them in calculations of the moment of inertia of various systems. Understand the physics and mathematics of oscillations and to solve the equations of motion for simple harmonic and damped oscillators Understand the concepts of energy, work, power, the concepts of energy, work, power, the concepts of conservation of energy and be able to perform calculations using them. Understand the concepts of elasticity and be able to perform calculations using them. Understand the concepts of surface tension and viscosity and be able to perform calculations using them. Understand the concepts of viscosity & fluid dynamics and its application in real life problems. Demonstrate quantitative problem solving skills in all the topics covered.



2	B.ScI	SEM-I	PAPER NO-II	OPTICS	 Understand technical applications of simple optical instruments. Understand and explain the different optical method of testing and measuring of various physical parameters Understand Fermat's principle, explain about different aberrations in lenses and discuss the method to minimize them.
					4.Understand the types of eyepieces and construction and working of spectrometer and
					optical bench for determining various optical values.5. Understand the phenomenon of interference of light and its formation in thin
					film, Newton's ring, wedge shaped film etc. due to division of amplitude.
					6. Explain Schuster method, Distinguish between diffraction and interference patterns, prism and grating spectra
					7.Comprehended the basic principle of laser and its parts, the construction and working of He-Ne and Ruby laser.
					8. Solve problems using suitable assumptions

and formulae as well as able to assess□ the

results.



3	B.ScI	SEM-II	PAPER NO-III	HEAT AND THERMODYN AMICS	 Determination of Coefficient of Viscosity, Thermal Conductivity and Diffusion. Understand Liquefaction of gases by various methods and Properties of Liquid He- II.
					3. Apply the laws of thermodynamics to formulate the relations necessary to analyze a thermodynamic process.
					4. Analyse the heat engines and calculate thermal efficiency.
					5. Analyze the refrigerators and calculate coefficient of performance.
					6. Understand property 'entropy' and derive some thermo dynamical relations using entropy concept.
4	B.ScI	SEM-II	PAPER NO- IV	ELECTRICITY , MAGNETISM AND BASIC ELECTRONIC S	 Understand the concept of Varying Current and applying them in charging and discharging of capacitor and time constant. Understand the concept of AC circuits and different AC bridges.
					3. Understand the concepts Magnetostatics
					 and applying then to determine magnetic induction and also understand Ballistic Galvanometer theory and its constants. 4. Understand the rectifiers specially Bridge rectifier with filters also different wave shaping circuits. 5. Understand BJT include its output characteristics under CE and CB mode with application of transistor amplifier.



5	B.ScII B.ScII	SEM-III	PAPER NO-V	General Physics and Sound	 Understand the physics and mathematics basic concepts of vector to solve the problems. Understand the concepts of processional motions and various pendulums and its application in real life problems. Understand the concepts of elasticity and be able to perform calculations using them. Understand the concepts of surface tension and viscosity and be able to perform calculations using them. Understand the physics behind in sound and study basic applications of sound instruments. Understand the concept of transistor and
0	D.SC11	5121VI-111	VI	S	various constructions like BJT include its output characteristics under CE and CB mode



					 with application of transistor amplifier. 2. Understand the concepts of oscillators and its types with applications. 3. Understand the concept of transistor and constructions like UJT include its output characteristics application of transistor amplifier. 4. Understand the physics behind in various instruments and study basic applications of instruments in daily life. 5. Understand the concept of regulator power supply and various its types.
7	B.ScII	SEM-IV	PAPER NO- VII	OPTICS	 Understand technical applications of simple optical instruments and behind various theoretical concepts. Understand and explain the different optical phenomena of light like interference, diffraction and polarization. Understand Fermat's principle, explain about different aberrations in lenses and discuss the method to minimize them. Understand the phenomenon of interference of light and its formation in thin film, Newton's ring, wedge shaped film etc. due to division of amplitude.



		5. Understand the theory of physics behind the fiber optics communication and its

					advantages.
8	B.ScII	SEM-IV	PAPER NO-VIII	MODERN PHYSICS	 Understand the theoretical modern physics concepts and theories like theory of relativity, mass energy relations, and twin paradox Determination of matter waves by physics instruments and study the concept of De- Broglie's hypothesis Understand the laws of Compton effect with experimental verification. Analyze the various nuclear energy models with their principles.



9	B.ScIII	SEM-V	PAPER NO-IX	MATHEMATI CAL PHYSICS & STATISTICAL PHYSCIS	 Determination of vector theorems and introduction to partial differential equation and orthogonal curvilinear coordinates. Understand the basic concepts in statistical physics with classically MB statics. BE and FD statics studied with quantum mechanics To apply the mathematical physics concepts for solving problems of quantum physics.
10	B.ScIII	SEM-V	PAPER NO-X	SOLID STATE PHYSICS	 Understand the structure of solid in atomic level by using some instruments. Determination the various crystal structure by using XRD and study its characteristics. Understand the free electron theory and band theory of solid. Analyze the behavior of solid in external magnetic field and study types of magnetic materials. To study the application of
					superconductors.



11	B.ScIII	SEM-V	PAPER NO- XI	CLASSICAL MECHANICS	 Determination the equations of particles and systems of particles with application of Newton's laws of motions. Understand the Lagranges formulation with D' Alembert's principles and applications of Lagrange's equations with solving problems. Understand the theory of moving coordinate system and techniques of calculus variation. Understand the concept of coupled oscillations. Analyze the motion of rigid body.
12	B.ScIII	SEM-V	PAPER NO- XII	NUCLEAR PHYSICS	 To study nuclear structure and properties with nuclear reactions. Understand the particles accelerator and nuclear radiation detectors. To study the nuclear energy level and theory of elementary particles.
13	B.ScIII	SEM-V	PAPER NO- XIII	SKILL ENHANCEME NT COURSE	 To study of basic practices of thin film deposition. Understand the various characterizations techniques. To adopt the skill of laboratory safety and disaster management. To study the various energy resources and its impact on environments. To study the various applications of physics in medical field.
14	B.ScIII	SEM-VI	PAPER	ELECTRODY	1.To study the electrostatics and charge



			NO-XIV	NAMICS	particle dynamics.
					2. To study time varying fields with its applications as self inductance and mutual inductance.
					3. To study the Maxwell's Equations with its physical significance.
					4. To study the electromagnetic waves with reflection and refraction.
15	B.ScIII	SEM-VI	PAPER NO- XV	MATERIAL SCINECE	1. To study various material and their properties.
					2. To study different material likes polymer, ceramics and composite materials with their composition and applications.
					3. To study the introduction of nano- science and nonmaterial's
16	B.ScIII	SEM-VI	PAPER NO- XVI	ATOMIC PHYSICS,	1. To study the atomic spectra with alkali metals.
				MOLECULAR PHYSICS AND	2. Understand the selection rules and intensity rules.
				QUANTUM MECHANICS	3. To study the anomalous Zeeman effect, paschen Back effect, stark effect with solving their problems.
					4. To study the characteristics properties of Raman lines and classical theory of Raman effect.
					5. Understand the physical significance of □ and application of Schrödinger's equations and operators.
17	B.ScIII	SEM-VI	PAPER NO- XVII	ELECTRONIC S	1. To study block diagram of op-amp its characteristics and applications
					2. To study functional block diagram of



					 To st like SCR, D its application To response to the second second	eview of JFET MOSFET devices
1	M.ScI	SEM-I	HCT 1.1	MATHEM PHYSICS	ATICAL	 Understanding the concept of complex variable and presentation. Understand the analytical functions of complex variables with Cauchy's Integral Theorem. Understand the concepts of operator and matrix analysis. Understand the concepts of ordinary differential equations. Understand Fourier series, Integral transforms and Laplace transform with box and exponential functions.



	HCT 1.2	SOLID STATE	1. Understand the structure
		PHYSICS	of solid in atomic level by
			using some instruments.
			2. Determination the
			various crystal structure by
			using XRD and study its
			characteristics.
			3. Understand the free
			electron theory and band
			theory of solid.
			4. Analyze the behavior of
			solid in external magnetic field
			and study types of magnetic
			materials.
			5 To study the evention time
			5. To study the application
			of

		superconductors.



	HCT 1.3	ANALOG AND DIGITAL ELECTRONICS	 Understand the concept of transistor and various constructions like BJT include its output characteristics under CE and CB mode with application of transistor amplifier. Understand the concepts of oscillators and its types with applications. Understand the concept of transistor and constructions like UJT include its output characteristics application of transistor amplifier. Understand the physics behind in various instruments and study basic applications of instruments in daily life. Understand the concept of regulator power supply and various its types.
	SCT 1.1	CLASSICAL MECHANICS	 Determination the equations of particles and systems of particles with application of Newton's laws of motions. Understand the Lagrange's formulation with D' Alembert's principles and applications of Lagrange's equations with solving problems. Understand the theory of moving coordinate system and



	techniques of calculus variation.

		4. Understand the concept of coupled oscillations.
		5. Analyze the motion of rigid body



2.	M.ScI	SEM-II	HCT 2.1	QUANTUM MECHANICS	1. Understand the physics and mathematics basic concepts of vector to solve the problems.
					2. Understand the concepts of processional motions and various pendulums and its application in real life problems.
					3. Understand the concepts of elasticity and be able to perform calculations using them.
					4. Understand the concepts of surface tension and viscosity and be able to perform calculations using them.
					5. Understand the physics behind in sound and study basic applications of sound instruments.
			HCT 2.2	ELECTRODYNAMI CS	1. To study the electrostatics and charge particle dynamics.
					2. To study time varying fields with its applications as self inductance and mutual inductance.
					3. To study the Maxwell's Equations with its physical significance.
					4. To study the electromagnetic waves with reflection and refraction.



			SCT 2.1 OET 2.1	STATISTICAL PHYSICS FUNDAMENTALS OF ELECTRONICS	 Understand the basic concepts in statistical physics with classically MB statics. To study BE and FD statistics studied with quantum mechanics. To apply the mathematical physics concepts for solving problems of quantum physics. To study block diagram of op-amp its characteristics and applications To study functional block diagram of IC555 and its
					 block diagram of IC555 and its applications. To study the various electronic devices like SCR, Diac, Traic and display devices and its applications. To review of JFET MOSFET devices. To study applications of active and passive devices.
3.	M.ScII	SEM-III	HCT 3.1	SEMICONDUCTOR PHYSICS	 To study the energy bands and charge carrier in semiconductor with Fermi level, electron and holes concentration at equilibrium. To study role of carriers in semiconductor with direct and indirect recombination of electrons and holes with understand Haynes-Shockley experiment.



		charge carriers and lattice, and semiconductor interfaces.4. To understand semiconductor crystal growth process.
НСТ 3.2	ATOMIC AND MOLECULAR PHYSICS	 To study the atomic spectra with alkali metals. Understand the selection rules and intensity rules. To study the anomalous Zeeman effect, Paschen Back effect, stark effect with solving their problems. To study the characteristics properties of Raman lines and classical theory of Raman effect. Understand the physical significance of □ and application of Schrödinger's equations and operators.



			SCT 3.1 OET 3.1	FUNCTIONAL NANOMATERIALS ENERGY HARVESTING DEVICES	 To understand semiconductor quantum dots, nanotubes and nanowires. To understand polymer nanocomposite, nanofibers and metal oxide frameworks. To study solar cell, fuel cell and piezoelectrics.
4.	M.Sc II	SEM-IV	HCT 4.1	SEMICONDUCTOR DEVICES	 To study MIS structures and MOS FETS with its applications. To study power devices GTO, MOS, SCR, DIACs,
					TRIACs, SUS, IGBT.
					3. To study coupled and transferred electron, applications of opto electronics and advanced solid state devices.
			HCT 4.2	NUCLEAR AND PARTICLE PHYSICS	 To study nuclear structure and properties with nuclear reactions. Understand the particles accelerator and nuclear radiation detectors. To study the nuclear energy level and theory of elementary particles. To study various nuclear models and nuclear reactions.
					5. To study particle physics and cosmic rays.



	SCT 4.1	MATERIALS CHARACTERIZATI ON TECHNIQUES	1. To study microscopic techniques I & II with different instruments.
			2. Understand the construction and working of optical, scanning and electron microscopy
			3. Understand the construction and working of transmission electron, scanning tunneling and Atomic force microscopy
			4. To study the x-ray photoelectron spectroscopy, Auger electron spectroscopy, Resonance spectroscopy.
	SCT 4.2	PHYSICS OF NANOMATERIALS	. To study the background of nano-science and nanotechnology.
			2. Understand the band structure and density of states at nanoscale.
			3. Understand the various properties of nanomaterials.
			4. To study growth techniques and characterization tools of nanomaterials.





Department of Botany

Sr.No.	Course	Semester	Paper No.	Paper Name	Course Outcome
1.	B.Sc. I	Ι	Ι	Microbiology & Phycology	 Understand the types and diversity in bacteria, viruses and mycoplasma Understand the diversity among Algae. Know the systematic, morphology and structure, of Algae. Understand the useful, harmful activities and industrial applications of Algae
			Π	Fungi &Archegoniate	 Understand General characteristics, Thallus organization, Cell wall composition Nutrition classification 2) Understand General characteristics, Occurrence, Thallus organization, Life cycle of fungi Understand types and economic importance of Lichen Understand types of Micorrhiza and its applications Understand applied aspects of fungi with respect to biotechnology, industry To understand unique characteristic features of archaegoniate. 7) Understand the morphological diversity, classification and economic importance of Bryophytes. Understand the morphological diversity, classification and economic importance of Pteridophytes. 9) Understand the morphological diversity, classification and economic importance of Pteridophytes. 9) Understand the morphological diversity, classification and economic importance of Pteridophytes. 9)
		II	III	Plant Ecology	 Understand different climatic and edaphic factors Understand form, Structure classification and characteristics of community. Understand concept, components, pyramids, food chain, energy flow and biogeochemical cycles in Ecosystem 4) Understand process and types of succession Understand adaptations in community Understand types and control measures of various pollution.

			IV	Taxonomy of	1) Understand about importance of
				Angiosperms	 taxonomy. 2) With respect to recent knowledge students should know about some angiospermic families and taxonomy. 3) Understand different methods of classification and rules of nomenclature. 4) Understand technique and botanical
2.	B.Sc. II	III	V	Plant Anatomy	gardens in India. 1) Understand the scope & importance of Anatomy. 2) Know various tissue systems. 3) Understand the normal and anomalous secondary growth in plants and their causes. 4) Perform the techniques in anotomy.
			VI	Plant Metabolism	 4) Perform the techniques in anatomy. 1) Understand the concept of ATP synthesis 2) To know about Carbon oxidation with different pathways 3) Understand the properties of Monosaccharides, Oligosaccharides and Polysaccharides. 4) They will learn about the Significance of Carbohydrates. 5) Understand the Properties of saturated fatty acids, and unsaturated fatty acids. 6) Understand lipid metabolism in plants. 7) Understand the Beta Oxidation, Gluconeogenesis and its role in mobilization of fatty acids during germination. 8) They will learn about the Significance of lipids.
		IV	VII	Plant Physiology	 Know about Photosynthesis and Nitrogen metabolism and its importance. To understand the plants and plant cells in relation to water. To understand mineral nutrients and its role. Learn about the movement of sap and absorption of water in the plant.



			VIII	Embryology of Angiosperms	 To know reproductive development in angiospermic plants. To understand anther and pollen biology
					biology.3) To understand ovule
					 4) To know the process of pollination and fertilization in the angiosperm. 5) To understand embryo and endosperm.
3.	B.Sc. III	V	IX	Plant	1) Understand principles of general
				Systematics	tonomy and they can usenonenclature rules plants.2)Understand historical
					development of taxonomy.3) Explain concept of species.
					4) Order sub and super categoriesof
					species according to Linnaeus hierarchy.
					5) Discuss the importance of nomenclature rules in botany.
			X	Genetics	 To understand basic concept of Genetics. To know variation in Mendelian and Post Mendelian Genetics To understand sex determination and sex linkage To know the concept of population genetics Understand Extra- chromosomal inheritance To know the structural and numerical changes in the chromosome. To know types of mutation, molecular basis and mutagens.
			XI	Molecular Biology	 Learn the scope and importance of molecular biology. Understand the biochemical nature of nucleic acids, their role in living systems, experimental evidences to prove DNA as a genetic material. Understand the process of synthesis of proteins.



	XII	Plant Breeding	 breeding. 2) To introduce the student with branch of plant breeding for the survival of human being from starvation. 3) To study the techniques of production of new superior crop verities. 4) Understand the modern strategies applied in Genetics and Plant Breeding to sequence and analyze genomes
VI	XIII	Plant Pathology	 5) Get the detail knowledge about modern strategies applied in Plant Breeding for crop improvement i.e. Mass selection, Pure line Selection and Clonal selection. 6) Know about exploitation of Heterosis, hybrid and variety development and their release through artificial hybridization. 7) Understand the role plants in human welfare. 8) Gain knowledge about various plants of economic use. 9) Know importance of plants & plant products. 1) Understand the scope and importance of Plant Pathology. 2) Know the prevention and control measures of plant diseases and its
	XIV	Plant Biotechnology	 effect on economy of crops. 1) Understand the fundamentals of Recombinant DNA Technology. 2) Know about the Genetic Engineering. 3) Understand the principle and basic protocols for Plant Tissue Culture. 4) To understand applications of biotechnology in relation to the crop improvement.
	XV	Cell Biology	 Understand the structures and purposes of basic components of prokaryotic and eukaryotic cells, especially macromolecules, membranes, and organelles. Students will understand how these cellular components are used to generate and utilize energy in cells.



XVI	Biostatistics	 To know the basic concepts of Biostatistics To understand collection of primary and secondary data To understand calculation of mean, mode median and variations
		 mode median and variations 4) To know probability 5) To know statistical inference with respect to 't' test and chi square test

Sr. No.	Course	Sem	Paper No.	Paper Name	Course Outcome
1	M.Sc. I	Ι	HCT 1.1	Biology and diversity of fungi, bacteria, viruses and lichens	 Understand General characteristics, Occurrence, Thallus organization, Life cycle of fungi 2) Understand types and economic importance of Lichen Know the prevention and control measures of plant diseases and its effect on economy of crops. Understand the types and diversity in bacteria, viruses and fungi
			HCT 1.2	Biology and diversity of Algae, bryophytes and pteridophytes	 Understand the diversity among Algae. Know the systematic, morphology and structure, of Algae. Understand the useful, harmful activities and industrial applications of Algae. Understand the morphological diversity, classification and economic importance of Bryophytes and pteridophytes.
Stivel Mana			HCT 1.3	Plant Ecology	 Understand different climatic and edaphic factors Understand form, Structure classification and characteristics of community. Understand concept, components, pyramids, food chain, energy flow and biogeochemical cycles in Ecosystem Understand process and types of succession

		SCT 1.1	Taxonomy of angiosperms	 With respect to recent knowledge students should know about some angiospermic families and taxonomy.
				 To know reproductive development in angiospermic plants. To understand anther and pollen biology. To understand ovule
	II	HCT 2.1	Biology and diversity of gymnosperms and paleobotany	1) Understand the morphological diversity, classification and economic importance of Gymnosperm.

		2) To get information about the types of plant that lived during different time period.
HCT 2.2	Tools and techniques in botany	 Analyze data using appropriate statistical methods. Create, select, and apply appropriate techniques, resources, and modern instruments and equipments for Biochemical estimation, Molecular Biology, Biotechnology, Plant Tissue culture experiments, cellular and physiological activities of plants with an understanding of the application and limitations. 3) To know probability To know statistical inference with respect to 't' test and chi square test



			HCT 2.3	Cell and molecular biology	 Learn the scope and importance of molecular biology. Understand the biochemical nature of nucleic acids, their role in living systems, experimental evidences to prove DNA as a genetic material. 3) Understand the process of synthesis of proteins. Understand the Biochemical nature of cell.
			OET 2.1	Advances in plant pathology	1) Understand the scope and importance of Plant Pathology. 2) Know the prevention and control measures of plant diseases and its effect on economy of crops.
2	M.Sc. II	III	HCT 3.1	Plant embryology and Palynology	 To understand anther and pollen biology. To understand ovule To know the process of pollination and fertilization in the angiosperm. 4) To understand embryo and endosperm.
			HCT 3.2	Cytogenetic and crop improvement	 To understand basic concept of Genetics. To know variation in Mendelian and Post Mendelian Genetics 3) To understand sex determination and sex linkage To know the concept of population genetics
					 5) Understand Extra- chromosomal inheritance 6) To know the structural and numerical changes in the chromosome. 7) To know types of mutation, molecular basis and mutagens.
			SCT 3.2	Angiosperm Systematics	 Understand the interrelation between plants and their evolutionary descent. To reconstruct development of plant life. To arrange the taxa into logical hierarchy that permits easy and simple recognition in the basis of similarity.



		OFT 2.2	TT 1 . 1 1	
		OET 3.2	Herbal and drug	1) Understand raw material as a source
			technology	of herbal drugs from
				cultivation to herbal drug product
				2) To know the WHO and ICH
				guidelines for evaluation of herbal
				drugs.
				3) To know the herbal cosmetics,
				natural sweeteners, nutraceuticals.
	IV	HCT 4.1	Phytogeography and	1) To explain the ranges of
			conservation biology	plants in terms of their origin,
				dispersal and evolution.
				2) To know about branch of
				biogeography that is concerned with
				the geographic distribution of plant
				species and their influence on earth
				surface
				3) To protect species, their
				habitat and ecosystems from
				excessive rates of extension and the
				erosion of biotic interactions.
		HCT 4.2	Plant tissue culture,	1) Understand the principle and basic
		1101 7.4	green house technology	protocols for Plant Tissue Culture. 2)
			and hydroponics.	To understand applications of
			and hydropolites.	biotechnology in relation to the crop
				improvement.
				3) To study the hydroponic system to
				deliver an optimized nutrient
				solutions to plant root.
		SCT 4.2	Modern trends in	1) To provide the knowledge of
		501 r.2	angiosperm taxonomy	taxonomy is possible with the
			angiosperin taxonomy	• 1
				principles of various disciplines like
				cytology, genetics, anatomy,
				physiology, geographical
				distribution, embryology numerical
				taxonomy.
				2) To improve present day
				knowledge of phylogeny of plants. 3)
				To develop taxonomic characters this
				may improve existing system of
				plant classification.
		OET 4.2	Industrial botany	1) It helps in the area of
				economic productivity because it I
				involved in the study of plants and
				ideal growing techniques
				2) It contribute significantly to
				anthropology, biology, conservation,
				botany and other fields of science 3)
				Commercial exploitation of plants by
1				peoples.



Sr.	Course	Semest	r	Ê	Subject Outcomes
	Course		Paper No	Paper	Subject Outcomes
No.	Name	er	No	Name	
1	B. Sc. I	Ι	Ι	Animal	- Zoology has tremendous job potential. a) The successful
				Diversity I	students will be able to establish research organizations
		II	II	Animal	with the help of agriculture, environment protection and also their own industry for transgenic animals, clinical
				Diversity II	pathology, genetic counseling, human karyotyping etc. b)
			III	Comparativ	Scientific Research Organizations. c) Universities in India
				e Anatomy	& aboard.
				of	
				vertebrates	
			VI	Developme	
				ntal	
				Biology of	
				vertebrates	
2	B.Sc.II	III	V	Cell	Zoology has tremendous job potential. The successful
				Biology	students will be able to establish research organizations
			VI	Demograph	with the help of agriculture, environment protection and
				ic Studies	also their own industry for transgenic animals, clinical
		IV	VII	Principles	pathology, genetic counseling, human karyotyping etc.
				of Ecology	Scientific Research Organizations. Universities in India &
			VIII	Fundament	aboard.
				als of	
				Biochemist	
				ry	
3	B.Sc.III	V	IX	DSE-1A-	- Develop an understanding of concepts, mechanisms and
				Molecular	evolutionary significance and relevance of molecular
				Biology	biology in the current scenario. Get well versed in
					recombinant DNA technology which holds application in
					biomedical & genomic science, agriculture, environment
					management, etc. Therefore, a fundamental understanding
					of Molecular Biology will help in career building in all
					these fields. Apply their knowledge in problem solving
					and future course of their career development in higher
					education and research. Get new avenues of joining
					research in related areas such as therapeutic strategies or
					related□ opportunities in industry.

Department Geography Zoology



chromosome number and structure. ☐ Relate the conventional and molecular methods for gene				X	Principles	After successfully completing this course, the students will be able to: Understand how DNA encodes genetic information and the function of mRNA and tRNA Apply the principles of Mendelian inheritance. Understand the cause and effect of alterations in chromosome number and structure. Relate the conventional and molecular methods for gene
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				manipulation in other□ biological systems. Discuss and analyse the epigenetic modifications and imprinting and
				its role in diseases. Get new avenues of joining research
				in related areas such as genetic engineering of cells,
				cloning, genetic disorders, human fertility programme, genotoxicity, etc
		XI	DSE- 3A- Endocrinol ogy	- Understand neurohormones and neurosecretions. Learn about hypothalamo and hypapophysial axis. Understand about different endocrine glands and their disorders. Understand the mechanism of hormone action.
	VI	XII	DSE 4 A- Wildlife Conservati on & Manageme nt	Students will understand the factors affecting the need to find sustainable practices Students will understand the general principles of ecology as how they related to terrestrial□ and/or aquatic plant and animal conservation and management. Students will be able to identify species, characteristics, habitat requirements and life cycles of□ birds, fish and/or wildlife species. Students will be able to evaluate current events and public information related to wildlife□ conservation and management as being scientifically-based or opinion
		XIII	DSE- 1B- Animal Physiology : Life Sustaining Systems	After successfully completing this course, the students will be able to: Understand the physiology at cellular and system levels. Understand the mechanism and regulation of breathing, oxygen consumption and determination of respiratory quotient. Understand the process of digestion and excretion. Understand the renal physiology Understand the process in haematology Learn the determination of hemoglobin content, blood groups and blood pressure. Understand the process of Physiology of Heart



	XIV	DSE- 2B Evolutionar y Biology	1
	XV	Animal Behaviour and Chronobiol ogy	- Understand the. Biological Clocks and its importance Understand how Biological Rhythm influence animal behavior Understand Social and Sexual Behaviour of animals Understand Behaviour Patterns of animals
	XV	DSE 4B- Applied Zoology	Students will understands the fisheries Students will learn the sericulture and Lac culture techniques□ Students will understand the Apiculture techniques□ Students will learn how to initiate Aquaculture practices.□ Students can incorporate social information about poultry and dairy



	Mathematics							
Sr. No	Course	Semes ter	Paper No	Paper Name	Course Outcome			
· 1	B.Sc- I	Ι	Ι	ALGEBRA	Understanding the applications of matrices			
					Understanding how they can calculate roots of a complex numbers.			
			Π	CALCULUS	Calculate the limit and examine the continuity of a function at point.			
					Explain the properties of threedimensional shapes.			
		II	III	GEOMETRY	Learn how to change points and equations in Cartesians to Polar.			
					Understand the Geometry of plane and spheres.			
			IV	DIFFERENTIA L EQUATIONS	Learn various methods of solving first order and firstdegree differential equations occurring in Physics, Chemistry and Engineering Sciences.			
					Understand the genesis of ordinary differential equation			
2	B.Sc- II	III	V	Differential Calculus	Find maximum and minimum value Jacobian of n order and find curvature of any given curve as well as find tangents and normals of any given curve.			
			VI	Laplace Transform	Define Laplace transform inverse Laplace transform and applications			
		IV	VII	Differential Equations	To solve differential Equation of first order and of degree higher than the first, linear equation of the second order, homogeneous linear equation			
			VIII	Abstract algebra-I	Apply the theory of groups to number systems, define group and its properties,homomorphism and isomorphism			
3	B.Sc- III	V	IX	Algebra – II	Understand the theory of rings and fields as well as linear algebra			
			Х	Complex Analysis	Define Analytic Function, Complex Differentiation, Cauchy-Rieman equation.			

Department Of Mathematics



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					Complex Integration, Line
					Integration, Cauchy Integral Formula,
					Power Series, Laurent Series.
			XI	Real Analysis	To understand completeness of set of
					real number, absolute value of real
					number.
					Define series of real number, Cauchy
					root test, D'Alembert's test, Ratio test
					for convergence of series.
			XII	Partial	: Learn to Partial Differential
				Differential	Equation, Formation of Partial
				Equations	Differential Equation, types of partial
				(Elective - A)	differential Equation.
					Lagrange's Method, Charpit's
					Method.
		VI	XIII	Metric Spaces	Define metric spaces
					completeness, compactness and open,
					closed sets
			XIV	Numerical	Define operators, finite difference,
				Analysis	Gauss Interpolation Formula,
					Newton's Interpolation
					Formula(Center, forward, backward)
					Numerical differentiation and
					integration, Maxima and minima of
					tabulated function, Difference
					equation.
			XV	Graph Theory	Able to define the basic concepts of
					graphs, directed graphs, and weighted
					graph
			XVI	Integral	Acquire the knowledge of double
				Calculus	integral beta, gamma function and
1				(Elective - A)	improper integral



Department of Electronics

SR. NO	COURSE	SEMISTER	PAPER NO.	PAPER NAME	COURSE OUTCOME
1	B.Sc.I	I	I	Basic Circuit Theory and Network Analysis	□ Students will get basic understanding of the subject. □ To
			11	Digital Fundamentals	encourage students to develop approach towards upcoming electronic technologies.
		П		Semiconductor Devices	 Students will get hands-on on various circuits and instruments.
			IV	Digital Electronics	To equip students with adequate fundamental concepts and knowledge base.
2	B.Sc.II	ш	v	Electronic Circuits	• To equip student with necessary fundamental concepts and knowledge base.
			VI	Pulse and Switching Circuits	To develop specific practical skills.
		IV	VII	Operational Amplifier and Applications	• To encourage student to develop skills for accepting challenges of
			VII	Digital Techniques and Microprocessor	upcoming technological advancements. • To prepare students for demonstrating the acquired knowledge.



3	B.Sc.III	V	IX X XI XII	 Linear Integrated Circuits and Applications Fundamentals f Microcontroller Sensors and Transducers Electronics Communication 	 To impart training on circuit design, analysis, building and testing. To design the syllabus with specific focus on key Learning Areas. To encourage student to develop skills for accepting challenges of upcoming technological advancements. To expose the students to onlineshooter certificate courses such as MOOC / SWAYAM/ NPTEL, etc.
		VI	XIII XIV XV XVI	 Power Electronics Embedded System Design Electronics Instrumentation Modern Communication Systems 	 To impart training on circuit design, analysis, building and testing. To inculcate awareness among the student to perform the project so find us trial standards, which could also, ensures the interdisciplinary approach. To provide the knowledge of design and implementation of instrumentation of significant preciseness. To expose the students to the industrial environment a on job training and internship may be provided



	Economics						
Sr.	Course	Semes	Paper	Paper Name	Subject Outcomes		
No.	Name	ter	No				
1	B.A.I	Ι	Ι	Indian Economy	-To understand meaning, need and importance of Indian economy To understand the Growth and development.		
		II	II	Indian Economy	-To understand the unemployment -To understand the aim and objectives of economy.		
2	B.A.II	III	III	Money and Banking	-To acquire knowledge about money -To acquire knowledge about banking system.		
			IV	Demographic Studies	To understand the meaning, importance and scope of demographic studies.To understand the census.		
		IV	V	Public finance	To acquire knowledge about public finance.To acquire knowledge about fiscal policy.		
			VI	Demographic Studies	-To understand the meaning, importance and scope of demographic studies.		
3	B.A.	V	VII	Micro	- to understand the concept of land labour		
	III			Economics	price monopoly etc.		
			VIII	Macro	-to know about the macro level issues in		
				Economics	the country.		
			IX	History of Economic Thought	-To understand the knowledge of economic thoughts of western economists.		
			X	Development Economics	-knowledge of the development concepts.		
			XI	Agricultural Economics	To understand Indian agriculture.		
		VI	XII	Micro Economics	-to understand the different price, market concepts.		
			XIII	Macro Economics	-to know about the trade cycles, monetary policies.etc.		
			XIV	History of Economic Thought	-to know about Indian economist thoughts on the economics.		
			XV	Development Economics	-Knowledge of hdi,hpi,gem etc.		

Department of Economics



			XVI	Agricultural Economics	-to understand the problems and solutions on agricultural crises.
1	M.A .I	I& II	Ι	Micro economic analysis	-To understand meaning, need and importance of land labor, monopoly, market theories etc.
			II	Economics of growth and development	-To understand the unemployment -To understand the aim and objectives of economy.
			III	Economics of Environment	-To acquire knowledge about money -To acquire knowledge about banking system.
			IV	Industrial Economics	To understand the meaning, importance and scope of demographic studies.To understand the census.
			V	Financial institutes and markets	To acquire knowledge about public finance.To acquire knowledge about fiscal policy.
2	MA. II	III & IV	VI	Macro Economic analysis	- to understand the concept of money,inflationunemployment,trade cycles etc.
			VII	Public Economics	-to know about the macro level issues in the country of income, expenditure, taxes. budget etc.
			VIII	Research methodology	-To understand the knowledge of research methods data collection, report writing etc.
			IX	Adgricultural development of india	-knowledge of the development concepts of agriculture in india.
			Х	International trade and finance	To understand the concepts of trade, trade theories,trademou's.etc.



Department of Sanskrit

S	Course	Sem	Paper	Paper Name	Course Outcomes
N)				

1	BAI	Ι&Π	Ι	SanskritVihar	 Introduce importance of Aayurveda Tointroduce ModernstyleofSanskrit To Increase morality in students
2	BAI	I & II	Com	Sanskritmayukh	 To introduce Upanishad philosophy Modern Sanskrit they can learn different types of literature Student will aware for goodhealth
3	BAII	Ш	Ш	Prachin Bhartiya Jalshastra	 To introduce scientific knowledge In Sanskrit The paper introduces a branch of science Student canknow the technique Of find underground water
4	BAII	III	IV	Karakprakaran	 Student can achieve knowledge About vibhakti Student can make sentence Useful for speaking Sanskrit
5	BAII	IV	V	Bhagvadgeeta	 Student can achieve valuable Knowledge of Indianphilosophy They can learnt the technique of Mental ,physical and spiritual peace Through yogshastra
6	BAII	IV	VI	Kavyashastra	 To introduce the poetics in Sanskrit Language Introduction of Alankaras Which is important for language



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PRINCIPAL Spri Shivaji Mahavidyalaya Barshi,Dist.Solapur