

Shetkari Shikshan Sanstha's



## ARTS, COMMERCE & SCIENCE COLLEGE, MAREGAON (ROAD)

Dist. Yavatmal- 445 303 (M.S.) India

(Affiliated to Sant Gadge Baba Amravati University, Amravati)

NAAC Accredited at 'B+' grade with CGPA 2.51 (Cycle-I)

### 2.6.1: Program Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the institution are stated and displayed on website and attainment of POs and COs are evaluated

The students who have completed three years undergraduate program BA, BCom and BSc will be awarded a Bachelor's Degree. Some of the desirable learning outcomes which a student should be able to demonstrate on completion of Bachelor's Degree will include the following:

#### PROGRAM OUTCOMES (POs):

Program	Program Outcomes
<b>BACHELOR OF ARTS (BA)</b>	<p>Students</p> <ul style="list-style-type: none"><li>• Demonstrated the critical thinking and analytical skills.</li><li>• developed the proficiency in written and verbal communication.</li><li>• analysed and interpret texts, literature and other forms of media.</li><li>• becomes familiar with theories and concepts in the humanities.</li><li>• developed strong research and information literacy skills.</li><li>• prepared students for realization of social responsibility and humanity.</li><li>• developed various skills and employability.</li><li>• developed critical thinking.</li><li>• becomes most responsible and ethical citizen for the nation.</li><li>• prepared students responsible about woman health problems and remedies for it.</li><li>• improved regional and English language communication skills.</li></ul>

	<ul style="list-style-type: none"> <li>• prepared for various competitive examinations in civil services.</li> <li>• understand social relations, social values and social culture.</li> <li>• prepared for use of knowledge in real life.</li> <li>• prepare for knowledge about Constitution of India.</li> </ul>
<b>BACHELOR OF COMMERCE (BCom)</b>	<p>Students</p> <ul style="list-style-type: none"> <li>• understand the fundamental business concepts and principles.</li> <li>• analyzed data and interpretation.</li> <li>• gained knowledge of accounting, finance, marketing, management, and economics.</li> <li>• applied business theories and practices to real-world situations.</li> <li>• developed communication and interpersonal skills.</li> <li>• developed social responsibility in a business context.</li> <li>• promotes Entrepreneurship.</li> <li>• improved Human Resources Management.</li> <li>• developed Numerical ability.</li> <li>• developed business-oriented skill.</li> <li>• analyzed organizational problems and general realistic solutions based on current academic research.</li> <li>• analyzed range of problems in Economics Accounting, marketing, management and finance.</li> <li>• developed knowledge of macroeconomic theory as it relates to current macroeconomics policy and issues.</li> <li>• developed knowledge of key concepts underlying quantitative decision analysis.</li> <li>• developed knowledge of commerce theory as it related to markets, firms, government policy and resource allocation.</li> </ul>

**BACHELOR OF SCIENCE  
(BSc)**

Students

- developed foundation in scientific principles and methodologies.
- developed quantitative and analytical skills.
- understand the various scientific methods and experimental design.
- gained knowledge and application of theories in specific scientific disciplines (Physics, Chemistry, Mathematics, Computer Science, Botany, Zoology).
- collect, analyzed, and interpret scientific data.
- developed strong problem-solving and critical thinking abilities.
- developed scientific thinking.
- understand and creating the interest in environmental issues.
- understand the scientific concept on practical base.
- created ability to analyze and interpret numerical data.
- developed the mathematical logic which is very useful for solving mathematical reasoning problems.
- identify and described the physical systems with their professional knowledge.
- developed Knowledge and importance about scientific quantities.
- understand working characteristics, properties and applications of various instruments.
- identify various important resources which are helpful for living organism.
- identify different species of plants and animal.
- created knowledge about inheritance and metabolic activities.

**PROGRAM SPECIFIC OUTCOMES (PSOs):**

<b>Program</b>	<b>Subject</b>	<b>Program Specific Outcomes</b>
<b>BACHELOR OF SCIENCE (BSc)</b>	<b>Physics</b>	<p>Students</p> <ul style="list-style-type: none"><li>• Understand the basic laws of physics, their corollaries and comprehension of how they can be applied to explain specific natural phenomena within classical mechanics, electricity and magnetism, thermal and statistical physics, modern physics including quantum mechanics and relativity.</li><li>• developed the ability to apply physics principles to solve a variety of problems, both theoretical and practical, using mathematical and analytical methods.</li><li>• improved their proficiency in using mathematical techniques and quantitative reasoning to describe and analyze physical phenomena.</li><li>• developed research skills which might include advanced laboratory techniques communication skills.</li><li>• applied theoretical knowledge of principles and concepts of Physics to practical problems.</li><li>• developed the ability to critically evaluate scientific information, theories, and experimental evidence and understand the scientific method and be</li></ul>

		<p>able to design and conduct scientific investigations.</p> <ul style="list-style-type: none"> <li>• demonstrated the use of critical thinking, hypothesis building and application of the scientific methods to physics concepts.</li> <li>• understand the physics as a teaching and research career and doing job in various industries, colleges, etc.</li> <li>• demonstrated scientific concepts, ideas and results through oral presentations, technical reports, and written assignments.</li> <li>• applied physics principles to practical situations, technological advancements, and interdisciplinary areas, such as engineering, medicine, and environmental sciences.</li> </ul>
<b>BACHELOR OF SCIENCE (BSc)</b>	<b>Chemistry</b>	<ul style="list-style-type: none"> <li>• Students understand the basic principles of chemical sciences.</li> <li>• Students acquire the knowledge of basic and applied chemistry.</li> <li>• Study of physical properties of matter - melting point, boiling point, surface tension, viscosity, optical activity, etc.</li> <li>• The obtained knowledge is quite promising and forms the foundation of advanced knowledge in further higher education. Students understand basic</li> </ul>

		<p>mathematical concept and their applications in practicals.</p> <ul style="list-style-type: none"> <li>• Student's understand different methods of compound analysis.</li> <li>• Students understand the role of chemistry in daily life.</li> <li>• Students learn the chemical composition of some of the products of routine use fats, oils, soaps etc.</li> <li>• Students can handle basic and modern instruments independently.</li> <li>• Students understand and follow safe laboratory practices.</li> <li>• Students learn problem solving approach.</li> </ul>
<b>BACHELOR OF SCIENCE (BSc)</b>	<b>Mathematics</b>	<ul style="list-style-type: none"> <li>• The course increases the thinking capacity of the students.</li> <li>• The course develops the skill of applications of mathematics to the real value problems.</li> <li>• The course enables to study the numerical methods for the problems.</li> <li>• The course gives the ideas of number systems and their extension.</li> <li>• The course gives the ideas and methods to solve different differential equations.</li> <li>• The course enables to learn abstract mathematics.</li> </ul>

		<ul style="list-style-type: none"> <li>• The course enables to generalize the ideas in mathematics.</li> <li>• The course gives the ability to solve linear differential equations of nth orders.</li> <li>• The course is able to conduct the self-evaluations and continuously enrich themselves through lifelong learning.</li> <li>• The course is able to setup mathematical models of real-world problem and obtain their solutions.</li> </ul>
<b>BACHELOR OF SCIENCE (BSc)</b>	<b>Botany</b>	<ul style="list-style-type: none"> <li>• Students are able to obtained careers in the Botany.</li> <li>• Students are able to work outdoors, in forests, or fields for identification of Plants.</li> <li>• Students are able to work in laboratories, museums, in botanical gardens, or in industry.</li> <li>• Students are able to study diversity of plant, environmental monitoring and protection and agriculture in seed companies.</li> <li>• Most of the students will be admitted for post graduate/higher studies in natural science, agriculture, environmental sciences, etc.</li> <li>• Students can be developed organic farming bio-fertilizers production.</li> </ul>

		<ul style="list-style-type: none"> <li>• Students will be placed in forest services in Forest Department</li> <li>• Students may be placed in pharmaceutical industries</li> <li>• Students are able to develop Botanical garden, landscaping, Plant Nurseries, plant multiplications and breeding technician.</li> </ul>
<b>BACHELOR OF SCIENCE (BSc)</b>	<b>Zoology</b>	<ul style="list-style-type: none"> <li>• Students developed scientific principles, behaviors, evolution and physiological aspects of animals.</li> <li>• Students understand the identification, classification, observation, clarity of thought and expression, systematic approach, morphological and anatomical knowledge.</li> <li>• The program empowers the students to appear for various competitive examinations or choose the post graduate program of their choice.</li> <li>• This program updates the knowledge of learners to formulate and study of biodiversity.</li> <li>• This program enables the students to perform the jobs in diverse fields such as Forest department, Genetic engineering, Zoological survey of India, Agricultural sector, Academicians, self-</li> </ul>



		<p>business, etc.</p> <ul style="list-style-type: none"> <li>• Students gain ability to identify and classify different animal species based on their characteristics and taxonomy.</li> <li>• Students gain the Knowledge of the physiological processes and adaptations that enable animals to survive and thrive in various environments.</li> <li>• Students understand the ecological interactions and relationships between animals and their environments, including predator-prey dynamics, competition and symbiosis.</li> <li>• Students understand the animal behavior, including communication, social organization, and reproductive strategies.</li> <li>• Students analyzed and interpret scientific data related to zoological research, including the use of statistical methods and experimental techniques.</li> <li>• This course develops critical thinking and problem-solving skills through the application of zoological concepts and principles to real-world scenarios.</li> <li>• Students understands the conservation issues related to animal populations and</li> </ul>
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		<p>ecosystems.</p> <ul style="list-style-type: none"> <li>Students developed for further studies in various fields such as research, education, wildlife management, conservation, veterinary medicine, or environmental consulting.</li> </ul>
<b>BACHELOR OF SCIENCE (BSc)</b>	<b>Computer Science</b>	<ul style="list-style-type: none"> <li>This program makes learners aware of the history of the discipline of Computer Science and understand the conceptual underpinnings of the subject.</li> <li>Students understand the nature of the software development process, including the need to provide appropriate documentation.</li> <li>The program also empowers the graduates to appear for various competitive examinations or choose the post graduate program of MSc Computer Science.</li> <li>Understand the nature of the software development process, including the need to provide appropriate documentation.</li> <li>Understand standard techniques for solving a problem on a computer.</li> </ul>
<b>BACHELOR OF ARTS (BA)</b>	<b>English</b>	<ul style="list-style-type: none"> <li>Students demonstrated the capacity to write and speak clearly and think critically.</li> </ul>

		<ul style="list-style-type: none"> <li>• Students participated in critical conversations and prepare, organize and deliver their work to the public.</li> <li>• Students understand the nature and uses of language in the light of audience and purpose.</li> <li>• Developed and innovate effective writing processes to compose text for the variety readers.</li> <li>• Strengthens student's ability in listening, speaking and writing both at practical and theoretical level.</li> <li>• Students get acquainted to the grammatical properties and their uses.</li> <li>• To encourage face to face communication.</li> <li>• Students gave oral presentations and receive feedback on their performance.</li> <li>• Students enlarged their vocabulary.</li> <li>• Identify and become familiar with the scope, methodology and application of modern English and learn to appreciate its ability to explain various aspects.</li> <li>• Understand theoretical and practical concepts of English used in most fields.</li> <li>• Design and carry out scientific experiments and record the results of such experiments in Learning English Language.</li> </ul>
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		<ul style="list-style-type: none"> <li>• Understand the function of different speech organs.</li> </ul>
<b>BACHELOR OF ARTS (BA)</b>	<b>Marathi</b>	<ul style="list-style-type: none"> <li>• Students learn various literary streams, their nature, scope etc.</li> <li>• Students learn numerous thinkers on human life, values, and human problems expressed in Marathi.</li> <li>• Enhances empathy, inclusiveness, tolerance and human values in the students.</li> <li>• Students able to study multi-disciplinary aspects of Marathi.</li> <li>• Students learn Marathi culture with its variety and plurality in Indian culture.</li> <li>• Developed communication skills in the students.</li> <li>• Students understand the importance of food taste in our daily life and our happiness.</li> <li>• Students understand the value of advertisement and effects of dowry system.</li> <li>• Students learn Biography of Carver and his work and increasing the critical attitude about literature studies.</li> </ul>
<b>BACHELOR OF ARTS (BA)</b>	<b>Political Science</b>	<ul style="list-style-type: none"> <li>• Understand salient features of the Indian Constitution, Preamble &amp; Fundamental Rights</li> </ul>

		<ul style="list-style-type: none"> <li>• Understand Directive Principles of State Policy, Fundamental duties and Methods of acquire citizenship.</li> <li>• Understand concept of Democracy and Nationalism.</li> <li>• Understand Modern concept of socialism.</li> <li>• Understand concept of Behaviorism and Sovereignty.</li> <li>• Understand Election commission of India.</li> <li>• Understand State executive.</li> <li>• Understand state legislature of Maharashtra.</li> <li>• Understand Local Self Government on Maharashtra.</li> <li>• Understand women's participation in Panchayati Raj of Maharashtra.</li> </ul>
<b>BACHELOR OF ARTS (BA)</b>	<b>Sociology</b>	<p>Students</p> <ul style="list-style-type: none"> <li>• understand about current social problem in India.</li> <li>• understand the problem of terrorism and white-collar crime.</li> <li>• understand the problem of weaker section in India.</li> <li>• Understand the problems relating to urbanization.</li> <li>• learn about intolerance riot crime and introduction of sociology.</li> <li>• understand about the sociological perspective</li> <li>• learn about basic concept of sociology, status and role, social control, social anthropology, methods of social anthropology and society in India.</li> <li>• understand about tribal religion, tribal economy, tribal social life and family.</li> </ul>

		<ul style="list-style-type: none"> <li>• learn about Totemism, tribal problems and tribal Development.</li> </ul>
<b>BACHELOR OF ARTS (BA)</b>	<b>History</b>	<ul style="list-style-type: none"> <li>• Subject outcomes are measured through the performance of the students in the class, internal evaluation and external evaluation.</li> <li>• The knowledge and skills are evaluated through continuous internal evaluation with the help of class test, home assignments and seminars.</li> <li>• University examination result of History subject are analyzed and reported to the principal.</li> <li>• Understand the difference between Primary and secondary sources and use the sources in writing history.</li> <li>• Understand the history of Indus valley civilization.</li> <li>• Understand the religious movement and difference between the philosophy of Hinduism, Jainism and Buddhism.</li> <li>• Students get information about administration system in ancient India.</li> <li>• Perceive socio-economic, religious situation under the Maurya.</li> <li>• Clarify the concept of golden age of Gupta period.</li> <li>• Understand the condition of religion of Bouddha in ancient India.</li> <li>• Understand the establishment, expansion, consolidation and decline of Mughal power.</li> <li>• Identify the socio, economic, religious and political condition in Mughal period.</li> <li>• Understand the society and status of women in Mughal period.</li> <li>• Understand the religious movements in Mughal period.</li> <li>• Understand the importance of the Hindavi Swarajya in History.</li> </ul>

		<ul style="list-style-type: none"> <li>• Understand the formation of welfare state during the Maratha Rule.</li> <li>• Got knowledge regarding Russia under Stalin.</li> <li>• Illustrate the participation of USA in the World War.</li> <li>• Understand the causes and results of Second World War and the establishment of UNO.</li> <li>• Understand the effect of military alliances of Russia and America.</li> <li>• Understand the cold war and its consequences, problem of the world countries, foundation and role of UNO.</li> </ul>
<b>BACHELOR OF ARTS (BA)</b>	<b>Home-Economics</b>	<ul style="list-style-type: none"> <li>• Students recognized the basic concepts home economics.</li> <li>• Students design a plan of home- work using management process.</li> <li>• Students understand the resources and decisions and its use effectively.</li> <li>• enhances the chances of reaching the desired goals through wise decisions and effective use of resources.</li> <li>• Students understand the course knowledge in day-to-day life.</li> <li>• Students acquires the basic concept of event management.</li> <li>• Students design the event plan for carrying out easily and skillfully.</li> <li>• Students enable event delivery and evaluation.</li> <li>• Students develop various skills.</li> <li>• Students learn about employment and self-employment.</li> <li>• Students learn about the platform for various life applications like cooking, flower decoration, Rangoli making, greetings, sewing, house decoration, bringing up children's etc.</li> </ul>

## COURSE OUTCOMES (COs):

Class	Course	Course Outcomes
<b>English</b>		
B.Sc. I, 1S	English	<ul style="list-style-type: none"> <li>• Knowledge of Indian culture and enhance Humanity among students.</li> <li>• Development of patriotism and self- respect within student.</li> <li>• Development of virtues within pupils.</li> <li>• Information and important of water, RTI to information act 2005.</li> <li>• Development of hopefulness, spirit of life.</li> <li>• Importance of nature, environmental balance.</li> <li>• Preparation of parts of speech, tenses.</li> <li>• Revision of sentences and its transformation.</li> </ul>
B.Sc. I, 2S	English	<ul style="list-style-type: none"> <li>• Enhancement of courage, social harmony within students.</li> <li>• Precautions of food coloring.</li> <li>• Information about human psychology.</li> <li>• Development of optimism, faith in goodness, mercy.</li> <li>• Information of human estrangement in man-made world, Effects of Materialism.</li> <li>• Ability to write Resumes and Job application.</li> <li>• Proper use of language lab for pronunciation.</li> <li>• Group discussion of the students.</li> </ul>
B.Com. I, 1S	English	<ul style="list-style-type: none"> <li>• Knowledge of social bonds and relationship.</li> <li>• Understand the busy life in materialistic world.</li> <li>• Knowledge of nature and different personality.</li> <li>• Study the divine nature, artificial attitude of the people.</li> <li>• Ability to write professional resume, Job application.</li> <li>• Use of Tense, Articles and Narration.</li> </ul>
B.Com. I, 2S	English	<ul style="list-style-type: none"> <li>• Study the philosophy of Swami Vivekananda.</li> <li>• Tagore's story on Human relationship.</li> <li>• Understand the thought of Dr Ambedkar on democracy, caste system.</li> <li>• Understand the importance of happiness, perseverance for dream.</li> <li>• Ability to write E-mail, Newspaper report.</li> <li>• Understand the Change the voice, Preposition, Idioms and Phrases, One word substitutions.</li> </ul>



B.Com. II, 3S	English	<ul style="list-style-type: none"> <li>• Importance of traveling in various regions.</li> <li>• Study the A.J. Cronin's Two Gentlemen of Verona.</li> <li>• Understand the importance of love; everyone must give to the world.</li> <li>• Importance of education, faith, bravery, enthusiasm. Understand the human in the context of nature, value of nature.</li> <li>• Understand the communication, Ability of presentation.</li> <li>• Knowledge of Agendas, Notices and Minutes.</li> </ul>
B.Com. II, 4S	English	<ul style="list-style-type: none"> <li>• Knowledge of urban India and social bonds of the society.</li> <li>• To study Florence Nightingale.</li> <li>• Understand the relation between husband and wife.</li> <li>• Understand the religious beliefs of the people.</li> <li>• Knowledge of Poet's emotions, alienation effect.</li> <li>• Study the hunger of materialistic life, optimism</li> <li>• Understand the Interview and Interview skills, Meeting skills and Non-verbal Communication.</li> </ul>
B.Com. III, 5S	English	<ul style="list-style-type: none"> <li>• Understand the life of Ratan Tata.</li> <li>• To know the creative mind of Steve Jobs.</li> <li>• To know the dream of Vijay Bhaskar.</li> <li>• To understand the side effects of black economy.</li> <li>• To know the beauty of the love and nature.</li> <li>• To understand the value of equality.</li> <li>• To understand the natural elements represents love.</li> <li>• To know the value of garden in our life.</li> <li>• To know the computing skill.</li> <li>• To teach public speaking.</li> </ul>
B.Com. III, 6S	English	<ul style="list-style-type: none"> <li>• Understand the life of Sundar Pichai.</li> <li>• To know the Mallika Shrinivasan's TAFE.</li> <li>• To know the work of Muhammad Yunus.</li> <li>• To understand the RTI Act 2005.</li> <li>• To know the beautiful stages of human life.</li> <li>• To understand the importance of love in our life.</li> <li>• To know the fable and metaphorical meaning of the poem.</li> <li>• To know the beauty of nature specially in the autumn.</li> </ul>

		<ul style="list-style-type: none"> <li>• To learn the soft skills.</li> <li>• To know importance of advertising.</li> </ul>
B.A. I, 1S	Compulsory English	<ul style="list-style-type: none"> <li>• It gives importance of education in life.</li> <li>• Understand the value of love in our life.</li> <li>• To know the vision of Independent India.</li> <li>• Understand the film making and business.</li> <li>• Knowledge about Indian market and its variety as per diversity of Indian population.</li> <li>• To know the importance of physical beauty as well as spiritual and intellectual beauty.</li> <li>• Understand the anguish of woman.</li> <li>• Understand the parts of speech and tenses.</li> <li>• To know how to write the personal and business letters and CV.</li> </ul>
B.A. I, 2S	Compulsory English	<ul style="list-style-type: none"> <li>• Understand the value of simplicity and vision.</li> <li>• To know the values of public speaking and hard work.</li> <li>• Importance of moral values.</li> <li>• To know the values of equal society.</li> <li>• Understand the importance of peace, brotherhood, equality.</li> <li>• To know the power of almighty.</li> <li>• Knowledge about verbs, verb-agreement.</li> <li>• Understand how to develop story, write Fax, E-mail, notices, agendas and minutes.</li> </ul>
B.A. II, 3S	Compulsory English	<ul style="list-style-type: none"> <li>• Understand the cultural gratefulness of India.</li> <li>• To know the values of pleasures in life.</li> <li>• To impart values of charity, sacrifice, and true happiness.</li> <li>• Importance of non-violence.</li> <li>• To know the values of love.</li> <li>• Knowledge and important about good deeds.</li> <li>• Understand the joyfulness in simplicity and innocence.</li> <li>• Knowledge about clauses and sentences.</li> <li>• To develop communication skills- Telephone conversation and Interpersonal conversation.</li> </ul>

B.A. II, 4S	Compulsory English	<ul style="list-style-type: none"> <li>• Understand the humanity and social values.</li> <li>• Knowledge about good parenting and morality.</li> <li>• Understand the reality and illusion.</li> <li>• Understand the real value of freedom, truth and fearlessness.</li> <li>• To know the change is the law of nature.</li> <li>• Understand the importance of love in life.</li> <li>• Understand the values of goodness, duty and sacrifice.</li> <li>• Knowledge about transformation and synthesis of sentences.</li> <li>• To develop communication skills- interpersonal conversations and casual conversations.</li> </ul>
B.A. III, 5S	Compulsory English	<ul style="list-style-type: none"> <li>• To know the story of Saki 'The open window'.</li> <li>• To understand the real worship of God.</li> <li>• To develop the patriotism, nationalism within the students.</li> <li>• To aware about father's role in our lives.</li> <li>• To know the Indian women and their feelings.</li> <li>• To aware student about equality which is present in the nature.</li> <li>• To know how to write precise writing.</li> <li>• To understand how to expand the thought.</li> </ul>
B.A. III, 6S	Compulsory English	<ul style="list-style-type: none"> <li>• To understand the struggle of craftsmen.</li> <li>• To aware about old people emotions.</li> <li>• To understand the banking with humorous way.</li> <li>• To know the thought of Socrates.</li> <li>• To understand the beauty of the nature and countryside.</li> <li>• To enable students how to keep tranquility of mind.</li> <li>• To know how to write report writing.</li> <li>• To understand how to expand our view in to an essay.</li> </ul>
B.A. I, 1S	English Literature	<ul style="list-style-type: none"> <li>• To know about the formation of Poetry.</li> <li>• To differentiate between Subjective and Objective Poetry.</li> <li>• To Collect more information about Poetical Types and Stanzaform.</li> <li>• To make student aware about famous Poet and poems.</li> <li>• To acquire Knowledge about One Act plays with illustrations.</li> <li>• To make students familiar with Literary Terms and Theory.</li> </ul>

B.A. I, 2S	English Literature	<ul style="list-style-type: none"> <li>• To know about Schools and movements in Poetry.</li> <li>• To understand message in the poetry of Tagore</li> <li>• To understand nature poetry of Robert Frost.</li> <li>• To enjoy and understand one Act plays by Anton Chekhov and O’Henry.</li> <li>• To analysis Literary Theory Orientalism and cultural Studies.</li> <li>• To acquire knowledge about world famous poetry and poets.</li> </ul>
B.A. II, 3S	English Literature	<ul style="list-style-type: none"> <li>• To Know and understand Novel Form.</li> <li>• To Know Silent feature of Short Story Writing.</li> <li>• To be familiar with Biography and Autobiography.</li> <li>• To understand poetry of Sarojani Naidu along with other Poets.</li> <li>• To know new literary terms used in modern literature.</li> <li>• To understand literary Theories like: Archetypal Criticism, Formalism, Structuralism, and Narratology.</li> <li>• To Study Short Stories by Ruskin Bond, R.K.Narayan, Mansfield, etc.</li> </ul>
B.A. II, 4S	English Literature	<ul style="list-style-type: none"> <li>• To Know about literary forms such as The Essay, Criticism and Style</li> <li>• To understand poems by Nelson, Whitman, Emerson, Melville, and Dickinson.</li> <li>• To identify different literary terms and their meaning.</li> <li>• To Study Post Modern Theories: Post Colonialism, Feminism and Psychoanalytic Criticism.</li> <li>• To become Familiar with world famous Essayists.</li> <li>• To know about Bacon, Stevenson and Hazlitt</li> </ul>
B.A. III, 5S	English Literature	<ul style="list-style-type: none"> <li>• To read and analysis the short story, The Open Window by Saki</li> <li>• To read and analysis the short story, The Three Hermits by Leo Tolstoy</li> <li>• To understand the message from the Essay What is Swaraj? by M K Gandhi</li> <li>• To understand the message from the Essay A Letter to his Son by Lord Chesterton</li> <li>• To study the poetry and poetic technique of Sarojani Naidu</li> <li>• To study the poetry and poetic technique of Ralph Waldo Emerson</li> <li>• To develop writing skill with Exercise of Précis Writing and Developing a Thought.</li> <li>• To know about the technique of Personal Interview.</li> </ul>
B.A. III, 6S	English Literature	<ul style="list-style-type: none"> <li>• To Study Background English literature</li> <li>• To study literary terms and their significance</li> <li>• To study the literary theories i. e. Eco-Criticism, Queer Theory and Marxist Criticism.</li> <li>• To study the drama Twelfth Night.</li> </ul>

## Marathi

B.A. I, 1S	Compulsory Marathi	<ul style="list-style-type: none"> <li>• Knowledge about Walking.</li> <li>• To know the importance of Education.</li> <li>• Understand the features of Vinoba Bhave's literature.</li> <li>• To know the importance of inspiration in life.</li> <li>• To introduce a folk Literature .</li> <li>• To understand the life of Farmer and women .</li> <li>• To introduce poets &amp; their works .</li> </ul>
B.A. I, 2S	Compulsory Marathi	<ul style="list-style-type: none"> <li>• To inform literature of Swami Vivekanand.</li> <li>• Understand the importance of Marathi language.</li> <li>• To Devolve Scientific View.</li> <li>• To know the importance of Mother.</li> <li>• Understand the Letter Writing.</li> <li>• To introduce poets &amp; their works.</li> </ul>
B.A. II, 3S	Compulsory Marathi	<ul style="list-style-type: none"> <li>• To inform literature of Sant Literature .</li> <li>• Understand the importance of Marathi language.</li> <li>• To know the importance of Science.</li> <li>• To know the importance of Animals &amp; Birds.</li> <li>• Understand the honor of women.</li> <li>• To introduce poets &amp; their works.</li> </ul>
B.A. II, 4S	Compulsory Marathi	<ul style="list-style-type: none"> <li>• To know the importance of land.</li> <li>• To know the Comparison of Man and Women .</li> <li>• To know about Science.</li> <li>• To know the importance of Mirror.</li> <li>• To introduce the thoughts of Sant Gadge baba.</li> <li>• To understand the sensivity about urban life.</li> <li>• To know the speciality of the poet like Sant Ekanath, Sant Kanhopatra , Rajesh Mahalle, Shanta Shelake, Mirza Beg, Ani Parsawale's literature.</li> </ul>
B.A. III, 5S	Compulsory Marathi	<ul style="list-style-type: none"> <li>• To understand humanity.</li> <li>• To know the Power of Mind.</li> <li>• To introduce the speciality of Mahatma Fule's literature.</li> <li>• To know the importance of water.</li> <li>• To know the importance of trees, nature in our life.</li> <li>• To understand the value of Urban area.</li> <li>• To understand the value of life.</li> <li>• To know the speciality of poet and their poems like Tukaram, Ramdas, Balkavi, Gres, wahru Sonavane Sukhdev Dhanke literature.</li> </ul>
B.A. III, 6S	Compulsory Marathi	<ul style="list-style-type: none"> <li>• To understand the thought of Dr. Panjabrao Deshmikh, rajrshi Shahu Maharaj and Rajmata Jijau.</li> <li>• To know the importance of food taste in our daily life and our happiness.</li> <li>• To introduce the spectacles and its uses.</li> <li>• To know the special character of Arani.</li> </ul>

		<ul style="list-style-type: none"> <li>• To know factual picture of human life.</li> <li>• To understand the comic events in the story.</li> <li>• To know the speciality of poet and their poems like Sant Sheikh Mahamd, Father Stifan, Mardhekar, Narayan surve, dahake, Kavathkar and Baban Saradkar.</li> </ul>
B.Com. I, 1S	Compulsory Marathi	<ul style="list-style-type: none"> <li>• Knowledge about Baba Padmanji's literature.</li> <li>• To understand Feminism .</li> <li>• To understand Power of Young Generation.</li> <li>• Knowledge about Poem.</li> <li>• To understand social restrictions and social responsibility.</li> <li>• To develop the selflessness.</li> <li>• To understand the female awareness.</li> <li>• To know about Hamid Dalwai, Baba Padmanji, Baba Amte, Sumitra Gokhale Literature.</li> </ul>
B.Com. I, 2S	Compulsory Marathi	<ul style="list-style-type: none"> <li>• Understand the works of Sant Kabir.</li> <li>• Awareness about nature.</li> <li>• Understand the importance of nature.</li> <li>• To know about Democracy.</li> <li>• Knowledge about Globalization and Its Effects</li> <li>• To develop good Letter Writing</li> <li>• To aware about War.</li> <li>• To introduce poet and their works.</li> </ul>
B.Com. II, 3S	Compulsory Marathi	<ul style="list-style-type: none"> <li>• To know the literature of Dr. V. B. Kolte.</li> <li>• To know the features of Dr. Panjabrao Deshmukh.</li> <li>• To know the Place of Marathi language in Globalization.</li> <li>• Understand the Literature of Poet Vinda Karndikar .</li> <li>• To Know the importment of advertisement.</li> <li>• Understand the literature of Sant Gadge Baba.</li> <li>• Knowledge about Relation.</li> <li>• To know the speciality of Tukdoji Maharaj, Stive Jobe etc.</li> </ul>
B.Com. II, 4S	Compulsory Marathi	<ul style="list-style-type: none"> <li>• To inform about science and human life.</li> <li>• To inform importance the protection of environment.</li> <li>• Knowledge about happy life.</li> <li>• To know the importance of advertisement.</li> <li>• To inform about Mahanubhao samprday.</li> <li>• To know about Lilacharitra.</li> <li>• To introduce Dr Ambedkar and Mahtma Gandhi.</li> <li>• To know the speciality of gangadhar Pantavane VishnuSolanke Narayan Surv's literature.</li> </ul>
B.Com. III, 5S	Compulsory Marathi	<ul style="list-style-type: none"> <li>• To understand the value of Water, Nature and Globalization.</li> <li>• To understand ideology of Shahu Maharaj about Education.</li> <li>• To know the speciality of Writers like V. D. Savarakar, Agarkarand Mahatma Fule.</li> </ul>
B.Com. III, 6S	Compulsory Marathi	<ul style="list-style-type: none"> <li>• To understand the value of advertisement.</li> <li>• To know the effects of dowry system.</li> <li>• To know the effects of pollution.</li> <li>• To introduce poet and their works.</li> </ul>
B.Sc. I, 1S	Compulsory Marathi	<ul style="list-style-type: none"> <li>• To understand the importance of science in our life.</li> </ul>

		<ul style="list-style-type: none"> <li>To know the importance of values in our life.</li> <li>To introduce poets &amp; their works.</li> </ul>
B.Sc. I, 2S	Compulsory Marathi	<ul style="list-style-type: none"> <li>To know the importance of values in our life.</li> <li>To introduce Writers and poets &amp; their works.</li> <li>To Develop Scientific approach.</li> </ul>
B.A. I, 1S	Marathi Literature	<ul style="list-style-type: none"> <li>To Create an interest in literature.</li> <li>To introduce Novel and Writer.</li> <li>To Understand Modern Poem.</li> <li>To understand the value of Water.</li> </ul>
B.A. I, 2S	Marathi Literature	<ul style="list-style-type: none"> <li>To know the importance of values in our life.</li> <li>To introduce One act Play.</li> <li>Co3: To Understand Modern Poem</li> <li>To Increase the critical attitude about literature studies.</li> </ul>
B.A. II, 3S	Marathi Literature	<ul style="list-style-type: none"> <li>To know the importance of values in Marathi Story.</li> <li>To introduce Story Writers and his Story.</li> <li>To Develop Scientific approach to Literature.</li> </ul>
B.A. II, 4S	Marathi Literature	<ul style="list-style-type: none"> <li>To know the importance of values in Athvaniche Pakshi.</li> <li>To introduce ancient Marathi literature.</li> <li>To introduce Lila charitra and life of Shree Chakradhar swamiand Shree Govinprabhu.</li> <li>To Develop Sensibility.</li> <li>To introduce autobiography</li> </ul>
B.A. III, 5S	Marathi Literature	<ul style="list-style-type: none"> <li>To introduce D. M. Mirasdarandhis literature.</li> <li>To Develop the language to Literature.</li> </ul>
B.A. III, 6S	Marathi Literature	<ul style="list-style-type: none"> <li>To introduce Biography of Carver and his work.</li> <li>Increasing the critical attitude about literature studies</li> </ul>
<b>Sociology</b>		
B.A. I, 1S	Sociology	<ul style="list-style-type: none"> <li>To know about introduction of sociology.</li> <li>To understand the sociological perspective</li> <li>To know about basic concept of sociology</li> <li>To understand status and role</li> <li>To know about social control.</li> </ul>
B.A. I, 2S	Sociology	<ul style="list-style-type: none"> <li>To understand individual and society.</li> <li>To know about Social institution</li> <li>To understand religion</li> <li>To know about social movement</li> <li>To know about social stratification and social change.</li> </ul>
B.A. II, 3S	Sociology	<ul style="list-style-type: none"> <li>To Understand social problem in India.</li> <li>To know about familiar problems.</li> <li>To understand population problems in India.</li> <li>To know about rural contemporary in India.</li> <li>To know about Problem of alcoholism.</li> </ul>
B.A. II, 4S	Sociology	<ul style="list-style-type: none"> <li>To know about Current social problem in India.</li> <li>To understand problem of terrorism and white collar crime.</li> <li>To understand Problem of weaker section in India.</li> <li>To understand Problems relating to urbanization.</li> <li>To know about Intolerance riot crime.</li> </ul>

B.A. III, 5S	Sociology	<ul style="list-style-type: none"> <li>• To understand the social anthropology.</li> <li>• To know about Methods of social anthropology.</li> <li>• To know about tribal Society in India.</li> <li>• To understand tribal religion.</li> <li>• To know about tribal Economy.</li> </ul>
B.A. III, 6S	Sociology	<ul style="list-style-type: none"> <li>• To understand the Tribal Social Life.</li> <li>• To know about Family.</li> <li>• To know about Totemism.</li> <li>• To understand Tribal Problems.</li> <li>• To know about tribal Development.</li> </ul>
<b>Political Science</b>		
B.A. I, 1S	Indian Constitutional Provisions and Local Self Government	<ul style="list-style-type: none"> <li>• Understand salient features of the Indian Constitution, Preamble &amp; Fundamental Rights</li> <li>• Understand Directive Principles of State Policy, Fundamental duties &amp; Methods of acquire citizenship.</li> <li>• Understand President, Vice President, and Prime Minister of India's appointment process &amp; power, Function.</li> <li>• Understand Indian Parliament.</li> <li>• Understand Indian Judiciary</li> </ul>
B.A. I, 2S	Indian Constitutional Provisions and Local Self Government	<ul style="list-style-type: none"> <li>• Understand Election commission of India.</li> <li>• Understand State executive.</li> <li>• Understand state legislature of Maharashtra.</li> <li>• Understand Local Self Government On Maharashtra.</li> <li>• Understand women's participation in Panchayati Raj of Maharashtra.</li> </ul>
B.A. II, 3S	Selected Constitution and International Relations ( U.K. , U.S.A. & China)	<ul style="list-style-type: none"> <li>• Understand salient features of the constitution of UK., Historical background of crown and executive council.</li> <li>• Understand parliamentary system of UK.</li> <li>• Understand salient features of USA and executive council.</li> <li>• Understand legislature of USA Congress.</li> <li>• Understand organization of SAARK.</li> </ul>
B.A. II, 4S	Selected Constitution and International Relations ( Switzerland & China)	<ul style="list-style-type: none"> <li>• Understand salient features of constitution of China and National People Congress.</li> <li>• Understand executive council of China.</li> <li>• Understand United nation Organization.</li> <li>• Understand Security Council , Secretary General and International court.</li> </ul>
B.A. III, 5S	Modern Concepts and Policy in	<ul style="list-style-type: none"> <li>• Understand Concept of Leadership.</li> <li>• Understand Reservation Policy In India.</li> </ul>



	Politics	<ul style="list-style-type: none"> <li>• Understand Concept of Nationalism.</li> <li>• Understand Concept of Communalism.</li> <li>• Understand Modern concept of Terrorism.</li> </ul>
B.A. III, 6S	Concepts of Western and Indian Thinkers	<ul style="list-style-type: none"> <li>• Understand concept of state by Aristotle &amp; M. K. Gandhi.</li> <li>• Understand concept of Democracy.</li> <li>• Understand concept of Nationalism.</li> <li>• Understand Modern concept of socialism.</li> <li>• Understand concept of Behaviorism and Sovereignty.</li> </ul>
<b>History</b>		
B.A. I, 1S	History Of India From Earliest Times 1205 A.D.	<p>After completing the course contents students are able to...</p> <ul style="list-style-type: none"> <li>• Understand the difference between Primary and secondary sources and use the sources in writing history.</li> <li>• Understand the history of Indus valley civilization.</li> <li>• Understand the religious movement and difference between the philosophy of Hinduism, Jainism and Buddhism.</li> <li>• Students get information about administration system in ancient India.</li> <li>• Perceive socio-economic, religious situation under the Maurya.</li> <li>• Clarify the concept of golden age of Gupta period.</li> <li>• Understand the condition of religion of Bouddha in ancient India.</li> </ul>
B.A. I, 2S	History of India From 1206 A.D. to 1525 A.D.	<p>After completing the course contents students are able to...</p> <ul style="list-style-type: none"> <li>• Understand the Establishment of Muslim power in India.</li> <li>• Recognize the Socio, Political, Economic, Religious conditions under Vijaynagar and Bahamani empire.</li> <li>• Know the system of trade, commerce and technological development during the sultanate period.</li> <li>• Understand the nature of village community &amp; relationship between the Muslim and Hindu society.</li> <li>• Understand the literature, education and art-architecture condition in sultanate.</li> <li>• Understand the political, military Structure, condition of society and Social Status of women in sultanate Period.</li> </ul>
B.A. II, 3S	History of India From 1526 A.D. to 1756 A.D.	<p>After completing the course contents students are able to...</p> <ul style="list-style-type: none"> <li>• Understand the establishment, expansion, consolidation and decline of Mughal power.</li> <li>• Identify the socio, economic, religious and political condition in Mugal period.</li> <li>• Understand the society and status of women in Mugal period.</li> <li>• Understand the religious movements in Mugal period.</li> <li>• Understand the importance of the Hindavi Swarajya in History.</li> <li>• Understand the formation of welfare state during the Maratha Rule.</li> <li>• Understand the Policy of Shivaji about agricultural and farmers.</li> </ul>

		<ul style="list-style-type: none"> <li>Identify the contribution of Chhatrapati Sambhaji, Chhatrapati Rajaram and Maharani Tarabai in Maratha freedom movement against Mugal.</li> </ul>
B.A. II, 4S	History of India From 1757 A.D. to 1947 A.D.	<p>After completing the course contents students are able to...</p> <ul style="list-style-type: none"> <li>Identify the economic changes in India by British power.</li> <li>Evaluate the renaissance and social reform movement in India.</li> <li>Distinguish the detail account of British raj as well as its overall impacts on the Indian society, economy, agriculture and technology.</li> <li>Identify the importance of modern education in rise the nationalism in India.</li> <li>Inculcates the nationalist feelings among the students.</li> <li>Identify the important persons, their ideas, teachings and its effects in Modern India.</li> <li>Acquainted the knowledge of national leaders to create a memory of the national heroes.</li> <li>Understand the difference between moderates, extremists and revolutionaries.</li> <li>Understand the evolutionary processes of constitutional developments.</li> </ul>
B.A. III, 5S	History of Modern Europe: (From 1780 A.D. to 1965 A.D.)	<p>After completing the course contents students are able to...</p> <ul style="list-style-type: none"> <li>Get information about the French revolution.</li> <li>Understand the rise, work and downfall of Napoleon Bonaparte.</li> <li>Understand the unification of Italy and Germany.</li> <li>Understand the Bismarck's role in Germany under his leadership.</li> <li>Understand the Kaiser William II role in First World War.</li> <li>Understand the Russia revolution and its effect.</li> </ul>
B.A. III, 6S	History of Modern World (From 1921 to 1965 AD)	<p>After completing the course contents students are able to...</p> <ul style="list-style-type: none"> <li>Examine the Nazism and Fascism in Germany and Italy.</li> <li>Got knowledge regarding Russia under Stalin.</li> <li>Illustrate the participation of USA in the World War.</li> <li>Understand the causes and results of Second World War and the establishment of UNO.</li> <li>Understand the effect of military alliances of Russia and America.</li> <li>Understand the cold war and its consequences, problem of the world countries, foundation and role of UNO.</li> <li>Understand the causes and effect of Non-Aligned movement on the world.</li> </ul>

## Course Outcomes (CO's) of Commerce Stream

Class	Course	Course Outcome (Student will able to..... )
B.Com. I, 1S	Principle of Business Organization	<ul style="list-style-type: none"> <li>To know about commerce &amp; Industry</li> <li>To understand the basic concept of Business organization, E-Commerce and online Trade, toilers, cashless transaction.</li> <li>To know about merger and acquisition</li> <li>To understand New Enterprises</li> <li>To know about trade in India.</li> </ul>
	Computer Fundamentals & Operating System I	<ul style="list-style-type: none"> <li>To know about fundamentals of computer.</li> <li>To understand computer organization.</li> <li>To knowledge about memory organization of computer.</li> <li>To understand Input/output Devices or computer system</li> <li>Practical knowledge about MS word 2007.</li> </ul>
	Principle Of Economics	<ul style="list-style-type: none"> <li>Aware about fundamental concept of economics</li> <li>Able to understand consumer behavior.</li> <li>Realize the importance of demand and demand elasticity.</li> <li>Understand production function and various production theories.</li> <li>Understand concept of production cost and revenue</li> </ul>
	Advanced Accountancy	<ul style="list-style-type: none"> <li>Understanding the concepts of financial accounting, Exposure to nature and advantages of accounting, Accounting concepts and conventions, Introduction to Accounting Standards in India.</li> <li>To Understanding the subsidiary Books, Purchases Book, Purchases return Books, Sales Books, Sales return Books, Simple Cash Books, Double Column Cash Book, Triples &amp; Petty cash Books.</li> <li>Obtaining the knowledge of individual final accounts.</li> <li>Getting knowledge of depreciation method.</li> <li>Obtaining the knowledge of Bank Reconciliation Statements.</li> </ul>
B.Com. I, 2S	Principle Of Business Management	<ul style="list-style-type: none"> <li>To understand Management Concept.</li> <li>To know about planning</li> <li>To understand organization concept</li> <li>To know about directing</li> <li>To know about Controlling</li> </ul>
	Computer Fundamentals & Operating System II	<ul style="list-style-type: none"> <li>Acquire knowledge about operating system.</li> <li>To know about installing and uninstalling various programme &amp; features.</li> <li>To understand modern communications concepts.</li> <li>To know about word processing working with table &amp; Graphics</li> <li>Practical knowledge about Power point Presentation.</li> </ul>
	Business Economics	<ul style="list-style-type: none"> <li>Understand concept of Business economics and managerial economics</li> <li>Understand different market structure in market system</li> <li>Understand price determination different market</li> <li>Understand factors of pricing wages and rent</li> </ul>

		<ul style="list-style-type: none"> <li>• Understand factors of pricing interest and profit</li> </ul>
	Financial Accounting	<ul style="list-style-type: none"> <li>• To know accounts of Non Trading Institutions.</li> <li>• Understanding the special accounting areas : Accounts of Co-operative Societies.</li> <li>• Understanding Accounting for Agriculture farm.</li> <li>• Knowledge about Hire Purchases &amp; Installment Purchase Accounts</li> <li>• To know about Insolvency Accounts.</li> </ul>
B.Com. II, 3S	Business Mathematics	<ul style="list-style-type: none"> <li>• To Understand Natural Numbers, integers, HCF &amp; LCM, Linear equation.</li> <li>• To know about percentage.</li> <li>• To understand Average &amp; Profit &amp; Loss.</li> <li>• To know about Mathematics of finance.</li> <li>• To know about Ratio &amp; Proportion.</li> </ul>
	Monetary System	<ul style="list-style-type: none"> <li>• To understand money concept, kinds of money.</li> <li>• To know about value of money.</li> <li>• To understand price fluctuations.</li> <li>• Acquire knowledge about money market.</li> <li>• To understand capital market.</li> </ul>
	Auditing	<ul style="list-style-type: none"> <li>• Acquire knowledge concept of Auditing</li> <li>• Understand of Internal Check system.</li> <li>• Role of Company Auditor.</li> <li>• Audit of Dividend and report</li> <li>• Audit of Banking Insurance and educational institutions</li> </ul>
	Company Accounts	<ul style="list-style-type: none"> <li>• To know about shares and accounting entries regarding issue of shares.</li> <li>• To know the final company accounts.</li> <li>• To knowledge about profit prior to incorporations.</li> <li>• To know about companies' amalgamations.</li> <li>• To know about absorption of company.</li> </ul>
	Information Technology & Business Data processing-I	<ul style="list-style-type: none"> <li>• To Understand the basic concept of data and data processing.</li> <li>• To know about advantages and disadvantages of data base.</li> <li>• To understand the database management system.</li> <li>• To understand about Microsoft Excel &amp; Spreadsheet package.</li> <li>• Practical knowledge of formula, functions and chart in Excel.</li> </ul>
B.Com. II, 4S	Business Statistics	<ul style="list-style-type: none"> <li>• To know about introduction of Statistics.</li> <li>• To understand Index Numbers.</li> <li>• To understand Concept of Central Tendency &amp; their Measures.</li> <li>• To understand Concept of Dispersion.</li> <li>• To know about Co-efficient of correlation.</li> </ul>
	Indian Financial System	<ul style="list-style-type: none"> <li>• To understand Indian Financial market.</li> <li>• To know about Indian Banks.</li> <li>• To know about commercial Banks.</li> <li>• To understand Reserve Bank of India.</li> <li>• To know about stock exchange.</li> </ul>
	Income Tax	<ul style="list-style-type: none"> <li>• Acquire knowledge concept of Income tax</li> <li>• Computation of Income from salary and house property.</li> <li>• Income from other sources and deductions.</li> </ul>

		<ul style="list-style-type: none"> <li>• Concept of income tax authorities</li> <li>• E-filing procedure</li> </ul>
	Corporate Accounting	<ul style="list-style-type: none"> <li>• To know about final accounts of Banking Company.</li> <li>• To know about final accounts of fire and accident insurance company.</li> <li>• To knowledge about the liquidation of company.</li> <li>• To know about valuation of Goodwill.</li> <li>• Analyze the Share Valuation.</li> </ul>
	Information Technology & Business Data processing-II	<ul style="list-style-type: none"> <li>• To understand the basic concept of information technology.</li> <li>• Acquire knowledge about computerize accounting and taxation.</li> <li>• To know about the Accounting Software Tally 9.0</li> <li>• To know about ledgers, vouchers and entries for Tally 9.0</li> <li>• Practical knowledge about reports and advanced features in Tally.</li> </ul>
B.Com. III, 5S	Cost Accounting	<ul style="list-style-type: none"> <li>• To understand meaning, nature an scope of cost accounting.</li> <li>• To know about accounting overheads.</li> <li>• To know about Labour Cost</li> <li>• To understand reconciliation Statement</li> <li>• To understand Process Costing</li> </ul>
	Business Environment	<ul style="list-style-type: none"> <li>• To understand Indian Business Environment.</li> <li>• To know about Indian Agricultural Environment.</li> <li>• To know about Indian Industrial Environment</li> <li>• To understand Indian Service Environment</li> <li>• To understand India and Foreign Trade Environment</li> </ul>
	Business Regulatory Frame Work	<ul style="list-style-type: none"> <li>• To understand Indian Contract act. 1872.</li> <li>• To know about Special Contacts</li> <li>• To know about Sales of Goods Act. 1930 and Consumer Protection Act, 1986</li> <li>• To understand Negotiable Instrument Act, 1881</li> <li>• To understand Goods and Services Tax Act, 2017</li> </ul>
	Internet and world Wide Web I	<ul style="list-style-type: none"> <li>• To understand Network &amp; Types of Network.</li> <li>• To know about Internet, mechanism of the internet</li> <li>• To know about Electronic Mail, Gmail, Password, Captcha.</li> <li>• To understand Architecture of World wide web</li> <li>• To understand Designing Website HTML, Structure of the home page</li> </ul>
	e-Commerce- I	<ul style="list-style-type: none"> <li>• To understand Basics of e-Commerce.</li> <li>• To know about e-Commerce in India</li> <li>• To know about Retail e-Commerce</li> <li>• To understand B2B E-e-Commerce</li> <li>• To understand E-payment and E-Banking</li> </ul>
B.Com. III, 6S	Management Accounting	<ul style="list-style-type: none"> <li>• To understand meaning, nature an scope of Management accounting.</li> <li>• To know about Break-Even Analysis.</li> <li>• To know about Ratio Analysis</li> <li>• To understand Budget &amp; Budgetary Control</li> </ul>
	Economics of	<ul style="list-style-type: none"> <li>• To understand Indian Economic Development.</li> </ul>

	Development	<ul style="list-style-type: none"> <li>To know about Economic Growth Models.</li> <li>To know about Growth: Balanced &amp; Unbalanced</li> <li>To understand Development of Capital : Human &amp; Financial</li> </ul>
	Company Law	<ul style="list-style-type: none"> <li>To understand Company act, 2013.</li> <li>To know about Incorporation of Company</li> <li>To know about Share Capital of Company</li> <li>To understand Securities Market</li> <li>To understand Company Secretary and Company Meetings.</li> </ul>
	Internet and world Wide Web II	<ul style="list-style-type: none"> <li>To understand Web Browsing.</li> <li>To know about Web Directory, Search Engines, Feature of Google</li> <li>To know about Social Networking Websites, Mobile Application.</li> <li>To understand Google Drive, Google Forms, Google Classroom</li> <li>To understand Using MS Front page to create webpage</li> </ul>
	e-Commerce- II	<ul style="list-style-type: none"> <li>To understand Internet e-commerce.</li> <li>To know about B2C Internet Marketing</li> <li>To know about B2B Online Marketing</li> <li>To understand E-governance</li> <li>To understand E-Governance Models</li> </ul>

### Course Outcomes (CO's) of Science Stream

#### Chemistry

Class	Course	Course Outcome (Student will able to..... )
B.Sc. I, 1S	Chemistry	<ul style="list-style-type: none"> <li>Knowledge of Periodic Properties and Ionic bonding CO2: Information of S and P block elements</li> <li>Knowledge of Reactive intermediates, electronic displacements and Aliphatic hydrocarbons</li> <li>Knowledge of Nomenclature, aromaticity, orientation and Substitution of aromatic compounds</li> <li>Information of thermodynamics</li> <li>Knowledge of Gaseous state and Phase rule</li> </ul>
		<ul style="list-style-type: none"> <li>P1: Semi micro qualitative analysis of inorganic salt mixture containing two acidic radicals and two basic radicals of same or different groups.</li> <li>P2: Preparation of Organic Compounds</li> </ul>
B.Sc. I, 2S	Chemistry	<ul style="list-style-type: none"> <li>Information of covalent bonding, Polarization and covalent bonding</li> <li>Knowledge of Non aqueous solvents and Noble gases.</li> <li>Understand synthesis and reactions of Alkyl/aryl halides, Alcohols.</li> <li>Understand synthesis and reactions of Phenols, ethers and Epoxides.</li> <li>Information of Electrical and magnetic properties.</li> </ul>

		<ul style="list-style-type: none"> <li>• Knowledge of Chemical Kinetics.</li> </ul>
		<ul style="list-style-type: none"> <li>• P1: Complete analysis of simple organic compounds.</li> <li>• P2: Physical Chemistry Experiments like determination of Surface Tension, coefficient of viscosity, Parachor value, cleaning power of detergent, activation energy and heat of solution.</li> </ul>
B.Sc. II, 3S	Chemistry	<ul style="list-style-type: none"> <li>• Knowledge of Covalent, metallic bonding and VSEPR theory</li> <li>• Study of Volumetric and Gravimetric Analysis.</li> <li>• Synthesis and Reactions of Aldehydes, Ketones and Carboxylic acids</li> <li>• Knowledge of Optical, Conformational and Geometrical isomerism</li> <li>• Information of thermodynamic equilibrium and Phase equilibrium</li> <li>• Knowledge of Liquid state and electrochemistry.</li> </ul>
		<ul style="list-style-type: none"> <li>• P1: Volumetric analysis and gravimetric analysis</li> <li>• P2: To study the kinetics and determination of physical properties like Partition coefficient, transition temperature, refractive index, solubility etc.</li> </ul>
B.Sc. II, 4S	Chemistry	<ul style="list-style-type: none"> <li>• Study of transition series elements and Extraction of elements.</li> <li>• Knowledge of Inner transition elements and Principles of Metallurgy</li> <li>• Understand synthesis and reactions of Polynuclear hydrocarbons, Reactive Methylene compounds and Carbohydrates</li> <li>• Understand Aromatic nitro compounds, Amino Compounds, Diazonium Salts, Amino acids and Proteins.</li> <li>• Information of Colligative Properties of dilute solutions.</li> <li>• Knowledge of crystalline state.</li> </ul>
		<ul style="list-style-type: none"> <li>• P1: Inorganic Estimations like Colorimetric, hardness, Complexometry</li> <li>• P2: Organic Estimations like casein, Caffeine, Glucose, Acetamide.</li> </ul>
B.Sc. III, 5S	Chemistry	<ul style="list-style-type: none"> <li>• Knowledge of Coordination compounds and chelates</li> <li>• Study of Crystal Field Theory and electronic spectra.</li> <li>• Synthesis and Reactions of Heterocyclic compounds and Organometallic compounds</li> <li>• Knowledge about Chemistry of Some dyes, drugs and Pesticides.</li> <li>• Information of Photochemistry</li> <li>• Knowledge of Molecular Spectroscopy</li> </ul>
		<ul style="list-style-type: none"> <li>• P1: To Prepare some Inorganic Complexes</li> <li>• P2: To study Conductometric, Potentiometric and Polarometric Experiments.</li> </ul>
B.Sc. III, 6S	Chemistry	<ul style="list-style-type: none"> <li>• Study of Analytical chemistry and kinetic aspect of</li> </ul>



		<p>Metal Complexes</p> <ul style="list-style-type: none"> <li>• Knowledge of Organometallic Chemistry, inorganic Polymers and Bio-inorganic Chemistry</li> <li>• Understand Electronic and Infrared Spectroscopy.</li> <li>• Understand NMR and Mass spectroscopy</li> <li>• Information of Elementary Quantum Mechanics</li> <li>• Knowledge of Electrochemistry and Nuclear Chemistry.</li> </ul>
		<ul style="list-style-type: none"> <li>• P1: Organic Estimations like Urea, Glycine, formaldehyde etc.</li> <li>• P2: To study Conductometric, Potentiometric and Polarometric Experiments.</li> </ul>
<b>Botany</b>		
B.Sc. I, 1S	Botany	<ul style="list-style-type: none"> <li>• Knowledge of diversity of plant includes all microorganisms.</li> <li>• Knowledge of classification, diversity and importance of algae.</li> <li>• Knowledge of classification, diversity and importance of fungi.</li> <li>• Knowledge of classification, diversity and importance of Bryophytes.</li> <li>• Knowledge of classification and diversity of Pteridophytes.</li> <li>• Knowledge of Application of Microbes Cryptogams</li> </ul>
		<ul style="list-style-type: none"> <li>• P1: Study of preparation of temporary mount, identification and classification of algae, bryophyte, and pteridophytes materials.</li> <li>• P2: study of permanent slides of various materials plant pathology with the help of field study and excursion tour.</li> </ul>
B.Sc. I, 2S	Botany	<ul style="list-style-type: none"> <li>• Information of fossils study using geological time scale.</li> <li>• Knowledge of classification, general studies and economic importance of gymnosperm plants.</li> <li>• Studied the diversity on the basis of morphology of flowering plants.</li> <li>• Studied the morphology of flower and inflorescence.</li> <li>• Information of fruit morphology and utilization of plants.</li> <li>• Knowledge of Medicinal plants and others economically important plants.</li> </ul>
		<ul style="list-style-type: none"> <li>• P1: Morphology, anatomy, double stains permanent mount preparation of gymnosperm plants and fossils study.</li> <li>• P2: Detailed morphological study of root, stem, leaf flower its modification of various plants and utilization of plants study.</li> </ul>
B.Sc. II, 3S	Botany	<ul style="list-style-type: none"> <li>• Knowledge of nomenclature, herbarium and</li> </ul>



		<ul style="list-style-type: none"> <li>biodiversity concept.</li> <li>Study of Classification and systematic of angiosperm.</li> <li>Knowledge of systematic studies and economic importance of angiospermic families.</li> <li>Knowledge of anatomical studies of various angiosperm plants.</li> <li>Information of anatomical behaviour in plants.</li> <li>Knowledge of embryology.</li> </ul>
		<ul style="list-style-type: none"> <li>P1: study of embryology, pollination, and mounting of parts of flower in angiospermic plants.</li> <li>P2: To study the anatomy and taxonomy of angiosperm plant with the help of laboratory study, field study by conducting excursion tour.</li> </ul>
B.Sc. II, 4S	Botany	<ul style="list-style-type: none"> <li>Study of cell biology.</li> <li>Knowledge of structure and function of various cell organelles.</li> <li>Genetics study related to chromosome.</li> <li>Understand the Mendelian genetics and problem related to genetics.</li> <li>Study of linkage, crossing over and mutation in gene of genetics.</li> <li>Biochemical study of various molecules like enzyme, protein, lipid, DNA, RNA etc.</li> </ul>
		<ul style="list-style-type: none"> <li>P1: Study the isolation of cell organelles using various techniques and study the stages of mitosis and meiosis.</li> <li>P2: study of genetics using monohybrid and Dihybrid ratio with its related problems and demonstrate various test for biochemical's compound.</li> </ul>
B.Sc. III, 5S	Botany	<ul style="list-style-type: none"> <li>Knowledge of plants and its relation with water.</li> <li>Study of hoe glucose is form and its utilization in plant.</li> <li>Ideas about role of nitrogen, its fixation and growth hormone.</li> <li>Knowledge about various plant response with respect to various factor.</li> <li>study of ecology, environments and factors.</li> <li>Knowledge of population, succession in various Ecosystems.</li> </ul>
		<ul style="list-style-type: none"> <li>P1: Studied major and minor experiments of plant physiology.</li> <li>P2: Studied major and minor experiments of ecology and environment.</li> </ul>
B.Sc. III, 6S	Botany	<ul style="list-style-type: none"> <li>Study of DNA as genetic material.</li> <li>Study of gene structure and how it has been express in cell system.</li> <li>Understand how to regulate gene expression in cell</li> </ul>

		<ul style="list-style-type: none"> <li>system.</li> <li>Understand that by using various technical tools how to manipulate gene, or genetic engineering.</li> <li>Information of plant tissue culture.</li> <li>Gives idea about how the biotechnology is applicable in agriculture, industry and health care.</li> </ul>
		<ul style="list-style-type: none"> <li>P1: studied various major and minor experiments on molecular biology.</li> <li>P2: studied working principle and application of various biotechnological instruments and techniques.</li> </ul>
<b>Zoology</b>		
B.Sc. I, 1S	Zoology	<ul style="list-style-type: none"> <li>Knowledge of classification and general characters of non-chordates</li> <li>Knowledge of parasites and human diseases.</li> <li>Knowledge of morphological and anatomical structure of nonchordates.</li> <li>Knowledge of reproductive system, digestive system, respiratory system and excretory system in nonchordates.</li> <li>To understand the parasitic adaptation in helminth parasites.</li> <li>study of larval form and lifecycles.</li> </ul>
		<ul style="list-style-type: none"> <li>P1: Study of Life and diversity of non-chordata, Permanent slides, Anatomical Study through Computer Aided Techniques, Video Clipping Models, Photographs and other available resources.</li> </ul>
B.Sc. I, 2S	Zoology	<ul style="list-style-type: none"> <li>Knowledge of cell structure and different cell organelles and their function.</li> <li>Knowledge of different cell organelles.</li> <li>Knowledge of nucleus, chromosomes and their function.</li> <li>Knowledge of cell division, gametogenesis and fertilization.</li> <li>Embryological study of Amphioxus, frog and chick.</li> <li>Information about placentation, parthenogenesis, regeneration and stem cell.</li> </ul>
		<ul style="list-style-type: none"> <li>P1: Staining of Cell organelles, Study of life cycle and chick embryological study.</li> </ul>
B.Sc. II, 3S	Zoology	<ul style="list-style-type: none"> <li>Gain knowledge of Phylum Chordata, Protochordata with special affinities of Agnatha.</li> <li>Study of class Amphibia and Reptilia with type study of <i>Rana tigerina</i> and <i>Calotes versicolor</i>.</li> <li>Study of class Aves and Mammals with type study of <i>Columba livia</i>.</li> <li>Knowledge of Evolution with direct and indirect evidence study.</li> <li>Information of Evolutionary process and Hardy – Weinberg equilibrium for population genetics.</li> </ul>

		<ul style="list-style-type: none"> <li>• Knowledge of Adaptive radiations in mammals which include man. Special adaptation in desert, Aquatic and terrestrial animals.</li> </ul>
		<ul style="list-style-type: none"> <li>• P1: Taxonomy of Chordata, Osteology of Rabbit, Evolution study from specimen and histological slide study of amphioxus, frog and rat.</li> </ul>
B.Sc. II, 4S	Zoology	<ul style="list-style-type: none"> <li>• Study of Genetics law and Gene Interaction.</li> <li>• Knowledge of Linkage, Crossing over and multiple alleles.</li> <li>• Understand sex determination theory with genetic disorders and also biochemical genetic disorders.</li> <li>• Understand Genetic Screening, parental diagnosis and birth control measures.</li> <li>• Understand abiotic and biotic factors with special references with types of species interaction.</li> <li>• Knowledge of ecosystem concept and various ecosystems (Terrestrial, Aquatic).</li> </ul>
		<ul style="list-style-type: none"> <li>• P1: Genetic experiments, Genetics Diseases, Ecology Survey and quantitative analysis.</li> </ul>
B.Sc. III, 5S	Zoology	<ul style="list-style-type: none"> <li>• Knowledge of Respiration and Circulatory System</li> <li>• Study of Muscle physiology.</li> <li>• Information about Nerve physiology and chemical Co-ordination.</li> <li>• Knowledge about Reproductive physiology along with Homeostasis and conservative regulation.</li> <li>• Information of Agricultural Zoology (Beneficial Insects and Harmful Pest)</li> <li>• Knowledge of Aquaculture (Fish product and byproduct).</li> </ul>
		<ul style="list-style-type: none"> <li>• P1: They know Hematological, Biochemical experimentation, life cycle of various insect, Histological Slides of major organs along with Study of locally available fishes.</li> </ul>
B.Sc. III, 6S	Zoology	<ul style="list-style-type: none"> <li>• Study of Genetic material, Experimentation, Various types.</li> <li>• Obtain Knowledge of Genome replication and diseases related with it.</li> <li>• Understand basic knowledge of Genetic code, transcription and translation in Eukaryotic and prokaryotic cell.</li> <li>• Gain knowledge of mutation and types of mutation.</li> <li>• Understand Biotechnological techniques.</li> <li>• Knowledge of Immune system and immune system work.</li> </ul>
		<p>P1: Microtechnique for permanent slide preparation and preparation of various chemicals.</p>

<b>Mathematics</b>		
B.Sc. I, 1S	Algebra, Trigonometry, Differential and Integral Calculus	<ul style="list-style-type: none"> <li>• Study of Complex number and trigonometric series.</li> <li>• To gain the knowledge of Elements of quaternion and Theory of equations</li> <li>• Study the system of equations by using matrix methods.</li> <li>• Knowledge of limit of a function and differentiability.</li> <li>• To Understand Rolle's theorem</li> <li>• Knowledge of Partial derivatives and reduction formulae</li> </ul>
B.Sc. I, 2S	Differential Equations (Ordinary and Partial), Vector Analysis and Solid Geometry	<ul style="list-style-type: none"> <li>• Study of ordinary differential equation &amp; Second order linear differential equations.</li> <li>• Knowledge of Reduction of order, Formation of partial differential equations.</li> <li>• To gain the knowledge of Compatible differential equations.</li> <li>• Study of Scalar and vectors, Frenet - Serret formulae.</li> <li>• To gain the knowledge of Greens theorem, divergence and Curl.</li> <li>• To acquire the Knowledge of Sphere and Cone.</li> </ul>
B.Sc. II, 3S	Advanced Calculus and Elementary Number Theory	<ul style="list-style-type: none"> <li>• Knowledge of Sequence and Series</li> <li>• Study of Limit &amp; continuity &amp; Maxima &amp; minima of functions of two variables.</li> <li>• Understand Double integral, Gauss and Stoke's theorem.</li> <li>• Knowledge of Divisibility, Prime numbers and Fermat numbers.</li> <li>• Study of Congruence and Arithmetic functions.</li> <li>• Knowledge of Primitive roots, quadratic residues.</li> </ul>
B.Sc. II, 4S	Modern Algebra: groups and rings and Classical Mechanics	<ul style="list-style-type: none"> <li>• Study of Group, Cosets and normal subgroups.</li> <li>• To acquire the knowledge of Homomorphism and isomorphism.</li> <li>• Knowledge of Ring, integral domain and field, and Ideal.</li> <li>• To analyze D'Alembert's principle, Central force motion.</li> <li>• Study of Calculus of variation.</li> <li>• Knowledge of Hamilton's principle and Rigid body.</li> </ul>
B.Sc. III, 5S	Mathematical Analysis and Mathematical Methods	<ul style="list-style-type: none"> <li>• Knowledge of Riemann Integral, Improper integrals and their Convergence.</li> <li>• Study of Continuity and differentiability of complex function.</li> <li>• Study of Elementary function and Metric spaces.</li> <li>• Knowledge Legendre's equation and Bessel's equation.</li> <li>• To gain the knowledge of Fourier series.</li> <li>• To acquire the Knowledge of Laplace transform and Fourier Transform.</li> </ul>
B.Sc. III, 6S	Linear Algebra and	<ul style="list-style-type: none"> <li>• Study of Vector Space and Linear transformations.</li> </ul>

	Special Theory of Relativity	<ul style="list-style-type: none"> <li>• Knowledge of Dual Spaces and Inner Product Spaces.</li> <li>• Acquire the knowledge of Modules.</li> <li>• Understand Review of Newtonian Mechanics and Relativistic Kinematics.</li> <li>• Study of Geometrical representation of space- time and Relativistic Mechanics.</li> <li>• Knowledge of Electromagnetism and Maxwell's equation in tensor form.</li> </ul>
<b>Physics</b>		
B.Sc. I, 1S	Physics	<p>By the end of this Course students should be able to know about:</p> <ul style="list-style-type: none"> <li>• Mechanics</li> <li>• Properties of matter</li> <li>• Waves and Oscillations.</li> <li>• Kepler's law of Planetary Motions.</li> <li>• Motions related to rigid body.</li> <li>• Elasticity.</li> <li>• Simple Harmonic Motions.</li> <li>• Kinematics of Moving Fluids</li> </ul>
		<p>By the end of this Course students should be able to know about the Following practical knowledge:</p> <ul style="list-style-type: none"> <li>• Students knows about Vernier calipers &amp; screw gauge.</li> <li>• Study of laws of Parallel and perpendiculars axes for moment of inertia.</li> <li>• Determination of coefficient of restitution for inelastic collision.</li> <li>• Moment of inertia of fly wheel.</li> <li>• Study of compound pendulum.</li> <li>• To determine moment of inertia of a body using bifilar suspension.</li> <li>• Modulus of rigidity by Torsional Pendulum.</li> <li>• Acceleration due to gravity by Kater's pendulum.</li> <li>• Study of Oscillations of mass under different combinations of springs.</li> <li>• Young's modulus by cantilever.</li> <li>• Young's Modulus by bending of beam.</li> <li>• Modulus of rigidity by statical method.</li> <li>• Young's modulus by Vibration Method.</li> <li>• Modulus of rigidity by Maxwell's needle.</li> <li>• Coefficient of Viscosity by Poiseuille's method.</li> <li>• Surface tension by Quincke's method.</li> <li>• Determination of Surface tension by Jager's method.</li> </ul>
B.Sc. I, 2S	Physics	<p>By the end of this Course students should be able to know about:</p> <ul style="list-style-type: none"> <li>• Kinetic Theory</li> <li>• Thermodynamics</li> <li>• Electric Current</li> <li>• Ideal Gas and Various phenomenon of gases.</li> <li>• Motion of charged partical in electric and magnetic field.</li> <li>• Various theorms related to electric field</li> </ul>

		<ul style="list-style-type: none"> <li>• Alternating current</li> </ul> <p>By the end of this Course students should be able to know about the Following practical knowledge:</p> <ul style="list-style-type: none"> <li>• Students knows about Digital multimeter and they can able measure the various electronic component by using digital multimeter.</li> <li>• Heating efficiency of electrical Kettle with varying voltages.</li> <li>• Determination of “J” by Callendar and Barne’s method.</li> <li>• Cp/Cv by Clement and Desorme’s method.</li> <li>• Thermal conductivity of an insulator by Lee’s disc method.</li> <li>• Determination of charge sensitivity of ballistic galvanometer.</li> <li>• Measurement of low resistance by Carey-foster Bridge.</li> <li>• Measurement of low resistance by potentiometer.</li> <li>• Measurement of inductance by phasor diagram method.</li> <li>• Measurement of capacitance by phasor diagram method.</li> <li>• Study of frequency resonance of series LCR circuit and determination of Q-factor.</li> <li>• To study behavior of R-C circuit as a filter.</li> <li>• To determine high resistance by leakage method.</li> <li>• C1 / C2 by De-Sauty's method.</li> <li>• Verification of laws of capacitances.</li> <li>• Study of transformer.</li> <li>• Verification of Kirchoff's law, using electrical network.</li> <li>• Verification of Maximum power transfer theorem.</li> <li>• Verification of Thevenin's theorem.</li> <li>• Verification of Norton's theorem.</li> <li>• Verification of Milliman’s theorem.</li> <li>• Verification of Superposition theorem.</li> </ul>
B.Sc. II, 3S	Physics	<p>By the end of this Course students should be able to know about:</p> <ul style="list-style-type: none"> <li>• Mathematical background and Elecrostatics</li> <li>• Magnetostatics and Maxwell’s Equations</li> <li>• Solid State Electronics Devices-I</li> <li>• Solid State Electronics Devices-II</li> <li>• Special Theory of Relativity</li> <li>• Atmosphere and Geophysics</li> </ul> <p>By the end of this Course students should be able to know about the Following practical knowledge:</p> <ul style="list-style-type: none"> <li>• To determine characteristics of CB transistor</li> <li>• To determine characteristics of CE transistor</li> <li>• Measurement of magnetic field by Hall probe method</li> </ul>

		<ul style="list-style-type: none"> <li>• To study variation of gain of CE amplifier with load</li> <li>• To study Zener regulated power supply</li> <li>• To determine characteristics of FET</li> <li>• To study FET as a voltmeter</li> <li>• To study Weins bridge oscillator</li> <li>• To study phase shift oscillator</li> <li>• To study Wein's bridge oscillator</li> <li>• To study p-n diode as a rectifier</li> <li>• To determine characteristics of p-n junction.</li> <li>• Study of OP AMP as an inverting amplifier</li> <li>• Study of OP AMP as noninverting amplifier</li> <li>• Study of OP AMP as an adder</li> <li>• Study of OP AMP as subtractor</li> <li>• Study of OP AMP as differentiator</li> <li>• Study of OP AMP as an integrator</li> <li>• To determine characteristics of Phototransistor</li> <li>• Measurement of field strength its variation in a solenoid.</li> </ul> <p>By the end of this Course students should be able to know about:</p> <ul style="list-style-type: none"> <li>• Geometrical optics and interference</li> <li>• Diffraction</li> <li>• Laser.</li> <li>• Fiber Optics</li> <li>• Renewable Energy Resources</li> </ul>
B.Sc. II, 4S	Physics	<p>By the end of this Course students should be able to know about the Following practical knowledge:</p> <ul style="list-style-type: none"> <li>• To determine the wavelength of monochromatic light by Newton's rings.</li> <li>• To verify the Brewster's law.</li> <li>• To determine the refractive indices for ordinary and extraordinary rays using double image prism</li> <li>• To determine the Concentration of sugar solution by half shade polarimeter.</li> <li>• To determine the wavelength of monochromatic light by plane diffraction grating.</li> <li>• To find the number of lines per centimeter of the given grating.</li> <li>• To determine the resolving power of plane diffraction grating.</li> <li>• To determine the resolving power of telescope.</li> <li>• To determine the wavelength of laser light.</li> <li>• Determination of refractive index of a prism by spectrometer.</li> <li>• Determination of dispersive power of prism material</li> <li>• To determine the resolving power of prism.</li> </ul>

		<ul style="list-style-type: none"> <li>• study of interference of light by bi-prism experiment and find the wavelength of sodium light.</li> <li>• To verify the law of Malus of plane polarized light.</li> <li>• Polarplots of solar panel</li> <li>• Measurement of direct radiation using Pyrheliometer.</li> <li>• Measurement of global &amp; diffuse radiation using pyranometer</li> <li>• Determination of solar constant</li> <li>• To determine frequency and phase of signal using CRO.</li> <li>• To determine capacitance by Scherring bridge method.</li> <li>• To determine self-inductance by bridge rectifier method.</li> <li>• To determine frequency of AC mains by Sonometer.</li> <li>• To study and plot I-V characteristics of solar cell.</li> <li>• To study time constant of an RC circuit experimentally and verify the result theoretically.</li> <li>• Verification of Stefan's law of radiation by using an incandescent lamp as black body Radiator.</li> <li>• To study (a) Half-wave Rectifier and (b) Full-wave Bridge Rectifier and investigate the effect of C, L and p filters.</li> </ul>
B.Sc. III, 5S	Physics	<p>By the end of this Course students should be able to know about the Following practical knowledge:</p> <ul style="list-style-type: none"> <li>• To study RC coupled amplifier- variation of gain with load.</li> <li>• To study phase shift oscillator.</li> <li>• To study Wein bridge oscillator.</li> <li>• To study Hartley oscillator.</li> <li>• To study Colpitts oscillator.</li> <li>• To determine 'e' by Millikan "soil drop experiment.</li> <li>• To determine 'e' by Thomson's method.</li> <li>• Determination of Rydberg's constant.</li> <li>• To study absorption spectrum of Iodine vapors.</li> <li>• To study Raman spectrum.</li> <li>• To identify elements in optical line spectrum.</li> <li>• To determine absorption coefficient of material for gamma rays.</li> <li>• Determination of Hybrid parameters.</li> <li>• Study of Monostable multivibrator.</li> <li>• Study of Astable multivibrator.</li> <li>• Study of an amplifier - with &amp; without feedback.</li> <li>• Determination of Plank's Constant by using LED.</li> <li>• To study characteristics of Zener diode.</li> <li>• Study of LED characteristics.</li> <li>• Study of characteristics of Laser.</li> <li>• Study of Emitter follower.</li> </ul>



B.Sc. III, 6S	Physics	<p>curve.</p> <ul style="list-style-type: none"> <li>• To measure magnetic susceptibility of solids.</li> <li>• To study thermos-emf using thermocouple.</li> <li>• To Determination of temperature coefficient of resistance of platinum using platinum resistance thermometer.</li> <li>• To determine lattice parameter using X-ray diffraction pattern.</li> <li>• To determine half-life period of radioactive substance by GMcounter</li> <li>• Determination of dislocation density in alkali halide crystals.</li> <li>• Demonstrations- Any 4 demonstrations equivalent to 2 experiments</li> <li>• Mini project equivalents to 2 experiments.</li> <li>• Computer aided demonstrations (Using computer simulations or animations) (Any 2demonstrations equivalent to 2 experiments)</li> <li>• To study characteristics of Photo diode.</li> <li>• To study Zener regulated power supply.</li> <li>• Study of transistorized regulated power supply, series pass transistor.</li> <li>• Determination of velocity of sound by using sonometer wire.</li> <li>• Determination of velocity of ultrasonic wave in liquids.</li> <li>• Determination of Band gap energy of a p-n junction / Zener diode</li> </ul>
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## Computer Science

B.Sc. I, 1S	Computer Science	<ul style="list-style-type: none"> <li>• Understand Computers and programming concept, operating system of computer</li> <li>• Understand the Introduction to Internet: Direct, Types of Internet connection: Direct dial-up, broadband, Internet protocol: TCP/IP, FTP, HTTP, Domain name e-mail address</li> <li>• Understand the Programming Concept: Algorithm flowcharting programming languages, assembler, interpreter, compiler programming process</li> <li>• Understand History, features structure of C program</li> <li>• Understand the I/O Operations : Formatted I/O : Printf ( ), Scanf ( ), Unformatted I/O :</li> </ul>
B.Sc. I, 2S	Computer Science	<ul style="list-style-type: none"> <li>• Understand the basics of Data structure, its types, list, array, stack and Queue</li> <li>• Understand the Linked list &amp; its implementation, traversing, insertion, deletion algorithms, circular Queue</li> <li>• Understand the: Tree: Binary, Binary search tree, tree Traversing: in-order, preorder and post-order, sorting and searching Techniques</li> <li>• Understand the Function: Definition, prototype, local &amp; global variable, function parameter, function calling and return</li> <li>• Understand the String Handling: Declaring and initialization of string variable, operations on string.</li> <li>• To understand the Structure: Definition and declaration, initialization, array of structure, nested structure Union File Handling.</li> </ul>
B.Sc. II, 3S	Computer Science	<ul style="list-style-type: none"> <li>• Understand the Introduction to data structure linear array, operation on linear array.</li> <li>• Understand the queue: definition and concept of queue and operation on queue.</li> <li>• Understand the Tree: definition and concept of tree, sorting and searching, bubble sort, selection sort.</li> <li>• Understand the object-oriented programming: features and application of object-oriented programming, introduction of C++ programming managing console I/O.</li> <li>• Learn the Function in C++ line function, friends' function, Array of object, pointer to object.</li> <li>• Learn the operator overloading, Inheritance.</li> </ul>

B.Sc. II, 4S	Computer Science	<ul style="list-style-type: none"> <li>• Understand the Fundamental of Relational database management, Architecture of database system, database approaches data representation</li> <li>• Understand the Relational model: relation domain and attribute keys E-R diagram, Normalization</li> <li>• Understand the Introduction to SRL: Component of structure query language, data types and operator</li> <li>• Understand the Function: Numeric function, Character function, conversion function</li> <li>• Understand the PL/SQL: Feature and block structure, variable constant, data type cursor and its operation</li> <li>• Understand the Transaction : Roll back and commit and save point , security of database</li> </ul>
B.Sc. III, 5S	Computer Science	<ul style="list-style-type: none"> <li>• Understand the NETPRamework, NAMESPACES, assembler the common language Implementation</li> <li>• Understand the visual programming, concept of event driven programming</li> <li>• Understand the decision and looping statement</li> <li>• Understand the java feature, evaluation, JDK, JUM.</li> <li>• Understand the classes and inheritance</li> <li>• Understand the string, package and interface their operations</li> </ul>
B.Sc. III, 6S	Computer Science	<ul style="list-style-type: none"> <li>• Understand the exception handling multithreading; E conception handling.</li> <li>• Understand the applet; introduction to applet, applet lifecycle HTML applet tab with all attributes.</li> <li>• Learn the event handling and AWT; introduction, event delegation model, java AWT.</li> <li>• Understand the window application forms.</li> <li>• Know the object-oriented programming; classes and objects</li> <li>• Work out the data access with ADO.NET.</li> </ul>



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Principal  
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Maregaon, Dist. Yavatmal

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1	<a href="https://acscollegemaregaon.co.in/wp-content/uploads/naac2023/feedback-2017-22.pdf">https://acscollegemaregaon.co.in/wp-content/uploads/naac2023/feedback-2017-22.pdf</a>