Ahmednagar Jilha Maratha Vidya Prasarak Samaj`s
Rajarshi Shahu Mahavidyalaya,
Deolali Pravara, Tal-Rahuri, Dist- Ahmednagar

Faculty of Science

Programme Outcomes, Programme Specific Outcomes and Course Outcomes

Name of Programme	Programme Outcomes (PO's)	Programme Specific Outcomes (PSO's)
B.Sc. Chemistry	**PO1. CRITICALTHINKING** The curriculum is designed such way that students should acquire and ability to observe accurately and objectively. They should be able to solve the problems and also think scientifically, independently and draw rational conclusions. **PO2.EFFECTIVE COMMUNICATION** The medium of instruction for this course is English. English being the language of world students become habitual to communicate in English using language of Chemistry. **PO3 SOCIAL INTERACTIONS** In this course students are made aware of environment related issues.	**PSO1** To provide the basic principles of all branches of chemistry knowledge of chemical principles and make them independent for the effective application of it. **POS2** To provide thorough knowledge of laboratory skills so that students can prepare for the experimental setup, actual working of equipments, obtain experimental data and interpretation of it. This then interpreted using theoretical principles. **PSO3** To make the students self sufficient in understanding

	They are made aware of optimal use of fertilizers, water, fuels and drugs. **PO4 EFFECTIVE CITIZENSHIP** In this program students are made aware of pollution problems waste water management, water treatment etc. They are also made aware importance of energy and water, food, fuels, general hygiene and cleanliness etc. **PO5 ETHICS** In this program students are made alerts regarding misuse of food adulteration, chemical technology, poisons, fungicides, pesticides and chemical and nuclear weapons **PO6 ENVIRNMENT AND SUSTAINABILITY** Being Chemistry students they become well conversant with various pollutants their sources and their impact on bio-system. So they become well versed with protection and conservation of environment. **PO7 SELF DIRECTED AND LIFE LONG LEARNING** Program curriculum inculcates the curiosity and problem solving approach which makes them self directed and learning becomes a continuous process throughout the life.	and handling the various issues that may arise related to chemistry.

Courses offered: Under graduate

Courses According to 2013 Pattern

Sr.No	Class	Course	Course Outcomes
1	F.Y.B.Sc. Chemistry (Annual Pattern)	Paper I Physical & Inorganic Chemistry	1. This course enables students to understand basic laws regarding states of matter, surface chemistry, thermodynamics and structure of atom. 2. Students are also made aware of mole concept, derivations, depictions and problem solving and periodic properties of the elements including the preliminary theories of bonding.
		Paper II Organic & Inorganic Chemistry	1. Students are made aware of fundamental concepts of organic and inorganic chemistry which governs the structure, bonding, properties, structural effects, acid-base theories, preparation methods, reactivity and stereochemistry of organic molecules.
		Paper III Practical chemistry	Chemistry is an experimental subject; practical course is intended to achieve the basic skills required for understanding the concepts and authenticating the basic laws and principles of chemistry & helps in development of practical skills of the students.
2	F.Y.B.Sc Botany (Annual Pattern)	111: Plant Diversity, Plant Morphology and Anatomy	To provide thorough knowledge about various primitive plant groups.
		112: Industrial Botany	To make the students aware of applications of different plants in various industries To highlight the potential of these studies to become an entrepreneur
		Practical	To get acquainted with the subject in live form and visits to industries
3	F.Y.B.Sc. Mathematics (Annual Pattern)	Paper I Algebra and Geometry	On completion of this course students will be expected to • Prove results involving divisibility and greatest common divisors;

			• Applications of Modular Arithmetic's. • Solve systems of linear equations; • Find integral solutions to specified linear Diophantine Equations; • Apply Euler-Fermat's Theorem to prove relations involving prime numbers; • Apply the Wilson's theorem. • Polynomial addition, subtraction, division, multiplication, roots of polynomials. • Transformation, translation and reflection; • Used cut-out shapes as a means to develop the mental transformation of geometric shapes. • Perform translations and rotations of the coordinate axes to eliminate certain terms from equations. • To find nature of general conics. Find equation of spheres, cylinders and cones from different given
		Paper II Calculus and Differential Equations	On completion of this course students will be expected to • Be able to solve algebraic equations and inequalities involving the square root and modulus function understand the difference between equations and identities, and be able to prove simple identities and inequalities • Be able to recognize odd, even, periodic, increasing, decreasing functions • Understand the operation of composition of functions . • Be able to calculate limits by substitution and by eliminating zero denominators • Be able to calculate limits at infinity of rational functions • Be able to calculate limits in indeterminate forms by a repeated use of l'Hˆopital's rule • Be able to use derivatives to find intervals on

			which the given function is increasing or ecreasing • Find maxima and minima, critical points and inflection points of functions and to determine the concavity of curves • Be able to sketch graphs of rational functions. • Understand the concept of indefinite integral as anti-derivative
		Paper III Practical	A student should be able to recall basic facts about mathematics and should be able to display knowledge of conventions such as notations, terminology and recognize basic geometrical figures and graphical displays , state important facts resulting from their studies.
4	F.Y.B.Sc. Geography (Annual Pattern)	Paper I Geomorphology	1. To introduce the students to the basic concepts in geomorphology. 2. To acquaint the students with the utility and applications of geomorphology in different areas and environment. 3. To make the students aware of the need of protection and conservation of different landforms.
		Paper II Climatology and Oceanography	1. To introduce the students to the basic principles and concepts in Climatology and Oceanography. 2. To acquaint the students with the applications of Climatology and Oceanography in different areas and environment. 3. To make the students aware of the Planet Earth and thereby to enrich the student's life.
		Paper II Practical	1. To acquire the knowledge of various techniques in Physical Geography. 2. To enable the student to use techniques of specific maps and their geographical interpretation. 3. To acquaint the students with the weather instruments and their utility and applications in geographical phenomena.
5	F. Y. B.Sc. Physics(Annual Pattern)	Paper I Mechanics	1. Demonstrate an understanding of Newton's laws and applying them in calculations of the motion of simple systems. 2. Use the free body diagrams to analyse the forces

			on the object. 3. Understand the concepts of energy, work, power, the concepts of conservation of energy and be able to perform calculations using them. 4. Understand the concepts of elasticity and be able to perform calculations using them. 5. Understand the concepts of surface tension and viscosity and be able to perform calculations using them. 6. Use of Bernoulli's theorem in real life problems.
		Paper I Heat and Thermodynamics	1. Describe the properties of and relationships between the thermodynamic properties of a pure substance. 2. Describe the ideal gas equation and its limitations. 3. Describe the real gas equation. 4. Apply the laws of thermodynamics to formulate the relations necessary to analyze a thermodynamic process. 5. Analyze the heat engines and calculate thermal efficiency. 6. Analyze the refrigerators, heat pumps and calculate coefficient of performance. 7. Understand property 'entropy' and derive some thermo dynamical relations using entropy concept.
		Paper II Physics Principles and Applications	1. To demonstrate an understanding of electromagnetic waves and its spectrum. 2. Understand the types and sources of electromagnetic waves and applications. 3. To understand the general structure of atom, spectrum of hydrogen atom. 4. To understand the atomic excitation and LASER principles. 5. To understand the bonding mechanism in molecules and rotational and vibrational energy levels of diatomic molecules.
		Paper II Electromagnetic	1. Demonstrate an understanding of the electric force, field and potential, and related concepts, for stationary charges. 2. Calculate electrostatic field and potential of simple charge distributions using

			Coulomb's law and Gauss's law. 3. Demonstrate an understanding of the dielectric and effect on dielectric due to electric field. 4. Demonstrate an understanding of the magnetic field for steady currents using Biot-Savart and Ampere's laws. 5. Demonstrate an understanding of magnetization of materials.
		Paper III Practical	1. Acquire technical and manipulative skills in using laboratory equipment, tools, and materials. 2. Demonstrate an ability to collect data through observation and/or experimentation and interpreting data. 3. Demonstrate an understanding of laboratory procedures including safety, and scientific methods.
6	S.Y.B.Sc. Botany Semester I	211: Taxonomy of Angiosperms and Plant community	To provide thorough knowledge about various highly evolved plant groups and their community structure
		212:Plant Physiology	To study the different metabolic process for synthesis of food material
7	S.Y.B.Sc. Botany Semester II	221: Plant Anatomy and Embryology	Internal structure will be observed for further studies as well as to study the developmental pattern of plant
		222: Plant Biotechnology	To study the techniques of multiplication and nano techniques
8	S.Y.B.Sc Botany (Annual Pattern)	Practical based on theory course	To equipped the students with skills related to laboratory as well as field based studies
9	S.Y.B.Sc. Chemistry (Semester I)	Physical & Analytical Chemistry CH211	Students are made aware about kinetics of chemical reactions, photochemical laws , distribution law and extraction process. Students are introduced to analytical chemistry in which they are made aware of inorganic qualitative analysis and analysis of organic compounds (Qualitative & Quantitative).

			Along with it they also study error in quantitative analysis & ways to minimize them.
		Organic & Inorganic Chemistry CH212	Students are made aware of stereochemistry of different stereoisomer's & organic reaction mechanism in which they study different types of reagents, reactions and their mechanisms. Students are introduced to metallurgy to understand chemical reactions and processes occurred in metallurgy. The corrosion & passivity is also included in the syllabus.
	S.Y.B.Sc. Chemistry (Semester II)	Physical & Analytical Chemistry CH221	Students are made aware about concepts of Helmholtz free energy & Gibbs free energy as well as free energy of chemical reactions & physical transformation. Students also study different modes of concentration, distillation of solutions of liquid in liquid, partially immiscible liquids& distillation of immiscible liquids. Students are made to understand volumetric analysis wherein they study non-instrumental volumetric analysis which comprises of study of various titrations, indicators used in it& some theoretical aspects related with titrations.
		Organic & Inorganic Chemistry CH222	Students are introduced to various biomolecules, their role & structural aspects. Students also study different oxidizing and reducing reagents, their selectivity to different substrates, heterocycles, their preparation & reactions. Students are introduced to organometallic chemistry & use of organometallic compounds in synthesis of organic as well as inorganic compounds. They also study chemical toxicology to know adverse effects of chemicals.
	S. Y. B.Sc. Chemistry (Annual Pattern)	Practical course	Students are trained to determine the rate constant of chemical reactions, heat of solution , heat of neutralization, critical solution temperature of partially miscible system & distribution coefficient. Students are trained for quantitative analysis of different samples such as Na_2CO_3 in washing soda, Aspirin in APC tablet, Aluminium in Alum, strength of

			H_2O_2, Copper in Brass & iodimetric methods. Students are trained for organic & inorganic qualitative analysis. They are also trained for preparation of organic compounds & chromatographic techniques like TLC.
	S.Y.B.Sc. Physics Semester I	Mathematical Methods in Physics I	After the completion of this course students will be able to 1.Understand the complex algebra useful in physics courses 2.Understand the concept of partial differentiation. 3.Understand the role of partial differential equations in physics 4.Understand vector algebra useful in mathematics and physics 5.Understand the singular points of differential equation.
		Electronics I	Apply laws of electrical circuits to different circuits. 1.Understand the relations in electricity 2.Understand the properties and working of transistors. 3.Understand the functions of operational amplifiers. 4.Design circuits using transistors and operational amplifiers. 5.Understand the Boolean algebra and logic circuits.
	S.Y.B.Sc. Physics Semester II	Oscillations, Waves and Sound	1.Solve the equations of motion for simple harmonic, damped, and forced oscillators. Understand the physics and mathematics of oscillations. 2.Formulate these equations and understand their physical content in a varietof applications, 3.Describe oscillatory motion with graphs and equations, and use thesdescriptions to solve problems of oscillatory motion. 4.Explain oscillation in terms of energy exchange, giving various examples. 5.Solve problems relating to undamped, damped and force oscillators and superposition of oscillations. 6.Understand the mathematical description of travelling and standing waves. 7.Recognise the one-dimensional classical wave equation and solutions to it.

		Optics	1.acquire the basic concepts of wave optics 2.describe how light can constructively and destructively interfere 3.explain why a light beam spreads out after passing through an aperture 4.summarize the polarization characteristics of electromagnetic waves 5.appreciate the operation of many modern optical devices that utilize wave optics 6.Understand optical phenomena such as polarization, birefringence, Interference and diffraction in terms of the wave model.
	S.Y.B.Sc. Physics (Annual Pattern)	Practical	Whatever the students learned in their theory courses such as, electronics , waves oscillations and sound and optics. They need to verify these concept. This course will help to student to verify the concept from theory.
3	T. Y. B.Sc. Chemistry Semester III	CH-331 Physical Chemistry	Students are introduced basic concept of physical chemistry. They also learn methods to determine order of reaction, Arrhenius equation, and graphical evaluation of energy of activation. Students learn principle and applications of rotational, vibrational, raman and electronic spectroscopy. Students will get familiar with phase rule, phase diagram of one and two component systems.
		CH-332 Inorganic Chemistry	Students are made aware of the principles of various theories of bonding like Sidgwick model, Werner's theory VBT,CFT, MOT. They are also made aware of the principles of isomerism, nomenclature and structures of inorganic complexes .
		CH 333 Organic chemistry	It is the basic course in organic chemistry. Students are introduced with concepts like acidity, basicity of organic molecules, electrophile, nucleophile and good and bad leaving groups. Students are introduced with stereochemistry of disubstituted cyclohexane. Students are able to understand mechanism of organic reaction. Arrow drawing concept which is important part of reaction mechanism is explained thoroughly in this course.

			Students are able to identify different types of organic reactions and also they can understand reactivity profile of organic molecules.
		CH 334 Analytical Chemistry	1.Students are made aware of quantitative chemical analysis using the techniques like gravimetry, polarography, AAS, FES and spectrophotometry at the levels of macro, micro and trace analysis of metals and non-metals from industrial and natural samples.
		CH-335 Industrial Chemistry	1.This course enables the students to learn use of agrochemicals like pesticide, insecticides, fungicides, fertilizers and their environmental impact. 2. Study of food industry makes them aware of food adulteration, storage and processing of food. 3. This course also provides opportunity to study agrochemicals, food chemicals on industrial scale. 4. Students also learn manufacturing of basic chemicals such as Ammonia, Sulphuric acid and Nitric acid. 5. Syllabus further comprises study of petrochemicals and eco- friendly fuels, where in students study processing of petrochemical fuels, properties of fuels and applications of fuels,non conventional energy. 6. Syllabus also includes study of cement and glass industry. Properties, manufacture and applications of different types of cement and glass.
		CH-336(D) Environmental Chemistry	Students should know that; i) need and importance of water treatment ii) the difference between domestic and industrial waste water treatment iii) various methods used for water treatment iv) The composition and constituents of lithosphere and soil v) The chemistry involved in various soil vi) methods to achieve cleaner coal combustion vii) The meaning of green house effect and global warming viii) How the green house effect is produced, green house coefficient ,green house gases and their relative contribution ix) Radiative forcing, global warming potential (GWP), sources and sinks of CO_2, causes of fluctuations

			occurring in global temperature, implications of climate changes x) The meaning of ozonosphere and ozone umbrella, formation of ozone, mechanism of ozone depletion, effects of ozone depletion,chlorofluorocarbons (CFCs)
	T. Y. B.Sc. Chemistry Semester IV	CH-341 Physical Chemistry	1.The course aims to give fundamental understanding and applications of electrochemical Cells, Nuclear Chemistry, Crystal structure and Quantum Chemistry. Students get to know thermodynamics and EMF, Chemical cell with and without transfer, application of EMF measurement such as pH determination, determination of solubility and solubility product. 2. Basic elements of quantum chemistry are also introduced.
		CH- 342 Inorganic Chemistry	1.Students are made aware of chemistry of f block elements principles and applications of catalysis, organomettalic chemistry and the principles and the applications of metals, semiconductors and superconductors.
		CH -343 Organic chemistry	1.Students are introduced with carbanions and their reactions. 2. Retrosynthetic analysis concepts are explained to students. 3. Rearrangement reactions are introduced with mechanistic approach. 4. Spectroscopic techniques like PMR, U.V. and I.R. are introduced. 5. Students learned to differentiate organic compounds with the help of these spectroscopic techniques.
		CH 344 Analytical Chemistry	1.The students are trained in the technique of separation, identification of purification using chromatographic techniques like TLC,GC,HPLC, electrophoresis etc . 2. This knowledge enables them to be good analytical of Quality control chemist in various fields.
		CH-345 Industrial Chemistry	1.Students are expected to learn properties, ways to manufacture or process and application of different types of polymer, paints, pigments, dyes, soaps, detergents and cosmetics. 2. Students also learn theoretical aspects of

			manufacturing of sugar and fermentation industry. 3. Syllabus further includes study of Pharmaceutical industry where students are introduced to general aspects of drug action, manufacturing of some drugs and its usage and lastly there is topic which discusses problems caused by industry such as pollution and generation of waste and what are the ways which can prevent or minimize it.
		CH-346 (D) Environmental chemistry	1.Students need to know the significant metabolic pathways necessary for the sustenance of life. 2. Fundamental processes associated with central dogma of molecular biology are taught. 3. Students get acquainted with applications of genetic engineering in various fields like agriculture, industries and medicine.
	T. Y. B.Sc. Practical Chemistry (Annual)	CH- 347 Physical Chemistry Practical	1.Students are trained in the techniques such as pH metry, Conductometry, Potentiometry, Colorimetry, Spectrophotometry, Refractometry and G. M. Counter. 2. They learn to use these techniques in order to understand various chemical reactions.
		CH- 348 Inorganic Chemistry Practical	1. Students are trained in the IQA of different mixtures of inorganic compounds, and the separation of the metal ions using chromatographic techniques and inorganic quantitative analysis using the techniques of gravimetry, volumetry, colorimetry
		CH-349 Organic Chemistry Practical	1.Chemistry is an experimental subject; practical course is proposed to achieve the basic skills required for understanding the reactivity of organic molecules and validating the basic principles. 2. It helps in development of practical skillsof the students & understanding the importance of chemical safety and also explains the factors affecting reaction outcomes and yields.

Course outcomes of 2019 Pattern:

Sr.No	Class	Course	Course Outcomes
1	F.Y.B.Sc. Chemistry (CBCS) Sem-I	Paper I : Physical Chemistry (CH-101)	After completing the course work learner will be acquired with knowledge of chemical energetics, Chemical equilibrium and ionic equilibria.
		Paper II Organic Chemistry (CH:102)	Students will learn Fundamentals of organic chemistry, stereochemistry (Conformations, configurations and nomenclatures) and functional group approach for aliphatic hydrocarbons.
		Paper III Practical chemistry (CH: 103)	1. The practical course is in relevance to the theory courses to improve the Understanding of the concepts. 2. It would help in development of practical skills of the students. 3.Use of micro scale techniques wherever required
	F.Y.B.Sc. Chemistry (CBCS) Sem-II	Paper I : Inorganic Chemistry (CH-201)	Students will learn quantum mechanical approach to atomic structure, Periodicity of elements, various theories for chemical bonding.
		Paper II Analytical Chemistry (CH:202)	Students will know about basics of analytical chemistry, some techniques of analysis and able to do calculations essential for analysis.
		Paper III Practical chemistry (CH- 203)	1. The practical course is in relevance to the theory courses to improve the Understanding of the concepts. 2. It would help in development of practical skills of the students. 3.Use of micro scale techniques wherever required
2	F.Y.B.Sc Botany (CBCS Pattern) Sem-I	Plant life and utilization I (BO 111)	After successfully completing this course, students will be able to: 1: Define Higher and Lower cryptogams. 2: Identify the vegetative and reproductive structures in algae, fungi, bryophytes and pteridophytes. 3: Describe thallus organization of cryptogams. 4: Describe the Internal structure of the thallus of the cryptogams. 5: Diagram life cycle of various fungal, algal, bryophyte and pteridophytic forms. 6: Classify the lower cryptogams algae and fungi, upto their class level.

			7: Classify the higher cryptogams bryophyte and Pteridophytes. 8: Describe uses and economic importance and role of Cryptogams for human welfare.
		Plant morphology and Anatomy (BO 112)	After successfully completing this course, students will be able to: 1: outline cryptogams and phanerogams. 2: Define general characters of cryptogams and Phanerogams. 3: Classify the members of plants groups in to cryptogams and Phanerogams. 4: Describe the Life cycle of plant forms of cryptogams and Phanerogams. 5: Identify lichens and their economic value. 6: Discuss morphology of vegetative and reproductive parts of plants. 7: Describe anatomy of Monocot and dicot plants. 8: Explain types of plant tissues.
		Practical (BO 113)	1.Recognize the live forms of Cryptogamic and Phanerogamic plants. 2: Analyse and describe botanical concepts, including plant anatomy. 3: Differentiate usage for food, medicine, building materials, stimulating beverages, and for their psychoactive effects. 4: Explain conservation and sustainable use of plants; 5: Explain and demonstrate the impact that plants have on human society 6: Illustrate the floral parts, fruits, leaves and their types.
	F.Y.B.Sc Botany (CBCS Pattern) Sem-II	Plant life and utilization II (BO 121)	After successfully completing this course, students will be able to: 1: Memorize general characters of gymnosperms and origin of angiosperms 2: Define fossil and fossil groups. 3: Discuss gymnosperms with example of plants *Pinus* and *Gnetum*, 4: Describe morphology and anatomy of gymnosperms 5: Classify different theories of angiospermic origin.
		Principles of plant science (BO 112)	After successfully completing this course, students will be able to: 1: Define plant physiological concepts and biochemical terms. 2: Explanation of the physiological processes like photosynthesis, respiration, translocation and stress physiology. 3.Define terminologies related to cell and molecular biology.

			4: Identify localization and describe all cell organelles. 5: Discuss the dynamics of plant cell structure and function. 6: Describe Nucleus and chromosomes. 7: Describe DNA replication, Transcription and Translation. 8: Explain the concepts as well as mechanisms of damage and repair
		Practical (BO 113)	1.Recognize the live forms of Cryptogamic and Phanerogamic plants. 2: Analyse and describe botanical concepts, including plant anatomy. 3: Differentiate usage for food, medicine, building materials, stimulating beverages, and for their psychoactive effects. 4: Explain conservation and sustainable use of plants; 5: Explain and demonstrate the impact that plants have on human society 6: Illustrate the floral parts, fruits, leaves and their types.
3	F.Y.B.Sc. Mathematics (CBCS Pattern) Sem-I	Paper I Algebra (MT-111)	On completion of this course students will be expected to • Prove results involving divisibility and greatest common divisors; • Applications of Modular Arithmetic's. • Solve systems of linear equations; • Find integral solutions to specified linear Diophantine Equations; • Apply Euler-Fermat's Theorem to prove relations involving prime numbers; • Apply the Wilson's theorem. • Polynomial addition, subtraction, division, multiplication, roots of polynomials. • Transformation, translation and reflection; • Used cut-out shapes as a means to develop the mental transformation of geometric shapes. • Perform translations and rotations of the coordinate axes to eliminate certain terms from equations. • To find nature of general conics.

			Find equation of spheres, cylinders and cones from different given
		Paper II Calculus – I (MT-112)	On completion of this course students will be expected to • Be able to solve algebraic equations and inequalities involving the square root and modulus function understand the difference between equations and identities, and be able to prove simple identities and inequalities • Be able to recognize odd, even, periodic, increasing, decreasing functions • Understand the operation of composition of functions . • Be able to calculate limits by substitution and by eliminating zero denominators • Be able to calculate limits at infinity of rational functions • Be able to calculate limits in indeterminate forms by a repeated use of l'Hˆopital's rule • Be able to use derivatives to find intervals on which the given function is increasing or ecreasing • Find maxima and minima, critical points and inflection points of functions and to determine the concavity of curves • Be able to sketch graphs of rational functions. • Understand the concept of indefinite integral as anti-derivative
		Paper III Mathematics Practical (MT-113)	A student should be able to recall basic facts about mathematics and should be able to display knowledge of conventions such as notations, terminology and recognize basic geometrical figures and graphical displays , state important facts resulting from their studies.
	F.Y.B.Sc. Mathematics (CBCS Pattern) Sem-II	Paper I Analytical Geometry (MT-121)	1.Calculate shortest distance between skew lines, radius, centre of sphere and angle between planes and lines, cylinder, cone by using some formulae. 2: Reduce the general equation of conic to its standard form by using reduction formulae.

			3: Determine the condition of tangency for the Sphere by using basic formulae. CO6: Give diagrammatic representations of various concepts by sketching diagrams.
		Paper II Calculus – I (MT-122)	1: Define the terms differential equation, order, degree, Bernoullis equation, selforthogonal 2: Describe the methods of solving integration using partial fraction, substitution of trigonometric, logarithm, exponential functions and differential equations problems using variable separable form, exact equations, homogenous, nonhomogenous, etc. 3: Convert non exact differential equation to exact differential equation by finding integrating factor 4: Solve differential equation of first order and higher degree using method of solvable for p, solvable for x, solvable for y and lagranges equation and Cairauts equation 5: Explain reduction formula for trigonometric equation like cosn x 6: Use self-orthogonal method to find orthogonal trajectory for a curve of family
		Paper III Mathematics Practical (MT-123)	A student should be able to recall basic facts about mathematics and should be able to display knowledge of conventions such as notations, terminology and recognize basic geometrical figures and graphical displays , state important facts resulting from their studies.
4	F.Y.B.Sc. Geography (CBCS Pattern) Sem-I	Paper I Geomorphology (GG 111)	1. To introduce the students to the basic concepts in geomorphology. 2. To acquaint the students with the utility and applications of geomorphology in different areas and environment. 3. To make the students aware of the need of protection and conservation of different landforms.
		Paper II - Introduction to Physical Geography - II (Ggeography of Atmosphere and Hydrosphere) (GG 112)	1.Basic study of atmosphere. 2. 2. To acquaint the students with the utility and applications of climatology in different areas and environment. 3.to study the basis of ocean phenomenon and its relation with human being. 4. to study the atmosphere with relation of human being.
		Practicals in Physical Geography	1. To acquire the knowledge of various techniques in Physical Geography.

		(GG 113)	2. To enable the student to use techniques of specific maps and their geographical interpretation. 3. To acquaint the students with the weather instruments and their utility and applications in geographical phenomena.
	F.Y.B.Sc. Geography (CBCS Pattern) Sem-II	Introduction to Human Geography (GG 121)	1.to learn the human evaluation and different races. 2.to study of different regions of tribes and impacts. 3.to overview knowledge of different languages in India and its impact on culture.
		Population and Settlement Geography (GG 122)	1.To study the demographic changes in population. 2.To understand settlement pattern in urban & rural area. 3.To aware about population density & distribution in world & India.
		Practical in Human Geography (GG 123)	1.To acquire the knowledge of various techniques in Human Geography. 2.To understand different maps & statistical data. 3.To learn the data analysis and various statistical tools and techniques in geography by using computer.
5	F. Y. B.Sc. Physics CBCS Pattern) Sem-I	Paper I Mechanics and Properties of Matter (PHY-111)	1. Demonstrate an understanding of Newton's laws and applying them in calculations of the motion of simple systems. 2. Use the free body diagrams to analyse the forces on the object. 3. Understand the concepts of energy, work, power, the concepts of conservation of energy and be able to perform calculations using them. 4. Understand the concepts of elasticity and be able to perform calculations using them. 5. Understand the concepts of surface tension and viscosity and be able to perform calculations using them. 6. Use of Bernoulli's theorem in real life problems.
		Paper II Physics Principles and Applications (PHY-112)	1. To demonstrate an understanding of electromagnetic waves and its spectrum. 2. Understand the types and sources of electromagnetic waves and applications. 3. To understand the general structure of atom, spectrum of hydrogen atom. 4. To understand the atomic excitation and LASER principles.

			5. To understand the bonding mechanism in molecules and rotational and vibrational energy levels of diatomic molecules.
		Paper III Practical (PHY-113)	1. Acquire technical and manipulative skills in using laboratory equipment, tools, and materials. 2. Demonstrate an ability to collect data through observation and/or experimentation and interpreting data. 3. Demonstrate an understanding of laboratory procedures including safety, and scientific methods.
	F. Y. B.Sc. Physics CBCS Pattern) Sem-II	Heat and Thermodynamics (PHY-121)	1. Describe the properties of and relationships between the thermodynamic properties of a pure substance. 2. Describe the ideal gas equation and its limitations. 3. Describe the real gas equation. 4. Apply the laws of thermodynamics to formulate the relations necessary to analyze a thermodynamic process. 5. Analyze the heat engines and calculate thermal efficiency. 6. Analyze the refrigerators, heat pumps and calculate coefficient of performance. Understand property 'entropy' and derive some thermo dynamical relations using entropy concept.
		Electricity and Magnetism (PHY-122)	1) To understand the concept of the electric force, electric field and electric potential for stationary charges. 2) Able to calculate electrostatic field and potential of charge distributions using Coulomb's law and Gauss's law. 3) To understand the dielectric phenomenon and effect of electric field on dielectric. 4) To Study magnetic field for steady currents using Biot-Savart and Ampere's Circuital laws. 5) To study magnetic materials and its properties. 6) Demonstrate quantitative problem solving skills in all the topics covered.
		Paper III Practical (PHY-123)	1. Acquire technical and manipulative skills in using laboratory equipment, tools, and materials.

			2. Demonstrate an ability to collect data through observation and/or experimentation and interpreting data. 3. Demonstrate an understanding of laboratory procedures including safety, and scientific methods.

Department of M.Sc.Computer Science

Programme Outcomes, Programme Specific Outcomes and Course Outcomes

Sr. No.	Programme	Programme Objectives	Programme Specific Objectives
1	**M.Sc. (Computer Science)**	**PO1:Critical Thinking**: Take informed actions after identifying the assumptions that frame our thinking and actions, checking out the degree to which these assumptions are accurate and valid, and looking at our ideas and decisions (intellectual, organizational, and personal) from different perspectives.	After successfully completing B. Sc. (Computer Science) Programme students will **PSO1:** Apply knowledge of computing and mathematics appropriate to the discipline **PSO2:** It aims to provide technology-oriented students with the knowledge and ability to develop creative solutions, and better understand the effects of future developments of computer systems and technology on people and society.
		PO 2:Effective Communication: Speak, read, write and listen clearly in person and through electronic media in English and in one Indian language, and make meaning of the world by connecting people, ideas, books, media and technology.	**PSO2** Develop problem-solving abilities using computer.
		PO3: Social Interaction Elicit views of others were decreased through evaluation of various Projects and Quizzes developed to provide ease of computer knowledge among local citizens. Work in Multi disciplinary	**PSO3** Graduates will demonstrate knowledge and understanding of computer science principles and apply these to manage projects and in multi disciplinary environment.

		environments and be responsive to the changing needs to the society	
		PO4: Effective Citizenship Communicate effectively display leadership skills and demonstrate professionalism .Work in multi disciplinary environments and be responsive to the changing needs of the society.	**PSO4:** Ability to understand the principles and development methodologies of computer systems.
		PO5:Ethics Recognize different value systems of moral Principles that Govern a person's behavior or conducting of an activity.	**PSO5:** It is believed that the proposed changes as part of the credit based system will bring a qualitative change in the way M.Sc. (Computer Science) is taught, which will offer a more enriched learning experience.
		PO6: Environment and Sustainability Understand the issues of environment. Generate awareness among them related to environment.	**PSO6:** Students are asked to demonstrate an environmental projects to overcome the issues related to environment and have a detailed overview of environmental issue solutions.
		PO7: Self Directed and Life Long Learning Engage in lifelong learning , apply the knowledge judicially and remain continuously employabale. Carry out projects and develop new projects in the area of computer science and persue higher studies.	**PSO7:** Design the application using programming languages.

Sr.No	Class	Course	Course Outcomes
1	**M.Sc. Computer Science Part-I (Sem-I)**	Course-I CS-101 PPL	Compare programming language design. Learn more languages quickly. Understand basic language implementation Separate syntax& semantics.
		Course-II CS-102 Adv.Networking	Basic Understanding of Networking Concepts,networking terminology,protocols,layers
		Course-III CS-103 DDC	To understand principles & foundation of DDC. To focus design issues & integrity constraint & concurrency control
		Course-IV CS-104 Design and Analysis of Algorithms	Basic Algorithm Analysis techniques improving algorithm performance, Understand classical problem and solutions, Learn a variety of useful algorithms, Understand
		Course-V- CS-105 Unix Network Programming	To state the major components and describe the architecture of the UNIX operating system. To organize and manipulate files and directories To use UNIX utilities to create simple tools for the information processing To introduce Network Programming covering TCP, and UDP connections. To explain Socket programming to design client-server environment To explain inter process communication consisting of pipes, FIFOs, Semaphores and message Queues. To review basic concepts covered in the core Operating Systems course prerequisite as they are realized in the Linux platform. To teach advanced C systems programming and debugging techniques in a Unix/Linux environment
2	**M.Sc. Computer SciencePart-I (Sem-II)**	Course-I CS-201 DIGITAL IMAGE PROCESSING	To learn the Fundamental concept of Digital Image Processing Study basics of Image Restoration. To study the basic image processing Operation To Understand Image Analysis Algorithm Understanding about Image Segmentation.
		Course-II CS-202	1.To understand the functions of Operating system.

		AOS	2. Provide insight into functional model of operating system . 3. Design & implementation of operating system
		Course-III CS-203 Data Mining &Data Warehousing	1.Understand application of DMDW. 2. Learn data analysis using WEKA software. 3. Learn web mining techniques.
		Course-IV(Elective) CS-205 Programming with DOT NET	1.To Understand the DOT NET framework 2. Introduce students about the C# Language Features 3. Discussions about Knowledge about object oriented programming concepts such as data abstraction, encapsulation, inheritance and polymorphism 4. Knowledge of web development
		Course-V(Elective) CS-206 Artificial Intelligence	1.To Understand & gain the knowledge of subject 2. Introduce students about the Artificial Intelligence. 3. Discussions about Knowledge representation using predicate logic 4. Understanding about matching algorithms. 5. Learning about Natural language processing
3	**M.Sc. Computer Science Part-II (Sem-III)**	Course-I CS - 301 :- Software Metrics and Project Management	1.Software Metrics and Project Management covers skills that are required to ensure successful medium and large scale software projects. 2. It examines Requirements Elicitation, Project Management, Verification and Validation and Management of Large Software Engineering Projects.
		Course-II CS-302 Mobile Computing	1.Student learn to select and apply project management techniques for process modeling, planning, estimation, process metrics and risk management; perform software verification and validation using inspections, design and execution of system test cases
		Course-III CS-303	To understand the concepts of how an intelligent system work and its brief Development

		Soft Computing	process,IT exposes learners to Neural Network, Fuzzy Logic and Genetic Algorithms, which are the major building blocks of Intelligent Systems.
		CS-304 Course-IV (Project)	1.Work with others and on one's own to pursue a goal. 2.Increase, develop and apply computer knowledge.Gain project management skill. 3.Develop skill at conveying activities and achievements. 4.Get experience at meeting deadlines. 5.Decide and agree with peers what work moves all toward a goal.
		Course-V(Elective) CS-305 Web Services	1.To understand web services. 2.Implementation model SOA. 3. Understanding cloud computing as web services. 4.Discuss concept of Virtualization.
		Course-VII(Elective) CS-306 Database and system Administrator	1.To acquire operating system & Database Administration Skill.
		Course-VI(Elective) Cs-308 Business Intelligence	1.Understand role of BI & Decision support. 2. Understand application of DMDW. 3.Learn data analysis using BI software
4	**M.Sc. Computer Science Part-II (Sem-IV)**	Course-I CS-401 Industrial Training	1.To acquire knowledge of current trends & technologies used in software companies.
		Course-II (Elective) Parallel Computing	1. Learning basic models of parallel machine. 2. how toured basic tools like MPI & POSIX
		Course-III(Elective) Embedded System	1. Design real time system . 2. Design embedded system
		Course-IV(Elective) Software Quality Assurance	1. To learn SQA good practices with the help of various techniques strategies & tools
		Course-V(Elective) Modeling and simulation	1.Solve real world problems . 2.To develop skills modeling & simulating problems

Courses According to 2019 Pattern:

Programme		Course Outcomes
First Year of Master of Computer Science MSc(Comp. Sci.)-I **Sem – I** **(2019 Pattern)**	**Paradigm of Programming Language (CSUT111)**	1.Separate syntax from semantics 2.Compare programming language designs 3.Learn new languages more quickly 4.Use standard vocabulary when discussing languages 5. Understand basic language implementation techniques
	Design and Analysis of Algorithms (CSUT112)	1.This course will prepare students in Basic Algorithm Analysis techniques and understand the use o asymptotic notation 2.Understand different design strategies 3. Understand the use of data structures in improving algorithm performance 4.Understand classical problem and solutions 5.Learn a variety of useful algorithms
	Database Technologies (CSUT113)	1.Provide an overview of the concept of NoSQL technology. 2.Provide an insight to the different types of NoSQL databases . 3.Make the student capable of making a choice of what database technologies to use, based on their application needs.
	Artificial Intelligence (CSDT114B) and Artificial Intelligence Practical (CSDP114B)	CO1.To Understand & gain the knowledge of subject CO2. Introduce students about the Artificial Intelligence. CO3. Discussions about Knowledge representation using predicate logic CO4. Understanding about matching algorithms. CO5. Learning about Natural language processing.
	Web Services (CSDT114C) and Web Services Practical (CSDP114C)	CO1. To Understand Web Services and implementation model for SOA CO2· To Understand the SOA, its Principles and Benefits CO3· Understanding cloud computing as a web service CO4· Discuss the concept of virtualization and data in cloud.

	PPL and Database Technologies Practical (CSUP115)	1..Learn new languages more quickly & Practically. 2..Use standard vocabulary when discussing languages. 3.Make the student capable of making a choice of what database technologies to use, based on their application needs.
First Year of Master of Computer Science MSc(Comp. Sci.)-I **Sem – II** **(2019 Pattern)**	**Advanced Operating System (CSUT121)**	1.To understand the functions of Operating system. 2. Provide insight into functional model of operating system . 3. Design & implementation of operating system.
	Mobile Technologies (CSUT122)	1.Student learn to select and apply project management techniques for process modeling, 2.planning, estimation, process metrics and risk management; perform software verificationand validation using inspections, design and execution of system test cases
	Software Project Management (CSUT123)	1.Software Metrics and Project Management covers skills that are required to ensure successful medium and large scale software projects. 2. It examines Requirements Elicitation, Project Management, Verification and Validation and Management of Large Software Engineering Projects.
	Project (CSDT124A) And Project related Assignments (CSDP124A)	1.Work with others and on one's own to pursue a goal. 2.Increase, develop and apply computer knowledge.Gain project management skill. 3.Develop skill at conveying activities and achievements. 4.Get experience at meeting deadlines. 5.Decide and agree with peers what work moves all toward a goal.

	Practical on Advanced OS & Mobile Technologies (CSUP125)	2. Provide insight into functional model of operating system . 3. Design & implementation of operating system 3.planning, estimation, process metrics and risk management; perform software verification and validation using inspections, design and execution of system test cases

Department of B.Sc.Computer Science

Programme Outcomes, Programme Specific Outcomes and Course Outcomes

Sr. No.	Programme	Programme Objectives	Programme Specific Objectives
1	**B.Sc. Computer Science**	**PO1: Critical Thinking**: After successfully completing **B.Sc. (Computer Science)** Programme students will be able to: PO1: Use creativity, critical thinking, and analysis and research skills to solve theoretical and real-world problems in computer science. Make use of fundamentals of Application, including information management and intelligent applications.	**PSO1** • To develop problem solving abilities using a computer • To build the necessary skill set and analytical abilities for developing computer based solutions for real life problems. • To imbibe quality software development practices. To create awareness about process and product standards • To train students in professional skills related to Software Industry. • To prepare necessary knowledge base for research and development in Computer Science • To help students build-up a successful career in Computer Science
		PO2 Effective Communication: Speak, read, write and listen clearly in person and through electronic media in English and in one Indian language, and make meaning of the world by connecting people, ideas, books, media and technology.	**PSO2** Graduates will be able to communicate effectively in both verbal and written form.
		PO3: Social Interaction	**PSO3**

		Elicit views of others were decreased through evaluation of various Projects and Quizzes developed to provide ease of computer knowledge among local citizens. Work in Multi disciplinary environments and be responsive to the changing needs to the society	Graduates will demonstrate knowledge and understanding of computer science principles and apply these to manage projects and in multi disciplinary environment.
		PO4: Effective Citizenship Communicate effectively display leadership skills and demonstrate professionalism .Work in multi disciplinary environments and be responsive to the changing needs of the society.	**PSO4** Graduates will show the understanding of impact of computer based solution on the society and also will be aware of contemporary issues
		PO5:Ethics Recognize different value systems of moral Principles that Govern a person's behaviour or conducting of an activity.	**PSO5** Graduates will demonstrate knowledge of professional and ethical responsibilities.
		PO6: Enviornment and Sustainability Understand the issues of environment. Generate awareness among them related to environment.	**PSO6** Graduates are asked to demonstrate an environmental projects to overcome the issues related to environment and have a detailed overview of environmental issue solutions.
		PO7:Self Directed and Life Long Learning Engage in lifelong learning , apply the knowledge judicially and remain continuously employabale. Carry out projects and develop new projects in the area of computer science and persue higher studies.	**PSO7** Graduate will recognize the need for and have the preparation and ability to engage in independent and life long learning to participate and succeed in competitive examination and higher studies.

Courses offered: Under graduate

Sr.No	Class	Course	Course Outcomes
1	F.Y.B.Sc. Computer Science (Annual Pattern)	Course-I(Problem solving Using Computers and C programming)	1. To develop problem solving ability using computer. 2. To teach basic principles of programming. 3. To develop skills for writing programs in C
		Course-II(File organization & Fundamentals of Databases)	1. To understand data processing using Computers. 2. To teach basic organization of data using files. 3. To understand creations, manipulations & querying of data in databases.
		Course-III(Practical)	1. To create skill in writing and executing programs in C 2. To make familier with peripheral devices and operating system,editor,translator etc.
		Course-IV(Practical)	1.To develop the skill in designing web pages 2. To aquire skil about creation design and handling database
		Course-I (Discrete Mathematics) Course-II(Algebra & Calculus) Course-III Mathematics Practical Paper	1. A student should be able to recall basic facts about mathematics 2. A student should get a relational understanding of mathematical concepts 3. A student should get adequate exposure to global and local concerns that explore them many aspects of Mathematical Sciences.and concerned structures, and should be able to follow the patterns involved, mathematical reasoning. 4. Student should be able to display knowledge of conventions such as notations, terminology and recognize basic geometrical figures and graphical displays,state important facts resulting from their studies
		Course-I Principles of Analog Electronics Course-II Principles of Digital Electronics Course-III	1.To provide indepth knowledge of scientific and technological aspects of electronics 2. To familiarize with current and recent technological developments 3. To enrich knowledge through programmes

		Electronics Practical Paper	such as industrial visits, hobby projects, market survey, projects etc
		Course-I (StatisticalMethods I) Course- II (Statistical Methods II) Course-III (Statistical Practical Paper)	1. Students are made aware of stereochemistry of different stereoisomers & organic reaction mechanism in which they study different types of reagents, reactions and their mechanisms. 2. Students are introduced to metallurgy to understand chemical reactions and processes occurred in metallurgy. The corrosion & passivity is also included in the syllabus.
2	**S.Y.B.Sc. Computer Science Semester II**	Course-I Mathematics I Course-II Mathematics II Course-III Mathematics Practical Paper II	1. A student should be able to recall basic facts about mathematics and should be able to display 2. A student should get a relational understanding of mathematical concepts and concerned structures, and should be able to follow the patterns involved, mathematical reasoning knowledge of conventions such as notations, terminology and recognize basic geometrical figures and graphical displays ,state important facts resulting from their studies. 3.Sstudent should get adequate exposure to global and local concerns that explore them many aspects of Mathematical Sciences.
		Course-I Electronics I	1.To study the applications of logic gates 2. To use K-maps for digital circuit design. 3. To understand fundamentals of multicore technology 4. To study and understand basics of microprocessor
		Course-II Electronics II	1.To understand basics of analog electronics 2. To study different types of sensors 3. To understand different types of signal conditioning circuits
		Course-III Electronics Practical Paper III	1.To use basic concepts for building various applications in electronics 2. To understand design procedures of different electronic circuits as per requirement 3. To build experimental setup and test the circuits.
		SEM-I	1. To teach basics of System Analysis and

		Course-I CS 211 DATA STRUCTURES USING 'C'	Design, 2. To teach principles of Software Engineering, 3. To teach various process models used in practice, To Build An process Model 4. To know about the system engineering and requirement engineering,
		SEM-I CS-212 Relational Database Management System	1. To teach fundamental concepts of RDBMS (PL/PgSQL) -To teach principles of databases -To teach database management operations -To teach data security and its importance -To teach client server architecture
		Course-III CS-223(PR) : Data structures Practicals	1.Design and implement Data structures and related algorithms, Understand several ways of solving the same problem.
		Course-VI CS-224(PR):Database Practicals & Mini Project using Software Engineering techniques	2. Understanding the use of cursors, triggers, views and stored Procedures, Understanding the steps of system analysis and design, Understanding Data requirements for a specific problem domain,Designing Data base as per the Data requirements,Designing queries as per the functional requirements
		EN-211: Technical English	1.To develop competence among the students for self-learning . 2. To develop students' interest in reading literary pieces 3. To expose them to native cultural experiences and situations in order to develop humane values and social awareness
3	**T.Y.B.Sc. Computer Science (Semester-I)**	Course-I CS 331: System programming	1) To understand the design and implementation issues of System programs that play an important role in program development 2) To understand the design structure of a simple editor 3) To understand the design structure of Assembler and macro processor for an hypothetical simulated computer. 4) To understand the working of linkers and loaders and other development utilities 5) To understand Complexity of Operating

			system as a software
		Course-II CS-332 Theoretical Computer Science	1. To have an understanding of finite state and pushdown automata. 2. To have a knowledge of regular languages and context free languages. 3. To know the relation between regular language, context free language and corresponding recognizers. 4. To study the Turing machine and classes of problems.
		Course-III CS-333 Computer Networks - I	1.Understand different types of networks, various topologies and application of networks. 2.Understand types of addresses, data communication. 3. Understand the concept of networking models, protocols, functionality of each layer. 4. Learn basic networking hardware and tools.
		Course-IV CS-334 Internet Programming-I	1.To Learn Core-PHP, Server Side Scripting Language 2. Discuss concept of user define function & predefine functions of strings; 3. Explain types of array & predefine function of array; 4. Illustrate object oriented concepts in PHP script; 5. Describe file & directory handling operation & predefine function of file & directory;
		Course-V CS-335 Java programming -I	1.To learn Object Oriented Programming language 2. To handle abnormal termination of a program using exception handling 3. To create flat files 4. To design User Interface using Swing and AWT
		Course-VI CS-336 Object Oriented Software Engineering	1. Understand the components of Unified Modeling Language 2.Understand techniques and diagrams related to structural modeling 3. Understand techniques and diagrams related to behavioral modeling

			4. Understand techniques of Object Oriented analysis, design and testing
4	**T.Y.B.Sc. Computer Science (Semester-II)**	Course-I CS 341: operating system	1.To understand the design and implementation issues of Operating System. 2. To understand design issues related to process management and various related algorithms 3. To understand design issues related to memory management and various related algorithms 4. To understand design issues related to File management and various related algorithms
		Course-II CS-342 Compiler Construction	1. To understand design issues of a lexical analyzer and use of Lex tool 2. To understand design issues of a parser and use of Yacc tool 3.To understand issues related to memory allocation 4.To understand and design code generation schemes
		Course-III CS-343 Computer Networks - II	1. Basic networking concepts. 2. Understand wired and wireless networks, its types, functionality of layer. 3. Understand importance of network security and cryptography.
		Course-IV CS - 344 :- Internet Programming - II	1.Learn different technologies used at client Side Scripting Language 2. Learn XML,CSS and XML parsers. 3. One PHP framework for effective design of web application. 4. Learn JavaScript to program the behavior of web pages
		Course-V Cs- 345 Java programming -II	1.To learn database programming using Java, 2.To study web development concept using Servlet and JSP, 3.To develop a game application using multithreading, 4. To learn socket programming concept
		Course-VI CS-346 Computer Graphics	To study how graphics objects are represented in Computer To study how graphics system in a computer supports presentation of graphics information

			To study how interaction is handled in a graphics system To study how to manipulate graphics object by applying different transformations To provide the programmer's perspective of working of computer graphics

Courses offered According to 2019 Pattern:

Sr.No	Class	Course	Course Outcomes
1	F.Y.B.Sc. Computer Science (CBCS Pattern) Sem-I	Problem Solving using Computer and 'C' Programming (CS-111)	1. To develop problem solving ability using computer. 2. To teach basic principles of programming. 3. To develop skills for writing programs in C
		Database Management Systems (CS-112)	On completion of the course, student will be able to– 1.Solve real world problems using appropriate set, function, and relational models. 2.Design E-R Model for given requirements and convert the same into database tables, Use SQL.
		Practical course (CS-113)	On completion of this course, students will be able to: 1. Devise pseudocodes and flowchart for computational problems. 2. Write, debug and execute simple programs in 'C'. 3. . Create database tables in postgreSQL. 4. Write and execute simple, nested queries.
	F.Y.B.Sc. Computer Science (CBCS Pattern) Sem-II	Advanced 'C' Programming (CS-121)	1. Develop modular programs using control structures, pointers, arrays, strings andstructures . 2. Design and develop solutions to real world problems using C.
		Relational Database Management Systems (CS-122)	Student will be able to :- 1.Develop modular programs using control structures, pointers, arrays, strings and structures . 2. Design and develop solutions to real world problems using C.
		Practical course (CS-123)	On completion of the course, student will be able to– 1.Design E-R Model for given requirements and convert the same into database tables. 2. Use database techniques such as SQL& PL/SQL. 3.Explain transaction Management in relational

			database System. 4.Use advanced database Programming concepts
2	F.Y.B.Sc. Computer Science (CBCS Pattern) **Mathematics** Sem - I	1. Matrix Algebra (MTC-111) 2.Discrete Mathematics (MTC-112) 3.Mathematics Practical (MTC-113)	1. A student should be able to recall basic facts about mathematics 2. A student should get a relational understanding of mathematical concepts 3. A student should get adequate exposure to global and local concerns that explore them many aspects of Mathematical Sciences and concerned structures, and should be able to follow the patterns involved, mathematical reasoning. 4. Student should be able to display knowledge of conventions such as notations, terminology and recognize basic geometrical figures and graphical displays,state important facts resulting from their studies
	F.Y.B.Sc. Computer Science (CBCS Pattern) **Mathematics** Sem - II	1. Linear Algebra (MTC-121) 2.Graph Theory (MTC-122) 3.Mathematics Practical (MTC-123)	**i)** A students should be able to work with graphs and identify certain parameters and properties of the given graphs. **ii)** A students should be able to perform certain algorithms, justify why these algorithms work, and give some estimates of the running times of these algorithms. **iii)** A students should be able to solve basic exercises of the type: given a graph with properties *X*, prove that the graph also has property *Y*. **iv)** A students should develop an appreciation for the literature on the subject and be able to read and present results from the literature. **v)**A students should be able to write cohesive and comprehensive solutions to exercises and be able to defend their arguments.
	F.Y.B.Sc. Computer Science (CBCS Pattern) **Electronics** Sem - I	1.Semiconductor Devices and Basic Electronic Systems (ELC-111) 2.Principles of Digital Electronics (ELC-112) 3.Electronics Lab IA (ELC-113)	1.To provide indepth knowledge of scientific and technological aspects of electronics 2. To familiarize with current and recent technological developments 3. To study various types of semiconductor devices 4. To study elementary electronic circuits and systems 5. To study arithmetic circuits, combinational circuits and sequential circuits 6. To enrich knowledge through programmes

			such as industrial visits, hobby projects, market survey, projects etc
	F.Y.B.Sc. Computer Science (CBCS Pattern) **Electronics** Sem - II	1.Instrumentation System (ELC-121) 2.Basics of Computer Organisation (ELC-122) 3.Electronics Lab IB (ELC-123)	1. To study Instrumentation System 2. To study various blocks of Instrumentation System 3. To study Smart Instrumentation System 4. To get familiar digital sequential circuits 5. To study Basic computer Organization 6. To study Memory architecture 7. To enrich knowledge through programmes such as industrial visits, hobby projects, market survey, projects etc
	F.Y.B.Sc. Computer Science (CBCS Pattern) **Statistical Methods** Sem - I	1.Descriptive Statistics I (CSST 111) 2.Mathematical Statistics (CSST 112) 3.Statistics Practical Paper I (CSST 113)	At the end of the course students are expected to be able i) To tabulate and make frequency distribution of the given data. ii) To use various graphical and diagrammatic techniques and interpret. iii) To compute various measures of central tendency, dispersion, Skewness and kurtosis. iv) To fit the Binomial and Poisson distributions. v) To compute the measures of attributes. vi) The process of collection of data, its condensation and representation for real life data. vii) To study free statistical softwares and use them for data analysis in project.
	F.Y.B.Sc. Computer Science (CBCS Pattern) **Statistical Methods** Sem - II	1.Methods of Applied Statistics (CSST 121) 2.Continuous Probability Distributions and Testing of Hypothesis (CSST 122) 3.Statistics Practical Paper II (CSST 123)	At the end of the course students are expected to be able i) To understand the relationship between two variables using scatter plot. ii) To compute coefficient of correlation, coefficient of regression. iii) To fit various regression models and to find best fit. iv) To fit the Normal distribution. v) To understand the trend in time series and how to remove it. vi) To apply inferential methods for real data sets. vii) To generate model sample from given

			distributions. viii) To understand the importance and functions of different statistical organizations in the development of nation.

Department of Computer Application

Programme Outcomes, Programme Specific Outcomes and Course Outcomes

Sr.No	Programme	Programme Objectives	Programme Specific Objectives
	BBA(CA)	**PO1:Critical Thinking**: Take informed actions after identifying the assumptions that frame our thinking and actions, checking out the degree to which these assumptions are accurate and valid, and looking at our ideas and decisions (intellectual, organizational, and personal) from different perspectives.	**PSO1** The objectives of the Programme shall be to provide sound academic base from which an advanced career in Computer Application can be developed. Conceptual grounding in computer usage as well as its practical business application will be provided.
		PO2 Effective Communication: Speak, read, write and listen clearly in person and through electronic media in English and in one Indian language, and make meaning of the world by connecting people, ideas, books, media and technology.	**PSO2** Graduates will be able to communicate effectively in both verbal and written form.
		PO3: Social Interaction Elicit views of others were decreased through evaluation of various Projects and Quizzes developed to provide ease of computer knowledge among local citizens. Work in Multi disciplinary environments and be responsive to the changing needs to the society	**PSO3** Graduates will demonstrate knowledge and understanding of computer science principles and apply these to manage projects and in multi disciplinary environment.
		PO4: Effective Citizenship Communicate effectively display leadership skills and demonstrate professionalism .Work in multi disciplinary environments and be	**PSO4** Graduates will show the understanding of impact of computer based solution on the society and also will be aware of

		responsive to the changing needs of the society.	contemporary issues
		PO5:Ethics Recognize different value systems of moral Principles that Govern a person's behaviour or conducting of an activity.	**PSO5** Graduates will demonstrate knowledge of professional and ethical responsibilities.
		PO6: Enviornment and Sustainability Understand the issues of environment. Generate awareness among them related to environment.	**PSO6** Graduates are asked to demonstrate an environmental projects to overcome the issues related to environment and have a detailed overview of environmental issue solutions.
		PO7:Self Directed and Life Long Learning Engage in lifelong learning , apply the knowledge judicially and remain continuously employabale. Carry out projects and develop new projects in the area of computer science and persue higher studies.	**PSO7** Graduate will recognize the need for and have the preparation and ability to engage in independent and life long learning to participate and succeed in competitive examination and higher studies.

Courses According to 2013 Pattern

Sr. No.	Course	Course Outcomes
1	**FYBBA (CA) Modern Operating Environment And MS Office (101)**	The objectives of the Programme shall be to provide sound academic base from which an advanced career in Computer Application can be developed. Conceptual grounding in computer usage as well as its practical business application will be provided.
2	**FYBBA (CA) Financial Accounting (102)**	To Employ critical thinking skills to analyze financial data as well as the effects of differing financial accounting methods on the financial statements
3	**FYBBA (CA) Principles of Programming and Algorithms (103)**	This course introduces two different programming styles, imperative and functional programming. Its primary intention is to develop key programming and problem solving skills but it has a secondary aim, which is to build students' confidence in their ability to take on and learn new programming languages within a short space of time

4	**FYBBA (CA) Business Communication (104)**	To prepare students for the challenges of a society that is shaped by communication. As participants in the program, students develop and integrate knowledge, creativity, ethical practice, and skills. Students also examine and produce work in oral, written, and visual communication and practice skills in group and intercultural communication.
5	**FYBBA (CA) Principles of Management (105)**	Students will examine the fundamental roles and processes of planning, leading, organizing and controlling that comprise the *managers*' role. It focuses on the entire organization from both a short and long-term perspective for strategic vision, setting *objectives*, crafting a strategy and then implementing it.
6	**FYBBA (CA) Procedure Oriented Programming using C (201)**	Students should be able to: understand the basic components of an object-oriented program including methods and attributes, the distinction between classes and instances, the structures required to write basic algorithms, the components of simple text and graphics based interfaces, the relevance of the design process and basic object-oriented design notation, the applicability and effectiveness of various basic software testing techniques.
7	**FYBBA (CA) Database Management Systems (202)**	This course is intended to provide you with an understanding of the current theory and practice of database management systems. To help you more fully appreciate their nature, the course provides a solid technical overview of database management systems, using a current database product as a case study. In addition to technical concerns, more general issues are emphasized. These include data independence, integrity, security, recovery, performance, database design principles, and database administration**.**
8	**FYBBA (CA) Organizational Behavior(203)**	1) To equip the students to understand the impact that individual, group & structures have on their behavior within the organizations. 2)To help them enhance and apply the knowledge they have received for the betterment of the organization.
9	**FYBBA (CA) Elements of Statistics (204)**	1. To understand the power of excel spreadsheet in computing summary statistics. 2. To understand the concept of various measures of central tendency and variation and their importance in

		business. 3. To understand the concept of probability, probability distributions and simulations in business world and decision making.
10	**FYBBA (CA) E-Commerce Concepts (205)**	This course introduces the concepts, vocabulary, and procedures associated with E-Commerce and the Internet. The student gains an overview of all aspects of E-Commerce. Topics include development of the Internet and E-Commerce, options available for doing business on the Internet, features of Web sites and the tools used to build an E-Commerce web site, marketing issues, payment options, security issues, and customer service.

Courses offered: Under graduate

Sr. No.	Course	Course Outcomes
1	**SYBBA (CA) RDBMS (Relational Database Management System) (301)**	**Objectives:** 1)Enables students to understand relational database concepts and transaction management concepts in database system. 2) Enables student to write PL/SQL programs that use: procedure, function, package, cursor and trigger.
2	**SYBBA (CA) Data Structure Using C (302)**	**Objective:-** 1. To understand different methods of organising large amounts of data 2. To efficiently implement different data structure 3. To efficiently implement solution for different problems 4. To get more knowledge on C programming language
3	**SYBBA (CA) Introduction to Operating System (303)**	**Objective -:** 1. To know system programming 2. To know services provided by operating system 3. To know the Scheduling concepts
4	**SYBBA (CA) Business Mathematics (304)**	1.Understanding basic terms in the areas of business calculus and financial mathematics, Independently solving of business problems.
5	**SYBBA (CA) Software Engineering (305)**	**Objective:** This course enables students to understand system concepts and its application in Software development.
6	**SYBBA (CA) Object Oriented Programming**	**Objectives:** 1. Acquire an understanding of basic object-oriented

	Using C++ (401)	concepts and the issues involved in effective class design. 2. Enables student to write C++ programs that use: object-oriented concepts such as information hiding, constructors, destructors, inheritance.
7	**SYBBA (CA) Programming in Visual Basic (402)**	**Objectives:-** To learn properties and events, methods of controls and how to handle events of different controls.To understand the use of active controls and how to design VB application To learn connectivity between VB and databases**.**
8	**SYBBA (CA) Computer Networking (4 03)**	**Objective :-** 1. To know about computer network. 2. To understand different topologies used in networking 3. To learn different types of network. 4. To understanding the use of connecting device used in network.
9	**SYBBA (CA) Enterprise Resource Planning and Management. (4 04)**	**Objectives -:** 1. To know what is ERP. 2. To learn different ERP technologies.
10	**SYBBA (CA) Human Resource Management (405)**	**Objective:** To acquaint the students with the Human Resource Management its different functions in an organization and the Human Resource Processes that are concerned with planning, motivating and developing suitable employees for the benefit of the organization.

Courses offered: Under graduate

Sr. No.	Course	Course Outcomes
1	**TYBBA (CA) 501 : Java Programming**	• Students will be able to program Java classes and methods using a subset of data types and using assignment, method calls, while loops, for loops, and conditionals. The goal will continue to be "coding from example" as opposed to "coding on a blank sheet of paper." • Students will learn how to use and manipulate several core data structures: Arrays, linked lists, trees, stacks, and queues. • Students will be able to construct simple Java user interfaces and identify where data structures are appearing in those user interfaces.

		. To learn the basic concept of Java Programming. • To understand how to use programming in day to day applications.
	TYBBA(CA) 502 : Web Technologies	1. Think critically about how to solve a problem using programming 2. Write JavaScript programs using functions, for loops, and conditional statements 3. Use HTML to construct a web page with paragraphs, divs, images, links, and lists; 4. Add styles to a web page with CSS IDs and classes 5. Make a web page interactive with JavaScript commands like alert, onClick, onChange, adding input features like an image canvas, button, and slider. 6. To know & understand concepts of internet programming. 7. To understand how to develop web based applications using PHP.
	TYBBA(CA)503 : Dot Net Programming	1. Students will able to design web applications using .NET 2. Students will be able to use .NET controls in web applications. 3. Students will be able to debug and deploy.NET web applications 4. Students will be able to create database driven.NET web applications and web services 5. This will introduce visual programming and event driven programming practically. 6. This will enhance applications development skill of the student.
	TYBBA(CA)504 : Object Oriented Software Engineering	1. To Understand concept of system design using UML. 2. To understand system development through object oriented techniques.

	TYBBA(CA) 601 : Advanced Web Technologies	• Student is able to understand and use the basics of the XML based technologies • Student is able to understand and define and utilize the Web Services / Windows Communication Foundations concept • Student is able to describe how Web Services can be used to implement Service Oriented Architecture (SOA) • Student is able to design and implement user interfaces based on the AJAX technology • To know & understand concepts of internet programming. • To understand the concepts of XML and AJAX.
	TYBBA(CA) 602 : Advanced Java	1. To know the concept of Java Programming. 2. To understand how to use programming in day to day applications. 3. To develop programming logic..
	TYBBA(CA) 603 : Recent Trends in IT	1. To introduce upcoming trends in Information technology. 2. To study Eco friendly software development.
	TYBBA(CA) 604 : Software Testing	1. To know the concept of software testing. 2. To understand how to test bugs in software. 3. To develop programming logic.

Courses offered according to 2019 Pattern:

Sr. No.	Course	Course Outcomes
1	**FYBBA (CA) Business Communication Skills (101)**	1. To understand what is the role of communication in personal and business world 2. To understand system and communication and their utility 3. To develop proficiency in how to write business letters and other communications in required business.
2	**FYBBA (CA) Principles of Management (102)**	1.To understand basic concept regarding org. Business Administration 2.To examining how various management principles 3.To develop managerial skills among the students
3	**FYBBA (CA)** - C Programming **(103)**	1. To develop problem solving ability using computer. 2. To teach basic principles of programming. 3. To develop skills for writing programs in C
4	**FYBBA (CA) Database Management Systems (104)**	1.This course is intended to provide you with an understanding of the current theory and practice of database management systems. 2.To help you more fully appreciate their nature, the course provides a solid technical overview of database management systems, using a current database product as a case study. 3. In addition to technical concerns, more general issues are emphasized. These include data independence, integrity, security, recovery, performance, database design principles, and database administration**.**
5	**FYBBA (CA) Business Statistics (105)**	1. To understand role and importance of statistics in various business situations 2. To develop skills related with basic statistical technique 3. Develop right understanding regarding regression, correlation and data interpretation
6	**FYBBA (CA) Computer Laboratory Practical (106)**	1.To produce skill oriented human resource. 2. To import practical skills among students. 3.To make industry ready resource. 4. To bring the spirit of entrepreneurship.
7	**FYBBA (CA) Organizational Behavior & Human Resource Management (201)**	i) To understand basic concept of HRM & OB ii) To make aware students about traditional & modern methods of procurement & development in organization. iii) To know the major trends in HRM & OB
8	**FYBBA (CA) Financial Accounting (202)**	i) To develop right understanding regarding role and importance of monetary and financial transactions in business ii) To cultivate right approach towards classifications of different transactions and their implications

		Iii) To develop proficiency preparation of basic financial as to how to write basis accounting statement - Trading and P&L
9	**FYBBA (CA) Business Mathematics (203)**	i) To understand role and importance of Mathematics in various business situations and while developing softwares. ii) To develop skills related with basic mathematical technique
10	**FYBBA (CA) Relational Data Base (204)**	i) Enables students to understand relational database concepts and transaction management concepts in database system. ii) Enables student to write PL/SQL programs that use: procedure, function, package, cursor and trigger.
11	**FYBBA (CA) Web Technology (HTML-JSS-CSS) (205)**	i) To know & understand concepts of internet programming. ii) To understand how to develop web based applications using JavaScript.
12	**FYBBA (CA) Computer Laboratory Practical (206)**	1.To produce skill oriented human resource. 2. To import practical skills among students. 3.To make industry ready resource. 4. To bring the spirit of entrepreneurship.

Department of Geography

Programme Outcomes, Programme Specific Outcomes and Course Outcomes

Name of Programme	Programme Outcomes (PO's)	Programme Specific Outcomes (PSO's)
B.A. Geography	**PO1. CRITICALTHINKING** The curriculum is designed such way that students should acquire and ability to observe accurately and objectively. They should be able to solve the problems and also think scientifically, independently and draw rational conclusions. **PO2.EFFECTIVE COMMUNICATION** Apply clear written and oral communication skills to communicate results of research **PO3 SOCIAL INTERACTIONS** In this course students are made aware of environment related issues. They can apply qualitative and quantitative research techniques to gather and analyse data on social, cultural, and ecological problems	**PSO1** Demonstrate ability to apply knowledge learned in classroom to set and perform simple laboratory experiments in geography. **POS2** Demonstrate and understanding of principles and theories of Geography. This include Geomorphology, Economic Geography, Human Geography, Agriculture Geography. **PSO3** To make the students self sufficient in understanding and handling the various issues that may arise related to geography.

	PO4 EFFECTIVE CITIZENSHIP In this program students demonstrate connections between everyday life at the local scale and the larger economic, social, and/or environmental forces that network them into a global community **PO5 ETHICS** In this program students are made alerts regarding misuse of food adulteration, chemical technology, poisons, fungicides, pesticides and chemical and nuclear weapons **PO6 ENVIRNMENT AND SUSTAINABILITY** Demonstrate general understanding of how the physical environment, human societies, and local and global economic systems are integral to the principles of sustainable development. **PO7 SELF DIRECTED AND LIFE LONG LEARNING** Develop a general understanding of global human population patterns, factors influencing the distribution and mobility of human populations including settlement and economic activities and networks, and human impacts on the physical environment.	

Courses offered: Under graduate

Sr.No	Class	Course	Course Outcomes
1	F.Y.B.Sc. Geography (Annual Pattern)	Paper I Geomorphology	1. To introduce the students to the basic concepts in geomorphology. 2. To acquaint the students with the utility and applications of geomorphology in different areas and environment. 3. To make the students aware of the need of protection and conservation of different landforms.
		Paper II Climatology and Oceanography	1. To introduce the students to the basic principles and concepts in Climatology and Oceanography. 2. To acquaint the students with the applications of Climatology and Oceanography in different areas and environment. 3. To make the students aware of the Planet Earth and thereby to enrich the student's life.
		Paper II Practical	1. To acquire the knowledge of various techniques in Physical Geography. 2. To enable the student to use techniques of specific maps and their geographical interpretation. 3. To acquaint the students with the weather instruments and their utility and applications in geographical phenomena.
2	F. Y. B. A. Geography	Course Gg110: Elements of Geomorphology (General -1)	1. Understood vertical and horizontal structure and changes in land and their impact on human life. 2. To study the application of Land uses 3. Explain principal terms, definitions, Concept and theories of geomorphology. 4. Identify different Materials of the earth crust, rock types, types of weathering, mass movements and types of slope
3	S. Y. B. A. Geography	Course Gg-210: Geography of Disaster Management (General -2)	1: Describe concepts of Disaster and its relations with Geography. 2: Explain terminology and concepts of Disaster Management. 3: Implement concepts of hazards in different areas and its Management. 4: Explain standard operating procedure on

			government for disaster management. 5: Describe concepts of anthropogenic disaster, its types, causes and management.
		Course Gg230: Fundamentals of Geographical Analysis (S-2)	1. Demonstrate preparation of drawing profile with the help of Dumpy Level 2: Identify different Types of Map Projections. 3: Describe basic of Statistical data and the skill of graphical data representation. 4: Apply Surveying Techniques in Geography. 5: Explain basic concepts of map and scale. 6: Describe surveying instruments and their applications. CO7:
4	T.Y.B.A. Geography	Course Gg 310: Human Geography (G-3)	1: Describe nature of man-environment relationship and human capability. 2: Explain conditions of living of human beings from primitive life to the modern era. 3: Explain human evolution and different races existed since the beginning of living life. 4: Describe different tribes and their culture in different geographical areas. 5: Explain causes and effect of migration of mankind.
		Course Gg: 320 Agriculture Geography (S-3)	1: Explain principal terms, definitions, nature and scope of Agriculture Geography 2: Discuss fundamental concept, land use, crops, agricultural production and Development, determinants of agricultural activities, physical determinants, and socio-economic determinants. 3: Explain different types of agriculture. 4: Discuss problems and prospects of agriculture with Indian examples.
		Course Gg-301 Techniques of Spatial Analysis (S-4)	1. Applied the topographic features for land usage. 2. Trained to practice various surveying methods. 3. Explain basic concepts of statistical and remote Sensing. 4. Identify different methods of Relief Representation. 5. Describe basic of Statistical data and the skill of data representation. 6 Apply Remote Sensing Techniques in Geography. 7.7. Interpret top sheet/ map, aerial photographs and analysis of toposheet/ map, aerial Photographs.

Courses Offered According to 2019 Pattern:

Programme	Course	Course Outcomes
Bachelor of Arts First Year of Bachelor of Arts (F.Y.B.A.) (2019 Pattern)	**Geography General Paper- I. , Sem-I Physical Geography Gg-110(A)**	CO1. Understood vertical and horizontal structure and changes in land and their impact on human life. CO2.To study the application of Land uses
	Geography General Paper- II , Sem-II Human Geography Gg-110(B)	CO1: Describe nature of man-environment relationship and human capability. CO2: Explain conditions of living of human beings from primitive life to the modern era. CO3: Explain human evolution and different races existed since the beginning of living life. CO4: Describe different tribes and their culture in different geographical areas. CO5: Explain causes and effect of migration of mankind

Department of Political Science

Programme Outcomes, Programme Specific Outcomes and Course Outcomes

Name of Programme	Programme Outcomes (PO's)	Programme Specific Outcomes (PSO's)
B.A. Politics	**PO1. CRITICALTHINKING** The curriculum is designed such way that students take informed actions after identifying the assumptions that frame our thinking and actions, checking out the degree to which these assumptions are accurate and valid. **PO2.EFFECTIVE COMMUNICATION** Speak, read, write and listen clearly in person and through electronic media in English and in one Indian language, and make meaning of the world by connecting people, ideas, books, media and technology. **PO3 SOCIAL INTERACTIONS** In this course students are made aware of Elicit views of others, mediate disagreements and help reach conclusions in-group settings	**PSO1** Demonstrate ability to discuss about Indian Constitution and Political process **POS2** Demonstrate Ability to describe Administrative Process and thinking in western thinking, as well as Indian context **PSO3** To make the students self sufficient in understanding and handling the various issues and discuss Political thinking in western world

	PO4 EFFECTIVE CITIZENSHIP In this program students demonstrate empathetic social concern and equity centred national development, and the ability to act with an informed awareness of issues and participate in civic life through volunteering. **PO5 ETHICS** In this program students recognize different value systems including your own, understand the moral dimensions of your decisions, and accept responsibility for them **PO6 ENVIRNMENT AND SUSTAINABILITY** Demonstrate general understanding of issues of environmental contexts of how the physical environment, human societies, and local and global economic systems are integral to the principles of sustainable development. **PO7 SELF DIRECTED AND LIFE LONG LEARNING** Develop a general understanding of global human population patterns, factors influencing the distribution and mobility of human populations including settlement and economic activities and networks, and human impacts on the physical environment.	

Courses offered: Under graduate

Sr.No	Class	Course	Course Outcomes
1	F.Y.B.A. Politics (Annual Pattern)	Paper I Indian Government and Politics	1. This paper focuses in detail on the political processes and the actual functioning of the political system. 2. It simultaneously studies in detail the political structure both Constitutional and Administrative. 3. It emphasizes on local influences that derive from social stratification of castes and jatis, from language, religion, ethic and economic determinants and critically assesses its impact on the political processes. 4. Explain Fundamental Rights, Duties and Directive principle of State Policy
2	S. Y. B. A. Politics	Course 2167: Political Theory and Concepts (General -2)	1. Understood vertical and horizontal structure and changes in land and their impact on human life. 2. To study the application of Land uses 3. Explain principal terms, definitions, Concept and theories of geomorphology. 4. Identify different Materials of the earth crust, rock types, types of weathering, mass movements and types of slope
3		Course 2168: Western Political Thought Management (Special -1)	1: This paper studies the classical tradition in political theory from Plato to Marx with the view to understand how the great Masters explained and analyzed political events and problems of their time and prescribed solutions. 2: The texts are to be interpreted both in the historical and philosophical perspectives to understand the universality of the enterprise of political theorizing. 3: Define Plato`s thinking, like Ideal State & Philosopher King, Education and Justice. 4: Interpret Aristotle`s thought on State, Property, Slavery &
		Course 2169: Political Sociology (Special -2)	1. Discuss Meaning and Nature of Political Culture, Types of Political Culture 2: State Meaning and Nature Participation, Levels of Participation, Agencies of Recruitment 3: Explain Process and Agencies of Socialization 4: The limitations of the classical tradition, namely its

			neglect of women's concerns and issues and the non-European world are critically examined.
4	T.Y.B.A. Politics	Local Self Government In Maharashtra (General-3)	The content of this course are designed with following objectives. 1) To introduce the students to the structure of Local Self Government of Maharashtra. 2) To make students aware of the various Local Self Institutions, their functions, compositions and importance. 3) To identity the role of Local Government and Local Leadership in development.
		Course 3168: Public Administration (Special -3)	1. Discuss meaning, Nature, Scope and Significance of Public Administration 2. The essence of Public Administration lies in its effectiveness in translating the governing philosophy into programmes, policies and activities and making it a part of community living. 3. The paper covers personnel public administration in its historical context thereby proceeding to highlight several of its categories, which have developed administrative salience and capabilities to deal with the process of change. 4. The recent developments and particularly the emergence of New Public Administrations are incorporated within the larger paradigm of democratic legitimacy.
		Course 3169: International Politics (Special -4)	1: Describe Power Approach, Decision Making Approach & System Approach to study International Relations 2. Explain the Meaning & Elements of Power, Changing Nature of the National Power. 3. The dominant theories of power and the question of equity and justice, the different aspects of balance of power leading to the present situation of a unipolar world are included. 4. It highlights various aspects of conflict and conflict resolution, collective security and in the specificity of the long period of the post Second World War phase of the Cold War, of Détente and Deterrence leading to theories of rough parity in armaments

Courses Offered According to 2019 Pattern:

Programme	Course	Course Outcomes
Bachelor of Arts First Year of Bachelor of Arts (F.Y.B.A.) (2019 Pattern)	**F.Y.B.A. Politics General Paper- I. , Sem-I INTRODUCTION TO INDIAN CONSTITUTION**	1. To acquaint students with the important features of the Constitution of India and with The basic framework of Indian government. 2. To familiarize students with the working of the Constitution of India. 3.Recognize background and features of Indian constitution; 4. Explain Fundamental Rights, Duties and Directive principle of State Policy
	F.Y.B.A. Politics General Paper- II , Sem-II, **INTRODUCTION TO INDIAN CONSTITUTION**	1.Discuss structure of Central governmental bodies with examples; 2. Discuss structure of State governmental bodies with examples; 3. Interpret Party System and Elections in India; 4.Discuss role of caste and religion in Indian politics; 5. Interpret issues of regionalism and developments in India

Department of Hindi

Programme Outcomes, Programme Specific Outcomes and Course Outcomes

Name of Programme	Programme Outcomes (PO's)	Programme Specific Outcomes (PSO's)
B.A. Hindi	**PO1. CRITICALTHINKING** The curriculum is designed such way that by reading, writing and listening to influential dialogues make their personalities effective **PO2.EFFECTIVE COMMUNICATION** Thinking about a good creation and meditating on it, reading and writing effective dialogues can make your personality clearly impressive and you can solve the problem of society by reading Indian creations. By reading literature, by changing the heart of the society, by reading literature, caste can get rid of the prevalent discrimination. **PO3 SOCIAL INTERACTIONS** Reading critical literature provides the power to review. Society has character in literature. This can help society. Increased conceptual capacity through literature can be tested in people through imaginary books and techniques can increase communication **PO4 EFFECTIVE CITIZENSHIP** In this program students demonstrate	**PSO1** Demonstrate ability to analyze natural beauty by reading stories, poetry and novels. **POS2** Time has an important place in life. It makes sense of the woman. Students can evaluate the literature by evaluating the literature and reviewing the literature and language. **PSO3** Students can try to test poetry and novel good story of Hindi literature, after learning the knowledge of Hindi literature, the student will speak well in Hindi and write novels.

	empathetic social concern and equity centered national development, and the ability to act with an informed awareness of issues and participate in civic life through volunteering. Hindi language arises feelings of patriotism among students and young people **PO5 ETHICS** In this program students recognize different value systems including your own, understand the moral dimensions of your decisions, and accept responsibility for them **PO6 ENVIRNMENT AND SUSTAINABILITY** Demonstrate general understanding of issues of environmental contexts of how the physical environment, human societies, and local and global economic systems are integral to the principles of sustainable development. **PO7 SELF DIRECTED AND LIFE LONG LEARNING** Develop a general understanding of global human population patterns, factors influencing the distribution and mobility of human populations including settlement and economic activities and networks, and human impacts on the physical environment.	

Courses offered: Under graduate

Sr.No	Class	Course	Course Outcomes
1	F.Y.B.A. Hindi (Annual Pattern)	(Course Code-1097) Gadya Vaibhav, Kavya Sarita) General Paper I	1.Familiarized with masterpieces in prose and poetry such as one act play, poems and short stories in Hindi. 2. Practiced Hindi language for analyzing, writing and communicating in Hindi. 3. Generated interest in studying Hindi language and literature. 4. Studied old and new literary extracts for the advancements of knowledge in Hindi language and literature.
2	S. Y. B. A. Hindi	(Course Code-2097) Story, Poetry & Writing General Paper: II	1. Familiarized students with masterpieces in prose, poetry and short stories in Hindi. 2 Practised report writing and advertising. 3 Generated interest in studying Hindi language and literature. 4. Identify different Materials of the earth crust, rock types, types of weathering, mass movements and types of slope
3		Course Code-2098: Hindi Bhasha Ka Vikas (Special -1)	1. Studied the growth of Hindi in modern world. 2: Studied script, punctuation marks and rules of grammar in Hindi. 3: Studied various dialects of Hindi. 4. Developed linguistic competence. 5. Studied Devnagari font in Hindi language.
		Course Code-2099: Novel, Drama & Medieval Hindi Poetry (Special -2)	1.Acquainted with basic elements, theory and types of novel. 2.Studied selected masterpieces in Hindi and Indian drama. 3.Criticized novel drama & medieval Hindi poetry in the light of various theories. 4.Studied the aesthetics of Hindi literature.
4	T.Y.B.A. Hindi	Course Code-3097: Atmakatha, Ek Kanth Vishpayi (General-3)	1. Familiarized with masterpieces in autobiographies and classical poetic drama in Hindi. 2. Studied the socio- cultural background of selected autobiographies. 3. Inculcated journalism skills and their applications. 4. Trained to translate English words into Hindi language.

		(Course Code-3098) History of Hindi Literature (Special -1)	1. Studied theory, elements of Hindi Literature. 2. Studied the development of Hindi Literature. 3. Studied various periods of Hindi Literature. i.e. Aadikal, Bhaktikal, Ritikaal, Aadhunikkaal. 4. Studied writers like Chandbardai, Kabir, Keshavdas and Premachand 5. Studied Hindi culture.
		Course Code-3099: Kavyashastra (Special -2)	1. Studied types of Hindi Poetry 2. Understood the development of poetry 3. Studied Hindi Prose such as essay, drama and one act play. 4. Developed critical attitude and sensibility. 5. Practiced figure of speeches, meter and flavours of literature.

Courses offered: Under graduate

Courses According to 2013 Pattern:

Sr.No	Class	Course	Course Outcomes
1	F.Y.B.A. Hindi (Annual Pattern)	(Course Code-1097) Gadya Vaibhav, Kavya Sarita) General Paper I	1. CO1.Familiarized with masterpieces in prose and poetry such as one act play, poems and short stories in Hindi. 2. Practiced Hindi language for analyzing, writing and communicating in Hindi. 3. Generated interest in studying Hindi language and literature. 4. Studied old and new literary extracts for the advancements of knowledge in Hindi language and literature.
2	S. Y. B. A. Hindi	(Course Code-2097) Story, Poetry & Writing General Paper: II	1. Familiarized students with masterpieces in prose, poetry and short stories in Hindi. 2 Practised report writing and advertising. 3 Generated interest in studying Hindi language and literature. 4. Identify different Materials of the earth crust, rock types, types of weathering, mass movements and types of slope
3		Course Code-2098: Hindi Bhasha Ka Vikas (Special -1)	1. Studied the growth of Hindi in modern world. 2: Studied script, punctuation marks and rules of grammar in Hindi. 3: Studied various dialects of Hindi. 4. Developed linguistic competence.

			5. Studied Devnagari font in Hindi language.
		Course Code-2099: Novel, Drama & Medieval Hindi Poetry (Special -2)	1.Acquainted with basic elements, theory and types of novel. 2.Studied selected masterpieces in Hindi and Indian drama. 3.Criticized novel drama & medieval Hindi poetry in the light of various theories. 4.Studied the aesthetics of Hindi literature.
4	T.Y.B.A. Hindi	Course Code-3097: Atmakatha, Ek Kanth Vishpayi (General-3)	1. Familiarized with masterpieces in autobiographies and classical poetic drama in Hindi. 2. Studied the socio- cultural background of selected autobiographies. 3. Inculcated journalism skills and their applications. 4. Trained to translate English words into Hindi language.
		(Course Code-3098) History of Hindi Literature (Special -1)	1. Studied theory, elements of Hindi Literature. 2. Studied the development of Hindi Literature. 3. Studied various periods of Hindi Literature. i.e. Aadikal, Bhaktikal, Ritikaal, Aadhunikkaal. 4. Studied writers like Chandbardai, Kabir, Keshavdas and Premachand 5. Studied Hindi culture.
		Course Code-3099: Kavyashastra (Special -2)	1. Studied types of Hindi Poetry 2. Understood the development of poetry 3. Studied Hindi Prose such as essay, drama and one act play. 4. Developed critical attitude and sensibility. 5. Practiced figure of speeches, meter and flavours of literature.

Courses Offered According to 2019 Pattern:

Programme	Course	Course Outcomes
Bachelor of Arts First Year of Bachelor of Arts (F.Y.B.A.) (2019 Pattern)	**F.Y.B.A. Hindi** **General Paper- I., Sem-I** **Kahani,Kavya evm Lekhan** **(1A)**	1.Introducing Hindi literature to students. 2. To know Hindi Kahani literature 3. To develop communication skills through Hindi language 4. Increase the trend of original writing 5. Develop advertising skills 6. Provide translation information 7. Introducing Hindi computing
	F.Y.B.A. Hindi **General Paper- I., Sem-II** **Kahani,Kavya evm Lekhan** **(1B)**	1.Introducing Hindi literature to students. 2. To know Hindi Kahani literature 3. Develop essay writing skills 4. Making students aware of advertising writing

PO's , PSO's for General Subjects:

Program Name	Program Outcome (PO's)	Program Specific Outcome (PSO's)			
		English	**Economics**	**History**	**Marathi**
B.A (General Subjects)	**PO1.Critical Thinking**: Take informed actions after identifying the assumptions that frame our thinking and actions, checking out the degree to which these assumptions are accurate and valid, and looking at our ideas and decisions (intellectual, organizational, and personal) from different perspectives. **PO2. Effective Communication**: Speak, read, write and listen clearly in person and through electronic media in English and in one Indian language, and make meaning of the world by connecting people, ideas, books, media and technology. **PO3.Social Interaction**: Elicit views of others, mediate disagreements and help reach conclusions in group settings. **PO4.Effective Citizenship**: Demonstrate empathetic social concern and equity center national development, and the	**PSO1.**The purpose of teaching each lesson/unit is to help the students, first of all, gain a clear idea of it. The teacher's role is to enable the learners formulate their own ideas about the contents of each unit. This is to be done by raising questions that can encourage learners to think about the issue discussed in the text. **PSO2.** The grammar and phonetic components in the syllabi provide enough opportunities to help learners use the four skills inside and outside the classroom. The grammar items are used situationally to develop the skill of speaking. **PSO3.** The syllabus offers scope for	**PSO1:** Understand the behavior of Indian and World economy **PSO2:** Analyze macroeconomic policies including fiscal and monetary policies of India **PSO3:**Determine economic variables including inflation, unemployment, poverty, GDP, Balance of Payments using statistical methods **PSO4:** Understand the behavior of financial and money markets and perform cost-benefit analysis for making investment decisions **PSO5:** The purpose here is to teach with	**PSO1:** Student enables to Evaluate, analyze and synthesize historical materials (primary and secondary sources). **PSO2:** Student enables to Recognize and explain the historical development of cultures. **PSO3:** Student understands to Evaluate and recognize different Empire in Indian history. **PSO4:**Studen tIdentify the role of theory and methodology in the production of	1.विध्यार्थ्यांची सर्जनशक्ती विकसित करणे. 2.विध्यार्थ्यांमध्ये मराठी भाषेचा प्रचार व प्रसार करणे. 3.विध्यार्थ्यांना भाषेचे महत्त्व पटवून देणे. 4.सोशल मीडिया मध्ये रोजगाराच्या संधी व मराठी भाषा याविषयी जागृती करणे.

	ability to act with an informed awareness of issues and participate in civic life through volunteering. **PO5.Ethics**: Recognize different value systems including your own, understand the moral dimensions of your decisions, and accept responsibility for them. **PO6.Environment and Sustainability**: Understand the issues of environmental contexts and sustainable development. **PO7.Self-directed and Life-long Learning**: Acquire the ability to engage in independent and life-long learning in the broadest context socio-technological changes	picking out issues of personal/general relevance for discussion in class. This is controlled by the teacher who can give subjects to individuals or groups of students. Discussions and debates are meant to develop the ability to formulate opinions, share them with the class and to express agreement, disagreement, etc. in socially acceptable ways. **PSO4.** The objective is to extend the social interaction practices to develop self-discipline and use the ideas gained through discussions for intelligently responding to a wide spectrum of political, social, economic and cultural issues.	a clear awareness of the diverse mix of students in the class and their specific necessities. The awareness is necessary for the teacher to abstain from imposing him-/herself on the students his/her ethical values. The aim is to recognise the value systems of each student group and to maintain a balance between different ethical ideas **PSO6:** The attempt in class is to use textual units to enlighten students on the positive and negative aspects of exploring Nature by people of different viewpoints. The purpose is to ensure students' understanding about	historical knowledge **PSO5:** Student Identify and critique basic historical concepts	

			the importance of ecological balance. Many of the lessons and poems can be used by teachers for this purpose.		

Courses Offered According to 2013 Pattern:

Programme	Course	Course Outcomes
Bachelor of Arts First Year of Bachelor of Arts (F.Y.B.A.)	**Economics General Paper- I (Indian Economy – Problems and Prospects) (Course Code- 1157)**	CO1. Understood micro model of market demand and supply to predict changes in price and output
		CO2. Used macroeconomic models to explain the changes in output, employment, inflation and growth.
		CO3. Trained students for statistical analysis and interpreting economic problems
		CO4. Analysis of economic status of various countries.
		CO5. Studied and utilized the economic data for statistical outcomes.
Bachelor of Arts Second Year of Bachelor of Arts (S.Y.B.A.)	**1.Economics General Paper- II (Modern Banking) (Course Code- 2157)**	CO1. Created the awareness among the students of Modern Banking System.
		CO2. Clear understood of the operations of banking their interaction with the rest of the economy is essential to realize how monetary forces operate through a multitude of channels- market, non-market, institutions and among others, the state.
Bachelor of Arts Third Year of Bachelor of Arts (T.Y.B.A.)	**Economics General Paper- III (Economic Development and Planning) (Course Code- 3157)**	CO1. Studied of Economic Development has gained importance because of stained interest of the developing countries in uplifting their economic conditions by restructuring their economics to acquire greater diversity, efficiency and equity in Consonance with their priorities.
		CO2. In recent times, besides hard core economic prescriptions to development, concern hitherto relegated to background, like education, health, sanitation and infrastructural development, have found place of pride in explaining the preference of various economies incorporated in this paper are devoted to the theories of economic development, approaches to economic development, social and institutional aspects of development, constraints on development process, macroeconomic policies, roll of foreign capital and economic planning etc. in developing countries.
		CO3. Created awareness of the basic theoretical framework underlying the field of macroeconomics.

Courses Offered According to 2019 Pattern:

Programme	Course	Course Outcomes
Bachelor of Arts First Year of Bachelor of Arts (F.Y.B.A.) (2019 Pattern)	**F.Y.B.A Economics** **General Paper- I , Sem - I** **Indian Economic Environment**	1.Describe status of the Indian economy as a developing economy in comparison with world economy. **2.** Describe status of agricultural and industrial sector of the Indian economy with special regional reference to the economy of Maharashtra. 3.Describe Factors of production and industrial labour in industrial sector of the Indian economy. **4**: Interpret demographic features of the Indian economy and problems. **5.** Analyse developments of secondary and tertiary sectors in the economy along with the problems and solutions.
	F.Y.B.A Economics **General Paper- I , Sem - I** **Indian Economic Environment**	1.Describe specific areas of economy of the Maharashtra like cooperative movement, regional imbalance and water management. **2.**Explain poverty and unemployment as economic problems in the India and Maharashtra. 3.Descried evolution of modern banking in the west and in India. 4. Describe functioning and working of the commercial and cooperative banks. 5. Explain functions and working of the central bank of country and Reserve Bank of India. 6.Describe new applications of technology evolved in the banking sector.

Courses Offered According to 2013 Pattern:

Programme	Course	Course Outcomes
Bachelor of Arts First Year of Bachelor of Arts (F.Y.B.A.)	**Compulsory English: (Text- Visionary Gleam) (Course Code- 1017)**	CO1.Familiarized with masterpieces in prose, poetry and short stories in English.
		CO2. Practiced English language for analyzing, writing and communicating in English
		CO3. Generated interest in studying English grammar.
		CO4. Studied old and new literary extracts for the advancements of knowledge in English language and literature.
Bachelor of Arts Second Year of Bachelor of Arts (S.Y.B.A.)	**Compulsory English: (Study of English Language and Literature) General English (G-2)**	CO1.Familiarized students with masterpieces in prose, poetry and short stories in English.
		CO2.Practiced English language for reading, writing and communicating in English
		CO3.Generated interest in studying English language and literature.
		CO4.Studied old and new literary extracts for the advancements of knowledge in English language and literature. CO5. To expose students to the basics of short story, one of the literary forms
Bachelor of Arts Third Year of Bachelor of Arts (T.Y.B.A.)	**T. Y. B. A. Compulsory English**	CO1.Familiarized students with masterpieces in prose, poetry and short stories in English.
		CO2.Learned communication techniques.
		CO3. Studied grammar and its usage.
		CO4.Inculcated soft skills and their applications in the real world.

		CO5.Trained to analyse the course content. CO6. To introduce students to the best uses of language in literature.
Bachelor of Computer Science Second Year of Bachelor of Computer Science (S.Y.B.Sc Comp. Sci.)	**EN-211:Technical English Sem - I**	CO1.Studied masterpieces in prose and poetry in English language.
		CO2.Practiced English language for enriching communicative competence in English.
		CO3.Enriched vocabulary through various exercises.
		CO4.Enriched written skills in English.
	EN-221:Technical English –Sem - I	CO1.Studied masterpieces in prose and poetry in English language.
		CO2.Practiced English language for enriching communicative competence in English.
		CO3.Enriched vocabulary through various exercises.
		CO4.Enriched written skills in English.

Courses Offered According to 2019 Pattern:

Programme	Course	Course Outcomes
Bachelor of Arts First Year of Bachelor of Arts (F.Y.B.A.) (2019 Pattern)	**F.Y.B.A English** **General Paper- I , Sem - I** **Compulsory English**	1.To expose students to the best examples of prose and poetry in English so that they realize the beauty and communicative power of English 2. To instill human values and develop the character of students as responsible citizens of the world 3. To develop the ability to appreciate ideas and think critically 4.To enhance employability of the students by developing their linguistic competence and communicative skills

		5.To revise and reinforce structures already learnt in the previous stages of learning
	F.Y.B.A English **General Paper- I , Sem - II** **Compulsory English**	1.To expose students to the best examples of prose and poetry in English so that they realize the beauty and communicative power of English 2. To instill human values and develop the character of students as responsible citizens of the world 3. To develop the ability to appreciate ideas and think critically 4.To enhance employability of the students by developing their linguistic competence and communicative skills 5.To revise and reinforce structures already learnt in the previous stages of learning

Courses Offered According to 2013 Pattern:

Programme	Course	Course Outcomes
Bachelor of Arts First Year of Bachelor of Arts (F.Y.B.A.)	**History General Paper- I (Chh. Shivaji and His Times 1630-1707) (Course Code- 1077)**	CO1. Knowledge of historical concepts, study techniques in the study of history of Marathas to make it value based, conceptual and thought provocative.
		CO2.Understood the Socio-economic, cultural and political background of 17th century Maharashtra .

		CO3. Imbibed nationalism through recognition of the cultural heritage and glorious traditions of Maharashtra and India and their exploitation for innovation.
Bachelor of Arts Second Year of Bachelor of Arts (S.Y.B.A.)	**History General Paper- II (Modern India-1857-1950) (Course Code-2077)**	CO-1. Understood the History of freedom movement of india,aims,objectives problem and progress of Independent india. CO-2. Understood the processes of rise of modern india. CO-3. Understood the concepts/concerns/frame work of Indian History. CO-2. understood of the social,economic,religious and institutional bases of Modern India
Bachelor of Arts Third Year of Bachelor of Arts (T.Y.B.A.)	**History of the World in 20th Century-I(1914-1992)**	CO-1. To help the student to know Modern World. To acquaint the student with the Socio-economic & Political developments in other countries. And understand the contemporary world in the light of its background History.
		CO-2. To orient the students with political history of Modern World
		CO-3. To acquaint Students about the main developments in the Contemporary World (To understand to important development in 20th century World.)
		CO-4. Impart knowledge about world concepts
		CO-5.To enable students to understand the economic transition in World during the 20th Century

Courses Offered According to 2019 Pattern:

Programme	Course	Course Outcomes
Bachelor of Arts First Year of Bachelor of Arts (F.Y.B.A.) (2019 Pattern)	**F.Y.B.A History** **General Paper- I , Sem - I** **Early India: From Prehistory to the Age of the Mauryas**	1.The history of Early India is a crucial part of Indian history. It is a base for understanding the entire Indian history. 2.The course is aimed at helping the student to understand the history of early India from the prehistoric times to the age of the Mauryas. 3. It attempts to highlight the factors and forces behind the rise, growth and spread of civilization and culture of India along with the dynastic history. 4. It also attempts to help the students to understand the contribution of Early Indians to polity, art, literature, philosophy, religion and science and technology. 5.It also aims to foster the spirit of enquiry among the students by studying the major developments in early Indian history.
	F.Y.B.A History **General Paper- I , Sem - II** **Early India: Post Mauryan Age to the Rashtrakutas**	1.The history of India after the Mauryas is very important to understand the developments in early India after the Mauryas, which finally led to the transition to medieval India. 2.The course is aimed at introducing the students to the developments in different parts of India through a brief study of regional kingdoms up to the tenth century C.E. 3.It attempts to highlight the consequences of the foreign invasions, particularly on the polity, economy, society and art and architecture. 4.The attempt is also to instill the spirit of enquiry among the students.

Courses Offered According to 2013 Pattern:

Programme	Course	Course Outcomes
Bachelor of ArtsFirst Year of Bachelor of Arts (F.Y.B.A.)	**1.Marathi General Paper- I (Aadhunik Marathi Wangmay) (Course Code- 1027)**	CO1. Introduced various flavours of Marathi literature, language and culture. CO2 Used Marathi for various professional and practical activities. CO3.Develop reading & writing skills among the students CO4. Exposed the knowledge of subject for life and career building
Bachelor of Arts Second Year of Bachelor of Arts (S.Y.B.A.)	**1.Marathi General Paper- II (Aadhunik Marathi SahityaAaniUpyojit Marathi) (Course Code- 2027)**	CO1. Students wrote correct Marathi CO2.Students explained subject related concepts CO3 Incepted literary revelation. CO4. Exposed the knowledge of subject for life and career building
Bachelor of Arts Third Year of Bachelor of Arts (T.Y.B.A.)	**1.Marathi General Paper- III (Aadhunik Marathi SahityaAaniVyavaharikUpyojit Marathi) (Course Code- 3027)**	CO1. Studied selected essays and travelogues. CO2.Understood the background of selected essays and travelogues. CO3.Used language effectively in day to day life. CO4.Evaluated the selected texts.
Bachelor of Science Second Year of Bachelor of Science (S.Y.B.Sc.)	**1.Marathi Paper (Marathi VidhyanSahityaAaniVyavaharik Marathi) (Course Code- 83111& 83112)**	CO1. Developed interest and scientific attitude through Marathi literature CO2. Familiarizedselectedliterary prose and communication skills in Marathi CO3.PracticedMarathi language skills in media. CO4.Practicedtranslation skills and essay writing.

Courses Offered According to 2019 Pattern:

Programme	Course	Course Outcomes
Bachelor of Arts First Year of Bachelor of Arts (F.Y.B.A.) (2019 Pattern)	**F.Y.B.A Marathi** **General Paper- I , Sem - I** **Marathi Sahitya: Katha Aani Bhahik Kaushalya vikas** **[CC-1 A]**	1.Introducing the type of story Literature. 2.Introducing the form, elements and types of stories. 3. To study selected stories in various literary genres 4. To develop linguistic skills
	F.Y.B.A Marathi **General Paper- I , Sem - II** **Marathi Sahitya: Ekagankika Aani Bhahik Kaushalya vikas** **[CC-1 A]**	1.Introducing the type of One act play Literature. 2.Introducing the form, elements and types of One act play Literature.. 3. To study selected One act play in various literary genres 4. To develop linguistic skills