Maratha Vidya Prasarak Samaj's K.P.G. Arts, Commerce and Science College, Igatpuri, Nashik

Program Outcomes, Program Specific Outcomes, Course specific Outcomes 2020-2021

Department of Computer Science

Bachelor of Science in Computer Science

Program Outcomes (PO) B.Sc.(CS)

Science graduate students are expected

PO1. Scientific knowledge: Apply the knowledge of mathematics, science, and computing to the solution of complex scientific problems.

PO2. Problem analysis: Identify, formulate, research literature, and analyze complex scientific problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and applied sciences.

PO3. Design/development of solutions: Design solutions for complex problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO4. Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO5. Modern tools usage: Create, select, and apply appropriate techniques, resources, and modern computing and IT tools including prediction and modeling to complex scientific activities with an understanding of the limitations.

PO6. The software engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional practice.

PO7. Environment and sustainability: Understand the impact of the professional software engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the scientific practice.

PO9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10.Project management: Demonstrate knowledge understanding of the scientific and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

Program Specific Outcomes (PSO) B.Sc. Computer Science

Students of B.Sc. Computer Science are expected

A graduate with a B.Sc. in Computer Science will have the ability to PSO1. Demonstrate mastery of Computer Science in the following core knowledge areas o Data Structures and Programming Languages

o Databases, Software Engineering and Development

o Computer Hardware and Architecture

PSO2. Apply problem-solving skills and the knowledge of computer science to solve real world problems

PSO3. Develop technical project reports and present them orally among the users

Course outcome of F.Y. BSc (CS) CBCS-2019 Pattern					
	Students of the first year B.Sc. (CS) are expected				
		Sen	nester-I		
Class	Paper Code	Course Title	Outcome		
F.Y.B.Sc.(CS)	CS-111	Problem Solving using Computer and 'C' Programming	 To understand the concept of Problem solving To understand steps involved in algorithm & program development To understand the concept of Algorithm Develop Algorithm for simple problem Ability to implement algorithms in the 'C' language. Develop modular programs using control structures and arrays in 'C'. 		
F.Y.B.Sc.(CS)	CS-112	Database Management Systems	 Describe the fundamental elements of relational database management systems Explain the basic concepts of relational data model, entity-relationship model, relational database design, relational algebra and SQL. Design ER-models to represent simple database application scenarios Convert the ER-model to relational tables, populate relational database and formulate SQL queries on data. Improve the database design by normalization. 		
F.Y.B.Sc.(CS)	CS-113	Practical course based on CS101 and CS102	 Able to devise pseudo code and flowchart for computational problems. Understand how to write, debug and execute simple programs in C. Able to create database tables in Postgres SQL. 		

			• Able to write and execute simple and nested queries.
	Course	outcome of F.Y. I	BSc (CS) CBCS-2019 Pattern
	Stud	ents of the first ye	ar B.Sc. (CS) are expected
		Sem	ester-II
Class	Paper Code	Course Title	Outcome
F.Y.B.Sc.(CS)	CS-121	Advanced 'C' Programming	 Develop advanced concepts of programming using C. • Develop modular programs using control structures, pointers, arrays, strings and structures. Design and develop solutions to real world problems using C. Able to develop structured programming approach.
F.Y.B.Sc.(CS)	CS-122	Relational Database Management Systems	 Able to acquire knowledge of data security and its importance. Design E-R Model for given requirements and convert the same into database tables. Able to use database techniques such as SQL & PL/SQL. Understand and able to implement concept of transactions. Use advanced database Programming concepts.
F.Y.B.Sc.(CS)	CS-123	Practical course based on CS201 and CS202	 Write debug and execute programs using advanced features in C. To perform advanced database operations.
	Couse		A. BSc (CS) 2019 Pattern
	Stude	nts of the second y	year B.Sc. (CS) are expected
		Sen	nester-I
Class	Paper Code	Course Title	Outcome
S.Y.B.Sc.(CS)	CS 231	Data Structures and Algorithms – I	 Understand different methods of organizing large amount of data using data structure. Able to choose appropriate data structure as applied to specified problem definition. Understand various techniques for representation of the data in the real world

S.Y.B.Sc.(CS)	CS 232	Software Engineering	 Able to design and conduct experiments, as well as to analyze and interpret data. Able to identify, formulate, and solve engineering problems. Able to analyze, design, verify, validate, implement, apply, and maintain software systems. Able to understand different phases of SDLC.
S.Y.B.Sc.(CS)	CS 233	Practical course on CS 231 and CS 232	 Students will be able to use linear and non-linear data structures like stacks, queues , linked list etc. Student will be able to handle operations like searching, insertion, deletion, traversing mechanism etc. on various data structures.
		Sem	ester- II
Class	Paper Code	Course Title	Outcome
S.Y.B.Sc.(CS)	CS 241	Data Structures and Algorithms – II	 Able to compute the complexity of various algorithms. Able to understand internal structure of compiler and interpreters.
S.Y.B.Sc.(CS)	CS 242	Computer Networks - I	 Understand basic computer network technology. Understand and explain Data Communications System and its components. Able to identify the different types of network topologies and protocols. Enumerate the layers of the OSI model and TCP/IP. Explain the function(s) of each layer.
S.Y.B.Sc.(CS)	CS 243	Practical course on CS 241 and CS 242	 Students will be able to use linear and non-linear data structures like stacks, queues , linked list etc. Student will be able to handle operations like searching, insertion, deletion, traversing mechanism etc. on various data structures.
	Cours	e outcome of T.	Y. BSc (CS) 2013 Pattern
	Stud	ents of the third ye	ear B.Sc. (CS) are expected
		Sem	ester-III
Class	Paper Code	Course Title	Outcome
T.Y.B.Sc.(CS)	CS-331	Systems Programming	 Able to design structure of a simple editor. Able to design structure of Assembler and macro processor for a hypothetical simulated computer. Understand working of linkers and loaders and other development utilities. Understands Complexity of Operating system as software.

T.Y.B.Sc.(CS)	CS-332	Theoretical Computer Science	 Understand the fundamental mathematical , regular languages and finite automata • Able to describe and transform regular expressions and grammars. • Able to design different types of Finite Automata and Machine as Acceptor , verifier and translators. • Able to understand the concept and design of push-down automata. Able to understand the design and different types of Turing machine . • Understand the relation between context free languages, PDA and TM . • Able to understand recursive enumerable languages, recursive function theory and Problems on recursive function
T.Y.B.Sc.(CS)	CS-333	Computer Networks –I	 Understand basic computer network technology. Understand and explain Data Communications System and its components. Able to identify the different types of network topologies and protocols. Enumerate the layers of the OSI model and TCP/IP. Explain the function(s) of each layer. Identify the different types of network devices and their functions within a network . Understand the basic protocols of computer networks, and how they can be used to assist in network design and implementation.
T.Y.B.Sc.(CS)	CS-334	Internet Programming I	 To understand client server architecture. Implement PHP, Server Side Scripting Language . To know how to implement socket programming.
T.Y.B.Sc.(CS)	CS-335	Programming in Java-I	 Understand to implement object oriented programming concepts. Understand how to design graphical user interface in Java programs. Understand how to design and develop applets. Able to design User Interface using Swing and AWT. Understand concept of packages and study how to implement them.
T.Y.B.Sc.(CS)	CS-336	Object Oriented Software Engineering Sem	 Understand the importance of Object Orientation in Software engineering. Acquire knowledge of components of Unified Modeling Language . Able to understand techniques and diagrams related to structural modeling . Will learn techniques and diagrams related to behavioral modeling . Will learn different techniques of Object Oriented analysis, design and testing .
Class	Paper Code	Course Title	Outcome
T.Y.B.Sc.(CS)	CS341	Operating Systems	• Understand the role of operating system as System software. • Able to compare the various algorithms and comment about performance of

			various algorithms used for management of memory, CPU scheduling, File handling and
			I/O operations. • Understand various concept
			related with Deadlock to solve problems related
			with Resources allocation, after checking
			system in Safe state or not. • To understand
			role of Process synchronization towards
	~~ ~ ~ ~		increasing throughput of system.
T.Y.B.Sc.(CS)	CS-342	Compiler	• Learn how to use lexical analyzer and parser
		Construction	generator tools. • Understand how to build
			symbol tables and generate intermediate code. •
			Will study compiler architecture. • Study and
			understand the technique of compiler
			optimization
T.Y.B.Sc.(CS)	CS-343	Computer	• Will study how to configure PCs running
		Networks II	Linux so that they receive IP addresses, have
			default routes, can resolve host names, and so
			on. (And similarly for Windows, if time permits.). • Able to apply knowledge of the
			TCP/IP layering model to intelligently debug
			networking problems. • Will able to use Linux
			commands to understand how a PC is
			configured. • Will able to understand and build
			the skills of subnetting and routing mechanisms.
$\mathbf{T} \mathbf{V} \mathbf{P} \mathbf{S}_{\mathbf{n}} (\mathbf{C} \mathbf{S})$	CS-344	Internet	
T.Y.B.Sc.(CS)	CS-344		• Understand working of XML,CSS and XML
		Programming II	parsers. • Will learn to implement PHP
		11	framework for effective design of web
			application. • Will use JavaScript to program
			the behavior of web pages. • Will use AJAX to
$\mathbf{T} \mathbf{V} \mathbf{P} \mathbf{S}_{\mathbf{n}} (\mathbf{C} \mathbf{S})$	CS-345	Decomming	make our application more dynamic.
T.Y.B.Sc.(CS)	C3-345	Programming in Java-II	• Understand how to use database
			programming using Java. • Will able to
			implement web development concept using
			Servlet and JSP. • Will Able to develop a game
			application using multithreading. • Learn and
	CS-346	Computer	implement socket programming concept.
T.Y.B.Sc.(CS)	US-340	Computer Craphics	• Understand how to use graphics objects
		Graphics	represented in computer. • Will able to
			correlate between user and computer through
			graphics. • Able to increase the productivity
			through graphics. • Understand programmer's
			perspective of working of computer graphics.
T.Y.B.Sc.(CS)	CS-347	Practical Based	• Understand how to implement structure of a
		on CS-331 and CS341-Sem-I	simple editor. • Able to develop structure of
		and II	Assembler and macro processor for an
			hypothetical simulated computer. • Able to
			develop various algorithms used for
			management of memory, CPU scheduling, File
			handling and I/O operations. • Understand how
			to develop Banker algorithms related with Resources allocation, after sheeking system in
			Resources allocation, after checking system in
			Safe state or not.

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T.Y.B.Sc.(CS)	CS-348	Practical Based	 Understand how to implement Object
		on CS-335 and	Oriented programming concept using basic
		CS345-Sem-I	syntaxes of control Structures, strings and
		and II and	function for developing skills of logic building
		Computer	activity. • Able to identify classes, objects,
		Graphics using	members of a class and the relationships among
		Java	them needed for a finding the solution to
			specific problem. • Able to demonstrates how to
			achieve reusability using inheritance, interfaces
			and packages and describes faster application
			development can be achieved. • Able to
			demonstrate understanding and use of different
			exception handling mechanisms and concept of
			multithreading for robust faster and efficient
			application development. • Able to identify and
			describe common abstract user interface
			components to design GUI in Java using Applet
			& AWT along with response to events . • Able
			to identify, Design & develop complex
			Graphical user interfaces using principal Java
			Swing classes based on MVC architecture.
T.Y.B.Sc.(CS)	CS-349	Practical Based	• Able to design a basic web site using HTML5
		on CS-334 and	and CSS3 to demonstrate responsive web
		CS344-Sem-I	design. • Learn how to implement dynamic web
		and II and	pages with validation using JavaScript objects
		Project	by applying different event handling
		U	mechanism. • Learn how to use AJAX
			Programming Technique to develop RIA. •
			Able to develop simple web application using
			server side PHP programming and Database
			Connectivity using My SQL. • Will understand
			how to build well-formed XML Document and
			implement Web Service using Java.
			miplement web service using Java.

Department of Chemistry

Bachelor of Science in Chemistry

POs/PSOs/COs

• Program Outcomes (PO) B.Sc.•

Science graduates are expected

PO-01	To do masters in the basic areas of the discipline.
PO-02	To apply their broad knowledge of science across a range of fields, with in-depth
I U-02	knowledge in at least one area of study.
PO-03	To articulate the methods of science and explain why current scientific knowledge is both
10-03	contestable and testable by further inquiry.
PO-04	To apply appropriate methods of research, investigation and design, to solve problems in

	science, including the planning and/or conduct of a significant project, problem or
	investigation.
PO-05	To recognize the need for information; effectively search for, evaluate, manage and apply
	that information in support of scientific investigation.
PO-06	Employ highly developed conceptual, analytical, quantitative and technical skills and are
	adept with a range of technologies.
	To evaluate the role of science, in addressing current issues facing local and global
PO-07	communities, for example climate change, health and disease, food security, sustainable
	energy use etc.
PO-08	To work effectively in groups to meet a shared goal with people who's disciplinary and
	cultural backgrounds differ from their own.
	To communicate clearly and convincingly about science ideas, practice and future
PO-09	contributions to expert and non-expert audiences, matching the mode of communication to
	their audience.

• Program Specific Outcomes (PSO) B.Sc. Chemistry•

B.Sc. Chemistry graduates are expected

PSO-1	To have post graduate education in chemistry after B.Sc. Chemistry.		
PSO-2	To use modern library search tools to locate and retrieve scientific information about a		
	topic, chemical, chemical technique, or an issue relating to chemistry.		
PSO-3	To understand the objective of their chemical experiments, properly carry out the		
130-3	experiments, and appropriately record and analyze the results.		
PSO-4	To use standard laboratory equipment, modern instrumentation, and classical techniques to		
	carry out experiments.		
PSO-5	To follow the proper procedures and regulations for safe handling and use of chemicals.		
PSO-6	To communicate the concepts and results of their laboratory experiments through effective		
F 50-0	writing and oral communication skills.		
	To pursue their career objectives in advanced education in professional and in a scientific		
PSO-7	career in government or industry, in a teaching career in the school systems, or in a related		
	career following graduation.		

Course Outcomes of T. Y. B.Sc. Chemistry (2013 Pattern) •Semester-III•

Class	Course Title	Course Outcomes
		Students of the T.Y. B. Sc. Chemistry (2013 Pattern) are excepted
T.Y.B.Sc. (2013Pattern)	CH-313: Physical Chemistry Paper-I	 To learn rate constant for third order reaction, energy of activation, Arrhenius equation, solve the sums based on it. To understand Ohm's law, Kohlrausch's law transport number. Debye-Huckel-Onsager Interionic Attraction theory, Asymmetry /Relaxation effect, Electrophoretic effect. To understand the term additive and constitutive properties,

		 electrical polarization of molecule, induced and orientation polarization, dipole moment, nature of wave Rotational / Microwave spectroscopy, Vibrational Spectra, Vibrational rotational Spectra, Raman Spectroscopy and Solve the numerical problems To understand terms in phase equilibria such as-system, phase in system, components in system, degree of freedom, one / two component system, phase rule and application of phase rule to one and two component system.
T.Y.B.Sc. (2013Pattern)	CH-323: Inorganic Chemistry Paper-II	 To draw the MO energy level diagram for heteronuclear diatomic molecule. To compare the different approaches to bonding in Coordination compound. To understand the meaning of various terms involved in coordination chemistry To comment on the stereoisomerism in complexes with C.N. 4 & 6.
T.Y.B.Sc. (2013Pattern)	CH-333: Organic Chemistry Paper-III	 To understand pKa and pKb of organic acids and bases, factors affecting the acidity and basicity of organic compounds. To understand stereochemistry, energy and stability of conformations of disubstituted cyclohexane. To understand mechanism, kinetics and comparison of SN1 &SN2 reactions. To understand reactions of alkenes, alkynes and carbonyl compounds with reaction mechanism. Elimination reactions and their mechanism. To understand the aromatic electrophilic and nucleophilic substitution reactions, effect of activating and deactivating groups on rate and orientation in reaction products.
T.Y.B.Sc. (2013Pattern)	CH-343: Analytical Chemistry Paper-IV	 To understand principles of common ion effect and solubility product factors affecting solubility product. To understand electro gravimetric principle, principle, factors and applications of TGA and DTA. To learn principle, instrumentation, working and application of Spectrophotometer, AAS, FES. To understand construction, working, advantages, disadvantages of DME, polarography.
T.Y.B.Sc. (2013Pattern)	CH-353: Industrial Chemistry Paper-V	 To understand different processes actually run, safety measures to be adopted in industries, production of chemicals and processes involving in production. To learn regarding set up of small scale industry, different techniques to increase the production
T.Y.B.Sc. (2013Pattern)	CH-E3: Agriculture Chemistry Paper-VI	 To know agriculture chemistry, it's potential, basic concept of soil, its properties & classification on the basis of pH. To know the different plant nutrients, their functions and deficiency symptoms, various techniques to protect the plants. To Identify the problematic soil and recommend method for their reclamation To have the knowledge of quality irrigation water, quality standard and analysis of irrigation water.

•Semester-IV•

Class	Course Title	Course Outcomes
		Students of the T.Y. B. Sc. Chemistry (2013 Pattern) are excepted
T.Y.B.Sc. (2013Pattern)	CH-314: Physical Chemistry Paper-I	 To know emf, type of cells, reference electrode, Nernst Equation and equilibrium constant K of the cell reaction, liquid junction potential, classification of electrochemical cell and solve the numerical problems based on this topic. To classify nuclides, decay kinetics, measurement of radioactivity, application of radioisotopes and solve the numerical problems based on this topic. To understand crystalline and amorphous solids / anisotropic and isotropic solid, and laws of crystallography, Weiss and Millers Indices, Crystal system different planes, Bragg's experiment, Structure of NaCl Laue's and Bragg's method applications and solve the numerical problems. To understand concept of quantization, .atomic spectra, wave particle duality, Uncertainty principle and its physical significance, Schrodinger wave equation, Wave function and its Interpretation, Degeneracy, application, solve the numerical problems.
T.Y.B.Sc. (2013Pattern)	CH-324: Inorganic Chemistry Paper-II	 To know the electronic configuration of lanthanides and actinides. To understand types of crystalline solids, different operations in stoichiometric molecules. To understand the bio-inorganic chemistry. To understand the formation of p-type and n-type semiconductor.
T.Y.B.Sc. (2013Pattern)	CH-334: Organic Chemistry Paper-III	 To understand carbanions and their synthetic application, retrosynthesis, terms involved in it. To understand mechanism of Beckmann, Bayer-Villiger, Pinacolpincolone, Curtis, Favorski, Claisen rearrangement reactions. To understand applications of UV, IR and NMR spectroscopy in structure determination. To know the isolation, classification, synthesis and structure determination of terpenoids (Citral) and alkaloids (Ephedrine) using chemical.
T.Y.B.Sc. (2013Pattern)	CH-344: Analytical Chemistry Paper-IV	 Principle, types, advantages and applications of solvent extraction, chromatography, electrophoresis. To know principle and working of GSC and GLC analysis, types of coloumn, detectors To understand separation mechanism, instrumentation and application of HPLC. To understand nephelometry and turbidimetry as an analytical tool, their differences and application.
T.Y.B.Sc. (2013Pattern)	CH-354: Industrial Chemistry Paper-V	 To classify polymerization reactions, thermodynamic and transport properties of polymer, commercial polymers. To know importance of sugar industry, consumption (plantation white) sugar with flow diagram., cane juice extraction by various methods, clarification by processes like carbonation, Sulphitation , Phosphatation, etc. To understand types of surfactants, raw materials for detergents, washing action and detergents, detergent builders, additives. To learn preparation of dye intermediates, structural features, classification and applications of dyes. To know methods of production and pharmacological activity, meaning of the terms, synthesis and uses of few drug.

T.Y.B.Sc. (2013Pattern)	CH-D3: Dairy Chemistry Paper-VI	 To know importance of the Dairy chemistry subject from the point of rural economy, composition of milk, its food & nutritive value To understand the microbiology of the milk, various preservatives and adulterants, various milk proteins and their role for the human body. To know various milk products, their composition, manufacture and uses To identify preservative and adulterants in milk.
T.Y.B.Sc. (2013Pattern)	CH-347: Physical Chemistry Practical- I	 To determine rate constant, strength of acid, order of reaction, energy of activation To understand the variation of mutual solubility temperature with %concentration, effect of impurity on critical point. verify Langmuir and Freundlich adsorption isotherm, determine the molecular weight of polymer by using Ostwald viscometer To handle different instrument like pH meter, conductivity meter, potentiometer, colorimeter etc. and are able to determine different parameters. determine specific refractivity, molar refractivity using Abbe's Refractometer To determine the transport number of cation by moving boundary method.
T.Y.B.Sc. (2013Pattern)	CH-348: Inorganic Chemistry Practical- II	 To understand gravimetric and volumetric analysis of ores and alloy. To prepare a various inorganic complex and determine its % purity. To study binary mixture with removal of borate and phosphate To understand inorganic Qualitative analysis of mixture containing borates and phosphates. To visit a chemical industry.
T.Y.B.Sc. (2013Pattern)	CH-349: Organic Chemistry Practical- III	 To understand quantitative estimation of organic compounds from the given sample solution. To learn synthesis of organic compounds and checking their purity. To perform qualitative analysis of binary mixture and identification of components by performing different kinds of reactions on them.

Course Outcomes of F. Y. BSc Chemistry (CBCS-2019 Pattern) w.e.f.- 2019-20

Semester-I

Course &	Course Outcomes		
Code	F. Y.B. Sc. Chemistry students are excepted to learn		
CH-101: Physical Chemistry	 The principles of thermodynamics & calculation of different types of energies. Exothermic and endothermic reactions. Third law of thermodynamics and its application. Different salts, their pH value and preparation of buffer solution. Concept of common ion effect, ionic product, solubility product, hydrolysis constant, etc. 		
CH-102: Organic Chemistry	 The fundamental principles of organic chemistry, nomenclatures, stereochemistry (Conformations and configurations) of organic compounds. Different functional groups in organic chemistry. 		
CH-103: Practical	• The importance of chemical safety and Lab safety while performing experiments in laboratory.		

Chemistry	Thermochemical parameters and related concepts.		
	• Importance and techniques of pH measurements and preparation of buffer		
	 solutions. Elemental analysis of organic compounds and chromatographic techniques for separation of constituents of mixtures. 		

Semester-II

Course &	Course Outcomes		
Code	F. Y.B. Sc. Chemistry students are excepted to learn		
	 Different theories and principles applied to revel atomic structure. Significance of quantum chemistry. Aufbau principle, Pauli Exclusion Principle. 		
CH-201:	 Hund's rule of maximum multiplicity and Electronic configuration. 		
Inorganic Chemistry	• Classification, name, symbol, electronic configuration, periodic trends in properties of elements.		
	• Types of chemical bonds- Ionic, covalent, coordinate and metallic bond.		
	• Valence Bond Theory, its application and also the need of VSEPR theory.		
CH-202: Analytical Chemistry	 Concept of mole concentrations, units of concentrations, preparation of solutions of different concentrations. Stoichiometric calculation, terms like ppm, ppb, ppt, density and specific gravity. Basics and types of chromatography. Working and application of pH meter. Classification, separation and analysis of binary mixture. 		
СН-203:	• Inorganic volumetric analysis and synthesis of Inorganic compounds.		
Practical	Chemical analysis of commercial products.		
Chemistry	Preparations and purification of organic compounds.		

Course Outcomes of S. Y. B.Sc. Chemistry (CBCS-2019 Pattern) w.e.f. A.Y.2020-21

Semester-III

Course &	Course Outcomes		
Code	S. Y. B. Sc. Chemistry students are excepted to learn		
CH-301: Physical & Analytical Chemistry Paper-I	 Concept of chemical kinetics and related terms (rate laws, molecularity, order, energy of activation, factors affecting rate of reaction, integrated rate laws). Characteristics of zero, first, and second order reactions. Order of reaction by integrated rate equation method, graphical method, half-life method and differential method. Arrhenius equation, collision theory and transition state theory of bimolecular reaction and its applications. Concept of adsorption, classification, factors affecting adsorption. Langmuir adsorption isotherm, Freundlich adsorption Isotherm, BET theory and application of adsorption. Concept of accuracy and precision. Methods of expressing the errors in analysis from results and different terms related to errors in quantitative analysis. Concept of volumetric analysis and related terms (concentration, indicator, 		

CH-302: Inorganic & Organic Chemistry Paper-II	 equivalence point, end point, standard solutions, primary and secondary standards, complexing agent, precipitating agent, oxidizing agent, reducing agent, redox indicators, acid base indicators, metallochome indicators, etc.). Preparation of standard solution and perform standardization of solutions. To construct acid – base titration curves and select proper indicator for particular titration (acid-base titrations, complexometric titration / precipitation titration / redox titration). Terms related to molecular orbital theory (AO, MO, sigma & pi bond, bond order, magnetic property etc.). Application of LCAO principle for the formation of different types of MO's from AO's. Distinction between AO and MO, bonding, anti-bonding and non-bonding molecular orbitals. MO energy level diagrams for homo and hetero diatomic molecules. Bond order, magnetic property and stability of molecule on the basis of bond order. Terms related to the coordination chemistry (double salt, coordination compounds, coordinate bond, ligand, central metal ion, complex ion, coordination number, magnetic moment, crystal field stabilization energy, types of ligand, chelate effect, etc.) Werner's theory of coordination compounds, distinction between primary and secondary valency. Coordination number and structure of complex ion. IUPAC nomenclature of coordination compound.
	coordination compound.
CH-303: Practical Chemistry Paper-III	 Verification of theoretical principles by experiment observations and interpret practical output with the help of theoretical principles. Methods of identification of substance by chemical methods. To write and verify balanced equation for the chemical reactions performed in the laboratory. Different reactions of organic and inorganic synthesis and follow the progress of the chemical reaction by suitable method (colour change, ppt. formation, TLC). To arrange and set the apparatus for the desired experiments.
	Quantitative chemical analysis of substances & explain principles behind it.Systematic working skill in the laboratory.

Semester-IV

Course &	Course Outcomes	
Code	S.Y. B. Sc. Chemistry students are excepted to learn	
CH-401:	• The term phase equilibria, components in phase system, degree of freedom and	
Physical	phase rule, etc.	

& Analytical	•	Types of equilibrium such as true or static, metastable and unstable equilibrium. Phase rule relationship and typical features for i) Water system ii) Carbon dioxide
Chemistry		system iii) Sulphur system.
Paper-I	•	Ideal and no-ideal solutions, their thermodynamic aspects such as Gibbs free
		energy change, volume change, enthalpy and entropy change of mixing.
	•	Raoult's law, Interpretation of i) vapour pressure-composition diagram ii)
		temperature- composition diagram. Explain azeotropes, Lever rule, Henrys law
		and its application.
	•	Solubility of partially miscible liquids- systems with upper critical solution
		temperature, lower critical solution temperature. Concept of distribution of solute
		amongst pair of immiscible solvents.
	•	Terms in conductometry, Kohlrausch's law and its Applications, Conductometric
		titrations and their applications in conductometric methods of analysis.
	•	Terms in Colorimetry, Construction and working of colorimeter. Applications of colorimetric methods in analysis. Terms in column chromatography, Applications
		of column chromatographic process in analysis.
	•	Different types of coordination complexes and isomerism in them.
	•	Application of VBT to explain bonding in coordination compound of different
		geometries & limitation of VBT.
	•	Correlate no of unpaired electrons and orbitals used for bonding, inner and outer
		orbital complexes,
	•	Principle of crystal field theory (CFT) and its applications to different type of
		complexes (Td, Oh, Sq. Pl complexes).
	•	Magnetic properties of coordination compounds on the basis of weak and strong
		ligand field ligand concept. Origin of colour of coordination complex. Calculation of field stabilization energy and magnetic moment for various
СН-402:	•	complexes.
Inorganic	•	To identify Td and Sq. Pl complexes on the basis of magnetic properties /
&		unpaired electrons.
Organic	•	Spectrochemical series, tetragonal distortion / Jahn-Teller effect in Cu(II) Oh
Chemistry		complexes.
Paper-II	•	To draw structures of different aldehydes/ketones/carboxylic acids and their
		derivatives/ amines from their names or name can be assigned from structure.
	•	Synthesis of expected compounds, inter conversion of functional groups,
		important reaction and their mechanism, synthesis of diazonium salt from amines and their reactions.
	•	Structures of different conformations of cyclohexane (terms like axial and
		equatorial hydrogen, confirmation, substituted cyclohexane, etc.)
	•	Conformation of cyclohexane, their interconversion, stability with respect to
		potential energy.
	•	Cis-trans conformations of methyl / t-butyl monosubstituted cyclohexane (axial,
		equatorial) and 1, 2 dimethyl cyclohexane and their stability.
СН-403:	•	Verification of theoretical principles by experiment observations and interpret
Practical		practical output with the help of theoretical principles.
Chemistry	•	Methods of identification of substance by chemical methods.
Paper-III	•	To write and verify balanced equation for the chemical reactions performed in the laboratory.
		the faboratory.

- Different reactions of organic and inorganic synthesis and follow the progress of the chemical reaction by suitable method (colour change, ppt. formation, TLC).
- To arrange and set the apparatus for the desired experiments.
- Quantitative chemical analysis of substances & explain principles behind it.
- Systematic working skill in the laboratory.

Department of Zoology POs/PSOs/COs

	Programme outcome
1.	Acquired the knowledge with facts and figure related to zoology,
2.	Understood the basic conept of fundamental principles, and the scientific theory related to various scientific phenomenon and their relavencies in the day today life,
3.	Acquired the skill in handling scientific instruments , and planning and performing in laboratory experiment,
4.	The skills of observation and drawing logical inference from the scientific experiment,
5.	Analized the given scientific data critically and systematically and the ability to draw the objective and conclusion.
6.	Being able to think creatively (Divergently and convergent) to propose novel ideas in explaining facts a and the figure or providing new solution to the problem,
7.	Realized hoe development in any science subject help in the development in the others science subject and vice versa and how interdisciplinary approach help in providing better solution and new ideas for the sustainable development.
8.	Developed scientific outlook not only with respect to science subject but also in all aspects related to life
9.	Realised that knowledge of subject in other faculty such as humanities, performing arts, social science etc. can have great and effective influence which inspire in evolving in new scientific theory and invention,
10	Embibed ethical, moral and social values in personal and social life leading to highly cultured and civilized personality,
11	Developed various communication skill such as reading listening and speaking etc. Which will help in expressing ideas and views clearly and effectively,
12	Realised the persuit of knowledge is a life long activity and in combination with untiring efforts and positive attitude and other necessary qualities leads towards the successful life,
13	Developed flair by participating in various social and cultural activities voluntarily, in order to spread knowledge, creating awareness about the social evils, blind faith , etc

Programme specific outcome

Student get the knowledge of animal science from primitive to highly evolved animal
group, that is breeding and management of the live stock animal such as cattle, sheep
,fishery ,lac, apiculture, etc.
It prepare the student for the carrier opportunities in the field of animal breeding, food
production of animal, animal agriculture business, animal behavior and welfare.
The curriculum highlights the potential of various branches to become an enterpreuner.
With the help of practical the students get equipped with the skills related to the
laboratory as well as with the field studies.
With the help of practical the students get equipped with the skills related to the
laboratory as well as with the field studies.
-

6	Students developed interest and foundation for further studies in zoology.
7	Students learn about the conversation and sustainable use of biodiversity.
8	Subject knowledge help the student for taking up the successful carrier in zoology

		Course specific outcome, Sem-I
Class	Course title	Outcome
F.Y.B.Sc.	Paper-I, ZO-111 Animal diversity-I	1. The student will be able to understand classify and identify the diversity of animals.
		2. The student understands the importance of classification of animals and classifies them effectively using the six levels of classification.
		3. The student knows his role in nature as a protector, preserver and promoter of life which he has achieved by learning, observing and understanding life.
	Paper-II, ZO-112 Animal Ecology	1.The learners will be able to Identify and critically evaluate their own beliefs, values and actions in relation to professional and societal standards of ethics and its impact on ecosystem and biosphere due to the dynamics in population. promote betterment of environment.
		2.To understand anticipate, analyse and evaluate natural resource issues and act on a lifestyle that conserves nature.
		3.The Learner understands and appreciates the diversity of ecosystems and applies beyond the syllabi to understand the local lifestyle and problems of the community.
		4. The learner will be able to link the intricacies of food chains, food webs and link it with human life for its betterment and for non-exploitation of the biotic and abiotic components.
		5. The working in nature to save environment will help development of leadership skills to promote betterment of environment.
	Paper-III, ZO-113 Practical	1.student will be able to identify the lower nonchordate animlas.
		2.student will learn how unicellular organism reproduce
		3.student will learn what are the impuriries present in the water and how to estimate them
S.Y.B.Sc.	Paper-I, ZO-231 Animal Systematics and Diversity-III	1. The students will be able to understand, classify and identify the diversity of higher vertebrates.
		2. The students will able to understand the complexity of higher vertebrates
		3. The students will be able to understand different life functions of higher vertebrates.
		4. The students will be able to understand the linkage among different groups of higher vertebrates.
		5. The student will become aware regarding his role and responsibility towards nature as a protector, to understand his role as a trustee and conservator of life which he has achieved by learning, observing and understanding life.
	Paper-II, ZO-234	1. The learner understands the basics about beekeeping tools,

Applied zoology-I	equipment, and managing beehives.
	2. The learner understands the basic information about fishery, cultural and harvesting methods of fishes and fish preservation techniques.
Paper-III, ZO-233 Practical	1.Student will get acquinted with the Animal group such as protochordate ,Pisces,Amphibia,
	2.Syudent will come to know the types of fins,Scales and tail in fish.
	3.Student will learn about rearing of silk worm
	4.Student will understand the different types of inect that damages the crop and how to control them.

Class	Course title	Course specific outcome, SEM-II Course Outcome
F.Y.B.Sc.	Paper-I, ZO-121	1. The student will be able to understand classify and identify
I.I.D. 5C.	Animal Diversity-	the diversity of animals.
	II	
		2. The student understands the importance of classification of
		animals and classifies them effectively using the six levels of
		classification.
		3. The student knows his role in nature as a protector, preserver
		and promoter of life which he has achieved by learning,
		observing and understanding life.
	Paper-II, ZO-122	1. The learner will understand the importance of cell as a
	Cell Biology	structural and functional unit of life.
		2. The learner understands and compares between the
		prokaryotic and eukaryotic system and extrapolates the life to
		the aspect of development.
		3.The dynamism of bio membranes indicates the dynamism of
		life. Its working mechanism and precision are responsible for
		our performance in life.
		4. The cellular mechanisms and its functioning depends on endo-
		membranes and structures. They are best studied with
		microscopy.
	Paper-III, ZO-123	1.student will be able to identify the Higher nonchordate
	Practical	animlas.
		2.student get acquainted with the diversity of mouth parts in
		insect.
		3.student will come to know how to rear the lac insect
		a,earthworm honey bees for the production of lac,vermicompost and honey.
S.Y.B.Sc.	Paper-I, ZO-241	1. The students will be able to understand, classify and identify
	Animal	the diversity of higher vertebrates.
	Systematics And	
	Diversity-IV	
		2. The students will able to understand the complexity of higher
		vertebrates

	3. The students will be able to understand different life
	functions of higher vertebrates.
	4. The students will be able to understand the linkage among
	different groups of higher vertebrates.
	5. The student will become aware regarding his role and
	responsibility towards nature as a protector, to understand his
	role as a trustee and conservator of life which he has achieved
	by learning, observing and understanding life.
Paper-II, ZO-242	1.The learner understands the biology, varieties of silk
Applied zoology-	silkworms and the basic techniques production.
II	
	2. The learner understands the types of agricultural pests,
	Major insect pests of agricultural
	importance and Pest control practices.
Paper-III, ZY-243	1.student will learn how to distinguish between poisonous and
Practical	non-poisonous snake.
	2.student will learn the diversity of beek and feet in birds.
	3.from the study of morphology and physiology of rat they will
	understand the human system.
	3.Beekeeping help them to start their own business.
	4.study of pisciulture help them to start their own business.

Department of Physics POs/PSOs/COs

	Program outcome: B.Sc. (Physics)		
1	Developed scientific outlook not only with respect to science subjects but also in all aspects related to life. Realized that knowledge of subjects in other faculties such as humanities, performing arts, social sciences etc. can have greatly and effectively influence which inspires in evolving new scientific theories and inventions.		
2	It also provides opportunities to learn experimental concepts related with life science.		
3	Acquired the knowledge with facts and figures related to various subjects in pure sciences such as Physics, Chemistry, Botany, Zoology, Mathematics, etc.		
4	Understood the basic concepts, fundamental principles, and the scientific theories related to various scientific phenomena and their relevancies in the day-to-day life.		
5	Acquired the skills in handling scientific instruments, planning and performing in laboratory experiments. The skills of observations and drawing logical inferences from the scientific experiments. Analyzed the given scientific data critically and systematically and the ability to draw the objective conclusions.		
6	Realized how developments in any science subject helps in the development of other science subjects and vice-versa and how interdisciplinary approach helps in providing better solutions and new ideas for the sustainable developments.		

	Program Specific outcome: B.Sc. (Physics)
1	To familiarize with recent scientific and technological developments.
2	To enrich knowledge through problem solving, minor/major projects, seminars, tutorials, review of research articles/papers, participation in scientific events, study visits.
3	To create foundation for research and development in Physics.
4	To help students to learn various experimental and computational tools thereby developing analytical abilities to address real world problems.
5	To train students in skills related to research, education, industry, and market.

Course outcome: B.Sc. (Physics) Semester 1		
Class	Course Title	Outcome
F.Y.B.Sc.	PHY-111-Mechanics and Properties of Matter	 To understand Work and Energy, Workdone with varying force. To demonstrate Fluid mechanics, Bernoulli's Principle, viscosity. To understand property of matter, stress and strain, Hook's law, young's modulus.solving the problem.
	PHY-112-Physics Principles and Application	 To understand the bonding mechanism and its different types. To demonstrate an understanding of electromagnetic waves and its spectrum. Understand the types and sources of electromagnetic waves and applications. To demonstrate quantitative problem-solving skills in all the topics covered.
	PHY-113 Physics Laboratory-IA	 Study and use of various measuring instrument such as vernier caliper, micrometer screw Gauge, Travelling microscope. Study of various practical related to research level such as LASER, Spectromter, Flat spiral spring with moment of intertia of disc, Coefficient of viscosity angle of prism.
S.Y.B.Sc.	PHY-231- Mathematical Methods in Physics I	 Understand the concept of partial differentiation. Understand the role of partial differential equations in physics Understand vector algebra useful in mathematics and physics Understand the singular points of differential equation.
	PHY-232- Electronics II	 Understand the functions of operational amplifiers. Design circuits using transistors and operational amplifiers. Understand the Boolean algebra and logic circuits.
	Course	outcome: B.Sc. (Physics) Semester2
Class	Course Title	Outcome

F.Y.B.Sc.	PHY-121 Heat and Thermodynamics	 To understand the concept of Heat transfer mechanism, Stdudy the different types of heat engine such as carnot's cycle,Diessel otto cycle ,refrigeratorPrinciples,Air conditioner. To study the thermometry, Gas filled thermometer,bimetallic thermometer,Platinum resistance thermometer, thermocouple.
	PHY-122 Electricity and Magnetism	 Able to calculate electrostatic field and potential of charge distributions using Coulomb's law and Gauss's law. To understand the dielectric phenomenon and effect of electric field on dielectric. d) To Study magnetic field for steady currents using Biot-Savart and Ampere's Circuital laws. To study magnetic materials and its properties. Demonstrate quantitative problem-solving skills in all the topics covered.
	PHY-123 Physics Laboratory 1B	 Study of thermocouple, specific heat oh gravity, thermal conductivity of lee's method,carnot's cycle. Design charging and discharging of capacitor LR circuit,Kirchhoff's law, Diode chracterisitcs ,frequency of AC mains.
S.Y.B.Sc.	PHY241- Oscillations, Waves and Sound	 Calculate the phase velocity of a travelling wave. Explain the Doppler effect, and predict in qualitative terms the frequency change that will occur for a stationary and a moving observer. Define the decibel scale qualitatively, and give examples of sounds at various levels. Explain in qualitative terms how frequency, amplitude, and wave shape affect the pitch, intensity, and quality of tones produced by musical instruments
	PHY 242-Optics	• Acquire the basic concepts of wave optics. Describe how light can constructively and destructively interfere. Explain why a light beam spreads out after passing through an aperture. Understand optical phenomena such as polarization, birefringence, interference and diffraction in terms of the wave model. Analyze simple examples of interference and diffraction phenomena. Be familiar with a range of equipment used in modern optics.
	PH243: Practical course	• Investigate the theoretical background to an experiment. Set up experimental equipment to implement an experimental approach.

B. Sc. (Mathematics) POs/PSOs/COs

Program outcome : B.Sc. (Mathematics)		
 1) Enabling students to develop a positive attitude towards mathematics as an interesting and valuable subject of study.		
2) Understand the basic concepts, fundamental principles and scientific theories related to various scientific phenomena and their relevance in the day-to-day life.		
3) Ability to analyze a problem, identify and define the computing requirements, which may be appropriate to its solution.		
4) Enhancing students' overall development and to equip them with mathematical modeling abilities, problem solving skills, creative talent and power of communication necessary for various kinds of employment.		
5) Understand application mathematics in different fields		
6) Ability to pursue advanced studies and research in pure and applied mathematical science.		

1) Think in a critical manner.
2) Know when there is a need for information, to be able to identify, locate, evaluate and effectively use that information for the issue or problem at hand.
3) Formulate and develop mathematical arguments in a logical manner.
4) Acquire good knowledge and understanding in advanced areas of mathematics and software like maxima, chosen by the student from the given courses.
5) Understand, formulate and use quantitative models arising in social science Business and other contexts.

Course outcome : B.Sc. (Mathematics)		
Class	Course Title	Outcome
SEM I		After completion of this course, the student will be able to:
F.Y.B.Sc.	MT-111 Algebra	 Define Basic concepts of Set, Relations and functions. Use the division algorithm, Euclidian algorithm, in computations and proofs about the integers Learn about some important results in the theory of numbers including the prime number theorem, describe the properties of prime numbers, Show that every positive integer can be expressed as product of prime power in unique way Write a formula for the number of positive integers less than n that are relatively prime to n Define congruence and describe the properties of congruence State Chinese Remainder Theorem, Fermat's and Wilson's theorem Compute sums, products, quotients, conjugate, modulus, and argument of complex numbers . Apply De-Moivre's theorem to find the nth roots of

	MT-112 Calculus I	 After completion of this course, the student will be able to: Describe the Algebraic and Order Properties of R Understand absolute value function and its properties, triangle inequality and its consequences, neighborhood of a point on real line. Define of Upper bound, Lower bound, supremum, infimum of subsets of R, completeness property of R. Know Archimedean property and its consequences, the density theorem Learn to define sequence in terms of functions from R to a subset of R. Recognize bounded, convergent, divergent, Cauchy and monotonic sequences and to calculate their limit superior, limit inferior, and the limit of a bounded sequence. Learn to check function is continuous understand the consequences of the intermediate value theorem for continuous functions.
	MT-113 Mathematics Practical	 This course will enable the students to: Learn Maxima software. Learn to find graphs, roots and primes integer using maxima software Problem solve on algebra and calculus by using maxima software. Knowledge of application of mathematics
SEM III S.Y.B.Sc.	MT-231-Calculus of Several Variables	 After completion of this course, the student will be able to: Learn conceptual variations while advancing from one variable to several variables in calculus. Understand Functions of two variables, Domain and Range, Graphs, Level Curves, Functions of Three or More Variables, Limits and Continuity. Applications of multivariable calculus tools in physics, economics, optimization, and understanding the architecture of curves and surfaces in plane and space etc. Understand Partial Derivatives Learn Higher Derivatives, Clairaut's Theorem, Partial Differential Equations, Wave equation, Chain Rule, Homogeneous Functions, Euler's theorem. Recognize the major classification of PDEs and the qualitative differences between the classes of equations. Be competent in solving linear PDEs using classical solution methods Understand Extreme values of functions of two variables. Learn Necessary conditions for extreme values, Second Derivative Test, Lagrange Multipliers Inter-relationship amongst the line integral, double and triple integral formulations.

		After completion of this course, the student will be able to:
	MT-232(A) Numerical Methods & it's applications	 Obtain numerical solutions of algebraic and transcendental equations. Learn about various interpolating and extrapolating methods. Define Basic concepts of operators △, E, ∇
		 Find the difference of polynomial Solve problems using Newton forward formula and Newton backward formula. Derive Newton forward formula and Newton backward interpolation formula. Apply Lagrange's Interpolation formula when difference interval are unequal Understood the concept of Numerical Differentiation (Derivatives using Newton's forward difference formula) Apply various numerical methods in real life problems Derive general quadrature formula Derive Trapezoidal rule, Simpson's 1/3 and 3/8 rules -using general quadrature formula Solve initial and boundary value problems in differential equations using numerical methods. Find the solution of ordinary differential equation of first by Taylor's Series method, Picard's method of successive approximations, Euler method, Modified Euler's methods and Runge-Kutta methods
	MT-233	This course will enable the students to:
	Mathematics	Learn Maxima software.
	Practical	 Problem solve on analytic geometry and calculus by using maxima software. Problem solving on geometry and calculus. Give the knowledge of geometry using maxima software.
		urse outcome : B.Sc. (Mathematics)
Class	Course Title	Outcome
SEM II F.Y.B.Sc.	MT-121 Analytical Geometry	 After completion of this course, the student will be able to: Describe the various forms of equation of a plane, straight line, Sphere, Cone and Cylinder. Find the angle between planes, Bisector planes, Perpendicular distance from a point to a plane, Image of a line on a plane, Intersection of two lines Define coplanar lines and illustrate Compute the angle between a line and a plane, length of perpendicular from a point to a line Define skew lines Calculate the Shortest distance between two skew lines
		 After completion of this course, the student will be able to: Assimilate the notions derivative of a function at a point Calculate the limit and examine the continuity of a function at a point. Apply derivative tests in optimization problems appearing in social sciences, physical sciences, life sciences and a host of other disciplines.

	MT-122 Calculus II	 Understand L' Hospital Ruleand Successive Differentiation Understand the genesis of ordinary differential equations. solve first order differential equations utilizing the standard techniques Learn various techniques of getting exact solutions of solvable first order differential equations and linear differential equations. Grasp the concept of a general solution of a linear differential equation of an arbitrary order and also learn a few methods to obtain the general solution of such equations. Formulate mathematical models in the form of ordinary differential equations to suggest possible solutions of the day to day problems arising in physical, chemical and biological disciplines.
	MT-123 Mathematics Practical.	 This course will enable the students to: Solves Problem on Calculus and analytical geometry Introduction to application of mathematics in real life. Learn to build logical concept.
SEM IV S.Y.B.Sc.	MT-241 Linear Algebra	 After completion of this course, the student will be able to: Solve linear systems (using matrices) by Gauss elimination and Gauss-Jordan elimination method Understand the concepts of vector spaces, subspaces, bases, dimension and their properties. Recognize the concepts of the term linear independence, linear dependence, basis, and dimension, and apply these concepts to various vector spaces and subspaces Understand about Row, Column and Null Space of a matrix, and Rank and nullity Discuss the linear transformations, properties and equality Understand the concepts of Kernel and range State Rank-Nullity theorem Use matrix algebra and the related matrices to linear transformations Relate matrices and linear transformations, compute eigen values and eigen vectors of linear transformations. Jrind the characteristic equation, eigen values and eigen vectors of a matrix. State Cayley- Hamilton theorem Learn basic Matrix Transformations in R² and R³ Understand linear Isomorphism
	MT-242(B) Dynamical Systems	 After completion of this course, the student will be able to: Students understand fundamental concepts related to modeling time dependent phenomena. Students extend their knowledge of calculus to solve problems in difference equations. Students improve problem solving skills. Students will cooperate when appropriate to help each

Course	other understand the concepts of dynamical systems and to learn how to function in a work. mtcome : B.Sc. (Botany) Semester I This course will enable the students to:
MT-243 Mathematics Practical	 To demonstrate used of interpolation method in numerical analysis. Use computational techniques and algebraic skills essential for the study of systems of Linear equations, matrix algebra, vector spaces, eigenvalues and eigenvectors, Orthogonality and Diagonalization

Department of Botany POs/PSOs/COs

	Program outcome: B.Sc. (Botany)
1	Apply the knowledge of biology to make scientific queries and enhance the comprehension potential
2	It also provides opportunities to learn experimental concepts related with life science.
3	Successful transfer of scientific knowledge both orally and in writing.
4	Function as an individual, as a member or a leader to perform a task in class room situation or during field study.
5	Acquired the skills in handling scientific instruments, planning and performing in laboratory experiments. The skills of observations and drawing logical inferences from the scientific experiments. Analyzed the given scientific data critically and systematically and the ability to draw the objective conclusions. Been able to think creatively (divergently and convergent) to propose novel ideas in explaining facts and figures or providing new solution to the problems.
6	Insist the significance of conserving a clean environment for perpetuation and sustainable development. study incessantly by self to cope with growing competition for higher studies and employment.
7	Developed scientific outlook not only with respect to science subjects but also in all aspects related to life. Realized that knowledge of subjects in other faculties such as humanities, performing arts, social sciences etc. can have greatly and effectively influence which inspires in evolving new scientific theories and inventions. Imbibed ethical, moral and social values in personal and social life leading to highly cultured and civilized personality.

	Program Specific outcome : B.Sc. (Botany)
1	Students acquire fundamental Botanical knowledge through theory and practicals as well as to explain basis plant of life, reproduction and their survival in nature
2	To enrich knowledge through problem solving, minor/major projects, seminars, tutorials, review of research articles/papers, participation in scientific events, study visits.
3	Helped to understand role of living and fossil plants in our life.
4	To create awareness about cultivation, conservation and sustainable utilization of biodiversity
5	To know advance techniques in plant sciences like tissue culture, Phytoremediation, plant disease management, formulation of new herbal drugs etc.
6	Students able to start nursery, mushroom cultivation, biofertilizer production, fruit preservation and horticultural practices.
7	To help students to build-up a progressive and successful career in botany

Class	Course Title	Outcome
F.Y.B.Sc.	BO-111- Plant life and utilization I	 Study of cryptogams to understand their Diversity, know evolution of algae, fungi and bryophytes. Discuss about morphological structure, classification, reproduction & economic importance of algae. Study and impart knowledge about the general Characteristics, structure, reproduction, life history and economic importance of fungi. Understand the features of Lichens. To get knowledge about classification, mode of reproduction and detailed study of some important bryophytes.
	BO-112-Plant morphology and Anatomy	 Understand the floral morphology of angiosperms and different theories related to the evolution of advanced leaf like or floral parts of the plants. To understand the types of an inflorescence and its significance. To provide knowledge about morphological and internal structure of plants. Students identify the different plants on the basis of its morphological and anatomical structure Plant anatomy and embryology are much awaited subject to study the internal structures and structure & function of reproductive organs in plants The course paper cover basic aspects of anatomy of plant tissues such as meristems, epidermis, permanent
	BO-113 Practical based on BO 111 & BO 112	 tissues, complex tissue systems and organ structure of plant To study and get knowledge about parts and working principles of compound and dissecting microscope. Students are capable to become practical knowledge about micro-preparation and observation of permanent slides of genera. Learn the microscopic technique, familiarize with the external and internal structure of lower and higher group organisms. Study of Lichens and its types. Understand in details with practical knowledge of the morphology of different types of inflorescence. Practical understanding of the different types of fruits and their morphology. Students able to understand the internal structure of monocot and dicot (stem, leaf and root), secondary thickening, anomalous secondary thickening (Dicot and Monocot) and nodal anatomy.

S.Y.B.Sc.	BO-231:Taxonomy of Angiosperms and Plant Ecology	 Understand the objective, scope and importance of angiosperms. Understand the concept of Artificial, Natural and Phylogenetic system of classification. its merits & demerits Understand the system of binomial nomenclature advantages and disadvantages Aware various plant families and its economic importance Understand the Plant ecology, concept of population, community and ecosystem as well as plant adaptation to environment
	BO-232: Plant Physiology	 Acquire knowledge on the physiological functions of plant. To become knowledgeable in plant and its water relations. Students will able to gain knowledge on role of micronutrients in plant growth, their development and understand the mechanism of nitrogen metabolism Students will be able to understand the various physiological life processes in plant Learn about the movement of sap & absorption of water in plant body Understand the Photoperiodism concept of short day plants, long day plants and day neutral plants.

	BO 233: Practical based on BO 231 & BO 232	 Students will gain a clear understanding of the most advanced plant division i.e. Angiosperms. Understand the floral morphology of angiosperms and different theories related to the evolution of advanced leaf like or floral parts of the plants. Understand in detail practical knowledge on study of plant families and its economic importance Understand the ecological adaptation in hydrophyte and xerophytes with the help of T.S. of plant material. Practical knowledge on how to measure the abundance, frequency of a species, population or community using quadrate method. Understand knowledge on different tools of taxonomy and ecological instruments. Students able too understand phytochemical test for starch and protein in germinating and non - germinating seeds To understand Isolation of Leaf Protein Concentration (LPC) from suitable plant material. Acquire knowledge about the Determination of DPD, Determine rate of transpiration in different condition of environment. Student will gain a clear understanding of theCommercial biofertilizers b. Imbibition in seeds, c. Ringing experiment d. Arc Auxanometer e. Spectrophotometer f. Nitrogen fixing bacteria / BGA (specimen/slide) Student will Calculate seed germination percentage and vigor index.
T.Y.B.Sc. Botany (Semister I)	BO331: Cryptogamic Botany (Algae and Fungi	 Know the salient features of Cryptogams plants. Become aware of the status of cryptogams as a group in plant kingdom. Understand the life cycles of selected genera. Learn about the economic and ecological importance of Cryptogams plants
	BO. 332 Cell and Molecular Biology	 Gain knowledge about "Cell Science. Understand Cell wall Plasma membrane, Cell organelles and cell division. Learn the scope and importance of molecular biology. Understand the biochemical nature of nucleic acids, their role in living systems, experimental evidences to prove DNA as a genetic material. Understand the process of synthesis of proteins and role of genetic code in polypeptide formation.

Class	Course Title	Outcome
	1	outcome : B.Sc. (Botany) Semester II
	BO.336 Computational Botany	 harvestingtechnics. To understand methods of preservation & preparation of preserve product. To learn the sampling techniques, diagrammatic and graphical representation. To gain knowledge about measures of central tendency and theories of probability. Students acquire knowledge about basics of bioinformatics and online bioinformatics tool. To study and impart the knowledge online available biological databases.
	BO.335 Horticulture and Floriculture	 To understand scope , importance & disciplines of horticulture. To familiar with horticultural zone of Maharashtra & India. To understand different horticultural practices &methods. To study role played by green & playhouses in horticulture. To understand production technology,
	BO.334 Spermatophyta and Palaeoboatny	 Understand the diversity of angiosperms. Understand the comparative account among the families of angiosperms. Know the economic importance of the angiosperm plants. Understand the distinguishing features of angiosperm families Understand Gymnosperms with respect todistinguishing characters, comparison with Angiosperms, economic importance and classification. Understand the life cycles of Pinus and Gnetum. Know the scope of Paleobotany, types of fossils and geological time scale. Understand the various fossil genera representing different fossil groups.
	BO. 333 Genetics and Evolution	 Understand the biochemical nature of nucleic acids, their role in living systems, experimental evidences to prove DNA as a genetic material. Understand the process of synthesis of proteins and role of genetic code in polypeptide formation. Know the details of Microscopy- Principles of light microscopy, electron microscopy (TEM and SEM). Understand & perform Chromatography and cultural techniques in Botany

F.Y.B.Sc.	BO-121 : Plant life and utilization II	 To get knowledge about plant diversity such as Pteridophytes, Gymnosperms and Angiosperms. To get knowledge about classification, mode of reproduction and detailed study of some important Pteridophytes. To study Gymnosperms, classification ,reproduction ,utilization and economic importance. To understand about Angiosperms, comparative account of monocotyledons &dicotyledons Utilization and economic importance of angiosperms.
	BO-122 : Principles of plant science	 To understand the scope of plant physiology. To get knowledge about diffusion in plants, imbibition as a special type of plant diffusion. To understand the osmosis three types of solution such as Hypotonic, .Isotonic and Hypertonic.to study the exoosmosis & endo-osmosis, plasmolysismechanism & its significance. To understand about the concept of plant growth & growth regulator & their significance. Acquire knowledge on ultrastructure of cell. Comparative account of prokaryotic and eukaryotic cell. Acquire knowledge on ultrastructure of cell. Understand ultrastructure of cell wall, plasma membrane and cell organelles as well as cell cycle in plants and stages of mitosis & meiosis. To understand the structure of DNA types of DNA & chromosomes, structure of RNA.
	BO-123 Practical based on BO-121 & BO-122	 Understand the internal structural variation of pteridophytes and gymnosperms through T.S. and L.S Study of utilization & economic importance of pteridophytes, Gymnosperms & Angiosperms. The laboratory course gives practical knowledge to perusing students in the field of cytology, cell division-Mitosis & Meiosis Students are capable to become practical knowledgeable in estimation of chlorophyll- a & b by using plant material. These experiments will be helpful to student for better understanding of the scientific principles and skillful implementation of the experiments such as Plasomolysis& DNA extraction by using Banana.

S.Y.B.Sc.	BO 241:Plant Anatomy and Embryology	 Plant anatomy and embryology are much awaited subject to study the internal structures and structure & function of reproductive organs in plant The course paper cover basic aspects of anatomy of plant tissues such as meristems, epidermis, permanent tissues, complex tissue systems and structure of plant organs; reproductive developmental aspects of male
		 organs, reproductive developmental aspects of materials reproductive system - Pollen grains, female reproductive system - embryo sac. Students will be benefitted by studying the plant anatomy enables to identify fragmentary plant materials, wood, forensic investigation, and applied aspects of meristems cultures.
		 Students will be able to utilize embryological studies in various aspects like analysis of evolutionary trends, circumscription and delimitation of taxa and making a decision on systematic position. Students familiarize in secondary growth, anomalous
		 secondary growth in monocot and dicot stems. Student able to understand the process of microsporogenesis, megasporogenesis and double fertilization. Students able To understand endosperm and its types and know the structure and development of monocot and dicot embryos.

BO 242: Plant Biotechnology	 Students will Acquire knowledge about Biotechnology-concept and scope Interdisciplinary nature of biotechnology Current status of biotechnology in India. Student get knowledge on Enzyme Technology & properties of enzymes. Classification of enzymes Industrial applications of enzymes. Production of amylase, proteases and lipase enzyme Enzymes immobilization - concept and techniques of immobilization Understand the basic principles of plant tissue culture. Able to learn the plant tissue culture techniques Acquir knowledge on Concept of plant tissue culture and cellular totipotency Basic techniques: Types of culture, Media preparation, sterilization, inoculation, incubation, hardening. To understand the Applications with reference to: Micropropagation, Somaclonal variation, Haploid production, Protoplast fusion & Somatic hybrids, Embryo rescue, Production of secondary metabolites. Students get knowledge on single cell protein, Methods of phytoremediation. Students learned about the Basics of plant genetic engineering Gene Cloning. DNA electrophoresis fragments ,genetic engineering and nano - technology in gene Students get knowledge on Definition, Concept and types of Renewable and non-renewable energy sources Definition and concept of Biogas, Bioethanol, Biobutanol, Biodiesel & Biohydrog.
BO 243: Practical based on BO 241 & BO 242	 Students will gain a clear understanding of theStudy of epidermal tissue system – non-glandular and glandular trichomes, Multi layered epidermis, typical stomata (Dicotyledonous and Monocotyledonous). Student will be able to apply Study of mechanical tissues and their distribution in root, stem and leaves. Students able to understand the internal structure of monocot and dicot (stem, leaf and root), secondary thickening, anomalous secondary thickening (Dicot and Monocot) and nodal, anatomy. Understand the .Study of tetrasporangiate anther and types ofovules. dicot and monocot embryo Student will be able to identify Instruments/equipments used in plant tissue culture laboratory: Principle and working of Autoclave, oven, laminar air flow cabinet, micropipette, culture bottles/tubes with cotton plug. Student apply knowledge about thePreparation & sterilization of MS medium Surface sterilization and Inoculation of nodal sector, leaf, anther and maize embryo.Know theLaboratory cultivation of <i>Spirulina</i>. Student will be able to determine practical on transgenic crops viz; Bt-Cotton, Golden rice

Demonstration of principle and working of agarose gel electrophoresis, centrifuge, spectrophotometer• Visit to plant tissue culture laboratory to understand the techniques of plant tissue culture.

Department of Economics POs/PSOs/COs

Program outcome : B.A. (Economics)		
	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.	
B.A. Economics	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.	
	 Social Interaction: Elicit views of others, mediate disagreements and help reach conclusions in group settings. 	
	Effective Citizenship: Demonstrate 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.	
	Ethics: Recognize different value systems including your own, understand the moral dimensions of your decisions, and accept responsibility for them.	
	Environment and Sustainability: Understand the issues of environmental contexts and sustainable development.	
	Self-directed and Life-long Learning: Acquire the ability to engage in independent and life-long learning in the broadest context socio-technological changes	
M.A. Economics	Ability to apply the concepts of micro economics such as demand, supply, revenue, cost, elasticity, etc	
	Ability to compare and contrast various market structures and understand concept of equilibrium, price determination	
	At the end of the course, the student should be able to evaluate microeconomic concepts, models and its use in real life situations.	
	Ability to understand, apply and analyze concepts-public debt, budget, fiscal policy in public economics.	
	> Ability to interpret the theories relating to public economics in real life situations.	

	> Ability to discuss and debate on the public finance and policies w.r.t. India
	 Ability to understand and interpret the concepts such as Balance of Payments, Exchange Rates, Foreign Exchange transactions, International capital flows, etc.
	Ability to critically analyze the effects of deficits, exchange risk, role of foreign capital on the world economy/trade
	Ability to discuss and debate on subjects related to international trade and finance w.r.t the Indian Economy
	Ability to analyze and evaluate the subject with reference to various aspects of Labour economics.
	Ability to develop an understanding of the labour with its intricacies and imperfections and to be able to construct intellectual dialogue on the challenges of labour w.r.t. the Indian Economy.

	Program Specific outcome : B.A. (Economics)				
B.A. Economics	1. Understand the behaviour of Maharashtra, India and World economy 2. Analysis macroeconomic policies including fiscal and monetary policies of India since economic reforms. 3. Determine economic variables including inflation, unemployment, poverty, GDP, Balance of Payments using statistical methods.				
				4. Understand the behaviour of financial and money markets and perform cost- benefit analysis for making investment decisions.	
M.A. Economics	1. Ability to analyze and demonstrate knowledge of the basic theories/laws in economics- law of demand, law of supply, production function, etc				
	2. At the end of the course, the student should be able to evaluate microeconomic concepts, models and its use in real life situations.				
	3. Ability to recognize, apply and analyze concepts and theories in public economics.				
	4. Ability to appraise and assess the theory of public economics in real life situations.				
	5. Ability to understand the concepts of international economics such as comparative cost, terms of trade, trade policies and trade agreements				
	6. Ability to interpret and apply theory relating to understand international trade				

7. Ability to discuss and debate the effects of trade policy, trade agreements, exchange rate policies on the world economy/trade
8. Ability to analyze and evaluate the subject with reference to various aspects of agrarian economies.
9. Ability to develop an understanding of agriculture with its intricacies and imperfections and to be able to construct intellectual dialogue on the challenges of agriculture

Sr. No.	Class	Course	Course Outcomes
1	FY BA- Sem- I & II	G1- Indian Economic Environment	 To familiarize the students with the recent developments in the Indian Economy. To help the students to prepare for varied competitive examinations To provide the students with the background of the Indian Economy with focus. Ability to develop an understanding of the economic environment and the factors affecting economic environment. Ability to develop awareness on the various new developments in the different sectors of an economy – agriculture, industry, services, banking, etc. Ability to compare and contrast Indian Economy with other world economies.
2 BA Ser	SY BA Sem- III &	G2-Financial System	 To understand fundamentals of modern financial system. To understand the recent trends and developments in banking system. To understand the role of the Reserve Bank of India in Indian financial system. To provide the knowledge of various financial and non-financial institutions. To provide the students the intricacies of Indian financial system for better financial decision making.
	IV	S1-Micro Economics	 To develop an understanding about subject matter of Economics. To impart knowledge of microeconomics. To clarify micro economic concepts. To analyze and interpret charts, graphs and figures. To develop an understanding of basic theories of micro economics and their application. To demonstrate that the theories discussed in class will usually be

Course Outcomes (U.G.)

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			 applied to real-life situations. ➢ To help the students to prepare for varied competitive examinations
		S2-Macro Economics	 To introduce students to the historical background of the emergence of macroeconomics. To familiarize students with the differences between microeconomics and macroeconomics. To familiarize students with various concepts of national income. To familiarize students with keynesian macroeconomic theoretical framework of consumption and investment functions To introduce students to the role of money in an economy. To introduce students to the conceptual and theoretical frameworks of inflation, deflation and stagflation, Business Cycle . To familiarize students with the conceptual and theoretical framework of business cycles. To introduce students to the role of monetary and fiscal policies in fulfilling the macroeconomic objectives of stability, full employment and growth. To introduce students to the various instruments of monetary and fiscal policies.
		G3-Economic Development & Planning	This paper is devoted to the theories of economics development, approaches to economic development, social and institutional aspects of development, constraints on development process, macroeconomic policies, role of foreign capital and economic planning in developing countries.
3	TY BA	S3- International Economics	Course provides the students a thorough understanding and deep knowledge about the basic principles that tent to govern the free flow of trading goods and services at the global level.
			It trained about the rational of recent challenge in the export import policies of India.
		S4-Public Finance	To understand the policies and operations which involve the use of tax and expenditure measures while budgetary policy. It helps to understand expenditure program, budgetary procedures, stabilizations instruments, debt issues, levels of the government, etc.
4	F.Y. B. Com Sem-I	Business Economics (Micro)	 To impart knowledge of business economics To clarify micro economic concepts To analyze and interpret charts and graphs To understand basic theories, concepts of micro economics and their application
5	F.Y. B.	Business Economics	 To understand the basic concepts of micro economics. To understand the tools and theories of economics for solving the

	Com Sem- II	(Micro)	problem of decision making by consumers and producers.> To understand the problem of scarcity and choices.
6	S.Y. B. Com Sem- III & IV	Business Economics (Macro)	 To familiarize the students to the basic theories and concepts of Macro Economics and their application. To study the relationship amongst broad aggregates. To impart knowledge of business economics. To understand macroeconomic concepts. To introduce the various concepts of National Income. To understand the theories of money. To understand the phases of trade cycle and policy measures to elongate the trade cycle. To understand various concepts related to public finance. To understand credit creation of banks and money measures of RB I
7	T.Y. B. Com	Indian and Global Economic Development	 To acquaint students with the basic concepts, terms & provisions of Mercantile and Business Laws. To develop the awareness among the students regarding these laws affecting business, trade and commerce.

Department of Geography POs/PSOs/COs

	Program Outcome: B.A. (Geography)
1.	The bachelor program in geography is tailored to meet the students specific educational and professional goals in mind.
2.	During the first year of the program, the students are trained on advanced concepts of physical and human geography.
3.	The second year allows them to concentrate on specific areas of the subject, on which they complete their field reports.
4.	Develop the general understanding of global human population pattern factor influencing the distribution and mobility of human population including settlement and economic activities and human impacts on the physical environment.
5.	Read, interpret and generate maps and other geographic representations as well as analyze and present information from a special perspective.
6.	Evaluate cultural social physical and environmental process with a particular focus on space and place.

	Program Specific Outcome: B.A. (Geography)
1.	The study of Physical Geography helps to gain an insight into the processes of
	landform development and geomorphic hazards. A possible outcome is that students

	could be able to minimize the intensity of such hazards and monument of related events.
2.	The branches of Human Geography make them capable of identifying the development prerogatives of regions and applying them in formulation of regional development plans.
3.	The study of Practical Geography prepares them in the field survey and Planning of region. Students could make outline and map of local region which is very useful in planning and Land use study.
4.	Geography introduces the students to the characteristics of soil regions, floral and faunal regions. This holistic knowledge makes them capable of assessing and developing forestry projects, biodiversity conservation plans and probable land use policies of rural areas.
5.	Demonstrate knowledge of physical and culture features of the earth and locate them on the map.
6.	Know the basic concepts and terminologies used in Geography like interior of the earth , plate tectonic , sea floor spreading , population growth , disasters, composition and structure of atmosphere , hydrosphere, etc.
7.	Know about the basic disciplines of Geography and its sub branches.
8.	Differentiate between minerals and rock , weather and climate, interior ofthe earth , basic industries , farming etc.
9.	Get information about the causes and the effect of local, national and International problems like global warming, acid rain, ozone depletion, soil Degradation , deforestation etc.
10.	Handle topographical and weather maps and interpret them.
11.	Identify types of rocks.
12.	Know about Geographical Information System (GIS) and Remote Sensing (RS).

		Course Outcome: B.A. (Geography)
Class	Course title	Outcome
F.Y.B.A	Sem I 110(A) Physical Geography	 Students are introduced to the basic concepts in Physical Geography. Students are introduced to the various geographical features.
	Sem II 110(B) Human Geography	 Students are introduced to basic concepts in Human Geography. The Geographical maturity of students in their current and future courses shall develop.

		3) The students develops theoretical , applied and computational skills .
F.Y.B.Com	Sem I and Sem II Elements of commercial Geography-I and II	 Students are understand the scope and content of Commercial Geography in relation to the spatial distribution of resources. Students are acquainted with the dynamic nature of Commercial Geography. Students are aware about the relationships between geographical factors and economic activities.
S.Y.B.A (G2)	(Yearly) Elements of Climatology and Oceanography (2207)	 Students are introduced to the basic principles and concepts in Climatology and Oceanography. Students are acquainted with the applications of Climatology and Oceanography in different areas and environment. Students are aware about the Planet Earth and thereby to enrich their knowledge.
S.Y.B.A (S1)	(Yearly) Tourisms Geography (2208)	 Students are acquainted basic concepts of Geography and Tourism. Students are aware with the utility and application of Tourism. Students are understand the impact of tourism on Physical and Human Environments.
S.Y.B.A (S2)	(Yearly) Fundamentals of Geographical Analysis (2209)	 Students are acquainted with the basic of Statistical data. Students are acquainted with the principles of surveying, its importance and utility in the geographical study. Students are familiar to the various Projections and Cartographic Techniques.
T.Y.B.A (G3)	(Yearly) Regional Geography Of India (3207)	 Students are acquainted with Geography of our nation. Students are aware about the magnitude of problems and Prospects at National level. Students are understand the inter relationship between the subject and society. Students are understand the recent trends in Regional studies.
T.Y.B.A (S3)	(Yearly) Agricultural Geography (3208)	 Students are introduced to Agricultural activities and its relation with Geography. Students are familiarized with new modern technical methods and their applications in agricultural activities. Students are able to apply the previously knowledge in

		problems and prospects in agriculture.
T.Y.B.A (S4)	(Yearly) Techniques Of Special Analysis (3209)	 Students are introduced with SOI Toposheets and to acquire knowledge of Toposheet Reading/Interpretation. Students are familiarized with the weather instruments and their applications in Geographical phenomena. Awareness about GIS was created among the students.

Department of English

Program outcome : B.A. (ENGLISH)
To acquire the knowledge of Social Sciences mental moral Sciences languages
To make aware the literary tradition and the new changes and up gradation in the field of language study
To acquire sufficient knowledge regarding the human psychology and behaviour and to adopt the knowledge for practical.
To find out proper remedies on the situations and questions arise in society regarding on equality vanishing human values like universal brotherhood
To make responsible citizens and follow the human values for upbringing of unequal Strata

Program Specific outcome : B.A. (ENGLISH)	
To introduce Various forms of literature like novel drama poetry	
To learn and analysis the different cultures in in each and every corner of the world	
Study of literary movement in different ages	
Develop grammatical knowledge and spectacle use	
Today develop and upgrade the knowledge of communication skills and its uses in practical life for success in the field of employment and business	

	Cours	se outcome : B.A. (ENGLISH) Semester 1
Class	Course Title	Outcome
FYBA 2019 CBCS	ENGLISH COMPULSORY 11011	A. To learn the art of writing B. To study the different writes C. To learn and create interest towards poetry D. To upgrade the communication skills
CBCS PATTERN	ENGLISH GENERAL 1 113331	 E. To learn basic language skills A. to develop basic qualities of human being B. To develop interest towards the language C. To make aware the cultural diversity D. To aware the concerns of human life E. The develop the struggle and positive attitude
SYBA 2019 CBCS PATTERN	ENGLISH COMPULSORY 23001	 A. To expose students to the best examples of literature in English and to contribute to their emotional quotient as well as independent thinking. b) To instill universal human values through best pieces of literature in English c) To develop effective communication skills by developing ability to use right words in the right context.
	Advanced Study of English Language (ENGLISH G 2) 23333	 A. To familiarize students with the various components of language. b) To develop overall linguistic competence of the students. c) To introduce students to some advanced areas of language study.
	Appreciating Drama (ENGLISH S 1) 23331	 A. To introduce Drama as a major form of literature B. To introduce minor forms of Drama C. To acquaint and enlighten students regarding the literary and the performing dimensions of drama D. To acquaint and familiarize the students with the elements and the types of Drama
	Appreciating Poetry (ENGLISH S 2) 23332	 A. To acquaint students with the terminology in poetry criticism (i.e. the terms used in appreciation and critical analysis of poems) B. To encourage students to make a detailed study of a few sample masterpieces of English poetry C. To enhance students awareness in the aesthetics of poetry and to empower them to read, appreciate and critically evaluate poetry independently
	Mastering Communication Skills SEC-2A 23334	 A. Enhancing the skill of using English for everyday communication B. To acquaint the students with the verbal and nonverbal communication C. To create opportunities to access exposure of speaking in various contexts D. To acquaint and familiarize the students with soft skills E. To develop interest among the students to interact in English

TYBA 2013 PATTERN	ENGLISH COMPULSORY 3017 ADVANCED STUDY OF ENGLISH LANGUAGE AND LITERATURE (G3) 3337	 A. To develop the student to use basic tips for communication B. To prepare the students for practice of language C. To introduce the students to the styles of writing D. To practise the grammar E. To develop the communication skills A. to aware the types of poetry B. To develop awareness regarding Indian poetry and its subject variety C. To understand and the practice of the creative use of language D. To increase the interest among the student to advance study of the language E. To prepare student for detail study of literature and language
	APPRECIATING NOVEL (S 3) 3338	 A. To introduce students to the basics of novel as a literary form B. To expose students to the historical development and nature of novel C. To develop literary sensibility and sense of cultural diversity in students D. To make students aware of different types and aspects of novel E. To expose students to some of the best examples of novel
	INTRODUCTION TO LITERARY CRITICISM (S 4) 3339	 A. To introduce students to the basics of literary criticism B. To make them familiar with the significant critical approaches and terms C. To develop aptitude for critical analysis D. To make them aware of the nature and historical development of criticism E. To encourage students to interpret literary works in the light of the critical approaches
FYB Com 2019 CBCS PATTERN	Compulsory English 111	 A. To offer relevant and practically helpful pieces of prose and poetry to students so that they not only get to know the beauty and communicative power of English but also its practical application B. To expose students to a variety of topics that dominates the contemporary socioeconomic and cultural life C. To develop oral and written communication skills of the students so that their employability enhances D.To develop overall linguistic competence and communicative skills of students
2019 CBCS	English	 poetry to students so that they not only get to know the beauty and communicative power of English but also its practical application B. To expose students to a variety of topics that dominates the contemporary socioeconomic and cultural life C. To develop oral and written communication skills of the students so that their employability enhances

SYB Sc.	Language	A.) To introduce the vivid perspectives of writers through thier
(B C S) 2019	Communication- I	short stories B.) To acquaint and familiarize students the human tendency in
CBCS	23922	various situations.
PATTERN		C.) To acquaint the students with grammar and the language
		skills in multivalent contexts
		D.) To acquaint and familiarize the students with advanced writing skills in different contexts
		writing skins in unrerent contexts
	Cours	se outcome : B.A. (ENGLISH) Semester 2
Class	Course Title	Outcome
	ENGLISH	A.) To aware students for basic humsn tendencies
	COMPULSORY	B.) To study baisc behaviour of human in literature
FYBA	11012	C.) To increase interest towards the writing of the writers
2019 CBCS		D.) To practise the basic grammar E.) To practise and develop basic concept of communication
CBCS PATTERN		E.) To practise and develop basic concept of communication
	ENGLISH	A.) To understand the form of writing
	GENERAL 1	B.) To study the style of writing
	11332	C.) To understand the human nature in literature
		D.) To understand the nature of language
		E.) To improve language skills
SYBA 2019	ENGLISH COMPULSORY	A.) To enhance employability of the students by developing their basic soft skills
CBCS	24001	B.) To revise and reinforce the learning of some important areas
PATTERN		of grammar for better linguistic competence.
		C.) To develop the students for self reliance and learning
	Advanced Study	A.) To prepare students to go for detailed study and
	of English	understanding of language.
	Language	B.) To enhance communicative skills of students by developing
	(ENGLISH G2)	insight into the working of language
	24333	C.) To understand the science of language D.) To understand the components forming the word and
		language
	Appreciating	A.) To encourage students to make a detailed study of a few
	Drama	sample masterpieces of English Drama from different parts of the
	(ENGLISH S 1)	world
	24331	B.) To develop interest among the students to appreciate and
		analyze drama independently
		C.) To enhance students' awareness regarding aesthetics of Drama and to empower them to evaluate drama independently
		D.) To encourage students to make detail study of masterpieces
		and understand the social settlement
	Appreciating	A.) To prepare students for practical criticisms to poetry
	Poetry	B.) To understand the various types and its peculiarities
	(ENGLISH S 2)	C.) To make aware students the aesthetic approach of poetry
	(E1(GLISH 5 2) 24332	D.) To develop the individual concern to study the styles of poets

	Mastering	A.) To acquaint and familiarize the students with soft skills
	Communication	B.). To develop interest among the students to interact in English
	Skills SEC-2A	
	24334	
	ENLISH	A) To instill humanitarian values and foster sympathetic attitude
	COMPULSORY	in the students.
	CC	B) To train the students in practical writing skills required in
		work environment.
		C) To impart knowledge of some essential soft skills to enhance
	Enhancing	their employabilityA.) To enhance skills required for their placement.
ТҮВА	Employability	B.) To use English effectively in the career of their choice.
2019	Skills	C.) To exercise verbal as well as nonverbal communication
CBCS	(ENGLISH G 3)	effectively for their career
PATTERN	SEC-1-D	
	Appreciating	A.) To develop literary sensibility and sense of cultural diversity
	Novel	in students
	(ENGLISH S 3)	B.) To expose students to some of the best examples of novel
	DSE-1-D	C.)
	Introduction to	A.) To make them aware of the nature and historical
	Literary	development of criticism
	Criticism	B.) To encourage students to interpret literary works in the light
	(ENGLISH S4) DSE-2-D	of the critical approaches
	Mastering Life	A.) To learn stress management and positive thinking
	Skills and Life	B.) To enhance leadership qualities
	Values	C.) To aware the students about universal human values
	SEC-2-D	D.) To develop overall personality of the students
FYB Com	Compulsory	A.) To make students aware of the cultural values and the major
2019	English	problems in the world today
CBCS	121	B.) To learn and create interest towards prose and poetry
PATTERN		C.) To develop literary sensibilities and communicative abilities
		among students
		D.) To expose students to a variety of topics that dominates the
		contemporary socioeconomic and cultural life E.) To develop overall linguistic competence and communicative
		skills of students
		Skiis of students
	Additional	A.) To offer relevant and practically helpful pieces of prose and
	English	poetry to students so that they not only get to know the beauty
	127A	and communicative power of English but also its practical
		application.
		B.) To expose students to a good blend of old and new literary
		extracts that is entertaining and informative so that they realize
		the beauty and communicative power of English.
		C.) To develop oral and written communication skills of the students so that their employability enhances
		students so that their employability enhances . D.) To study basic behaviour of human literature.
		D. J. D. Study Dasie Denaviour of numan merature.
SYB Sc.	AECC-IV A	A.) To acquaint and familiarize the students with soft skills
2019	Language	B.) To minimize the gap between the existing communicative
CBCS	English	skills of the students and the skills they require at professional
PATTERN	24321	level
		C.) To develop competence among the students to appreciate and
		analyze short stories and poetry

SYB Sc.	Language	A.) To acquaint and enlighten students regarding the speaking
(B C S)	Communication-	skill in various contexts
2019	II	B.) To minimize the gap between the existing communicative
CBCS	24922	skills of the students and the skills they require at professional
PATTERN		level

Department of Hindi POs/PSOs/COs

	Program Outcome: B.A. (Hindi)
1.	Student seeking admission for B.A. programme is expected to imbue with followingquality which helps them in their future life to achieve the expected Goals.
2.	Realization of human values.
3.	Sense of social service.
4.	Responsible and dutiful citizen.
5.	Creative ability.

Program Specific Outcome: B.A. (Hindi)
To understand the basic concept and subject of Hindi & its origin.
To make the importance of subject Hindi & its Branches.
To understand various aspect of Hindi literature with a process to reach method and giving new mode and direction
To make attempt in different area and theory such as vocabulary and vice versa
To understand in the Literature more in a border areas then merely confined to subject
To know about Hindi literature its roots cause perspectives and methods.
Elaborating and understanding its philosophical methods of Hindi Literature.
Evaluating the concept of Hindi from past to present and making the society more closely through literature

		Course (Dutcome: B.A. (Hindi)
Class	Course title		Outcome

SYBA 2019 Pattern S.Y.B.A Sem III 1. Students are introduced to Hindi Language Pedagogy (2019 A) MIL (Hindi Bhasha 2. Students can understand Hindi Language Pedagogy Pattern) Shikshan) Translation 23012 3. Students can read Hindi Language Pedagogy 4. Students can write Hindi Language Pedagogy. S.Y.B.A Sem IV 1. Students are introduced to different forms of (2019 sentences. Pattern) MIL (Hindi Bhasha A) 2. Students can introduced to special types of sentences Shikshan) 3. Students are introduced to Hindi Language Pedagogy 24012 4. Students can understand Hindi Language Pedagogy Translation 5. Students can read Hindi Language Pedagogy Sem III S.Y.B.A 1. Translational Skill is developed among the students (2019 B) SEC-2A (Anuwad Swaroop 2. The student can understand the translational form Pattern) avam Vyavhar) 3. The students are introduced to area of translation 23096 4. Translation of Hindi to Marathi is developed 5. Skill of translation from English to Hindi or Marathi is developed. S.Y.B.A Sem IV 1. Medium of writing is developed among the students (2019)B) SEC-2B (Madhyam 2. Creativity in Autobiography is developed among the Pattern) Lekhan) students 24096 3. Medium of writing is introduced to students 4. Audio Video mediums of communication is known to students Sem III S.Y.B.A 1. Students are introduced to Poetry Literature (2019 (C) Adhunik Kavya, Kahani 2. Students are introduced to Story Literature Pattern) tatha Vyavarik Hindi (G-2) 3. Students can understand the Hindi management skill 23093 4. Origin of words and actual use in sentence is developed among

		the students.
		5. Ability of Precise writing is developed
		6. Creativity is developed for the students.
		o. Orealivity is developed for the students.
S.Y.B.A	Sem IV	1. Students are introduced to Sarcasm
(2019 Pattern)	C) Adhunik Hindi Vyang	2. Students are introduced to Story Sarcasm
,	Sahitya tatha Vyavarik Hindi	3. Art of Literature among the student is developed
	(G-2)	4. Communication skill of Language is developed
	24093	5. Art of Expansion creativity is developed.
S.Y.B.A	Sem III	1. Students are introduced to Indian Kavyashastra (poetry)
(2019 Pattern)	D) Kavyashastra (S-1)	2. Termlogy and Elements of poetry are introduced to
	23091	students
		3. Different forms of literature is developed
		4. An interest in Critical Ability of Indian Kavyashastra id
		developed.
S.Y.B.A	Sem IV	1. Students are introduced to differences in literature
(2019 Pattern)	D) Sahitya ke Bhedh (S-1)	2. Poetry differences are introduced to students
,	24091	3. Epic, Khand kavya and Muktak Kavya are introduced
		4. Forms of Drama are made understood.
S.Y.B.A	Sem III	1. Students are introduced to Kabir Literature
(2019 Pattern)	E) Madhyayugin Kavya tatah	2. Incidents in Mirabai Literature is explained to students
	Upanyas Sahitya(S-2)	3. Accreditation about Indian is developed
	23092	4. Assessment about Novel can be done by students
		5. Creativity in Literature and its relation to life value can be
		enhanced to students
S.Y.B.A (2019	Sem IV E) Madhyayugin Kavya tatah	1. Students are introduced to Rahim Literature
Pattern)	Upanyas Sahitya(S-2)	2. Expressions of Bihari Ki Kavya is understood to students
	24092	3. Hindi Drama and stage Creativity is developed
		4. Acting Skills of Students is developed
		5. Theatrical Play is introduced for the students

T.Y.B.A 2013 Pattern T.Y.B.A 2013 Pattern	Hindi Sahitya ka Itihas (S3) 3098 Kavyashastra (S4) 3099	 Student are aware about history about the Hindi Literature Student are aware about naming about different period and background about history of Hindi Literature The students are well known with representative writing, importance of writing, accountability with previous and post effect Students are introduced toward development sequence and reasons for changes in literature Through history of Hindi literature, the relation between literature and era of life is clarified The changes in social, political, religious, aortic condition in modern era and perspective in changes of Hindi Literature are explained to students. Students gain the knowledge regarding poetry, literature and from different terminology different forms of poetry along its purpose is given
2013	-	literature and from different terminology different
	FYBA	2019 CBCS Pattern
F.Y.B.A 2019 CBCS Pattern	Sem I Vaikalpik Hindi 11091 A	 Hindi poetry literature is developed to students Awareness about Hindi story Literature Communication skills through Hindi language is developed Original writing trends is increased Advertisement writing skills is developed
		 6. Translation information is provides 7. Relative information is provided.

	8. Awareness about Hindi computing is developed.
Sem II	1. Hindi poetry literature is developed to students
Vaikalpik Hindi 11091 B	2. Awareness about Hindi story Literature
	3. Essay writing skill is developed.
	4. Advertisement writing skills is enhanced.

Department of Marathi POs/PSOs/COs

	Program outcome : B.A. (Marathi)
1.	विशिष्ट कालखंडाच्या पाश्र्वभूमीवर साहित्यामागील प्रेरणा प्रवृत्तींचे ज्ञान करुन घेतो.
2.	चिकित्सक अभ्यासाची क्षमता विकसित होते .
3.	जागतिकीकरणात विविध क्षेत्रांना सामोरे जाण्यासाठी भाषिक क्षमता विकसित करणे.
4.	विविध प्रकारची लेखन कौशल्ये विकसित करणे
5.	आस्वाद घेण्याची क्षमता विकसित करणे .
6.	साहित्य व्यवहार व प्रकाशन व्यवसायाचे स्वरूप समजते .
7.	समीक्षा करण्याची दृष्टी व क्षमता विकसित होते .

	Program outcome : M.A (Marathi)
1.	विद्यार्थ्याला आपल्या आवडीचे संशोधनाचे क्षेत्र निश्चित करता येते.
2.	मराठी भाषा आणि साहित्याचे प्रगत ज्ञान प्राप्त होते.
3.	समकालीन साहित्य प्रवाहांचे नीट आकलन होते.
4.	साहित्य प्रश्नांविषयी विचार करण्याची जाण निर्माण होते.
5.	साहित्य आणि जीवन विषयक जाणीव परिपक्व.
6.	चिकित्सक अभ्यासाची क्षमता विकसित होते.

7.	विद्यार्थ्याला लेखन गुणांना उत्तेजन मिळते.

	Program Specific Outcome B.A Marathi
1.	मराठी साहित्यातील भिन्न-भिन्न प्रवाह आणि प्रकार लक्षात घेणे.
2.	विद्यार्थ्याच्या साहित्य अभिरुचीचा विकास करणे.
3.	संशोधनाची संकल्पना, प्रयोजने आणि विविध संशोधन पद्धती समजावून घेतो .
4.	व्यक्तिमत्व विकासासाठी भाषिक कौशल्ये विकसित करणे.
5.	प्रसारमाध्यमांसाठी विविध प्रकारची लेखन कौशल्ये आत्मसात करणे.

Program Specific Outcome: M.A (Marathi)		
1.	विशिष्ट कालखंडातील साहित्याच्या व्याप्तीबद्दल जाण निर्माण होण्यास मदत होते.	
2.	विषयाच्या चिकित्सेची समज वाढविणे.	
3.	साहित्य कृतीच्या साहित्यप्रकाराच्या तौलनिकअभ्यासाबाबत दिशा , व्याप्ती आणि मर्यादा यांची समज निर्माण होण्यास मदत करणे, अशा अभ्यासाची क्षमता वाढविणे.	
4.	साहित्याच्या व्यवच्छेदक लक्षणाबाबत विचारांची आणि साहित्याच्या मूल्यमापनाची सवय लावणे.	

Course outcomes of B.A. (Marathi)

Class	Course title	Outcome
FYBA	MAR 10021 व्यावहारिक आणि उपयोजित मराठी सामान्य स्तर – 1. भाग १ ,२ Sem &	 मराठी साहित्य, मराठी भाषा आणि मराठी संस्कृती यांचा क्रमशः परिचय करून घेतो. मराठी साहित्यासंबंधी रूची निर्माण होते. वाङ्मयीन अभिरूचीचा विकास होतो. मराठी साहित्यातील भिन्न भिन्न प्रवाह व प्रकार लक्षात येतात.
	Pattern 2019	 व्यक्तिमत्त्व विकासात भाषेचे महत्व स्पष्ट होते. व्यावहारीक भाषेचे उपयोजन करता येईल.
FYBCom	Code - 117 भाषा, साहित्य आणि कौशल्य विकास. भाग 1,2 Sem I &II Pattern 2019	 भाषा व साहित्य यांचे उपयोजन करता येईल. भाषिक कौशल्यांची जाण निर्माण होईल. व्यवहार भाषेचे महत्त्व समजेल . भाषा व्यवहारात भाषेचे आदान प्रदान. भाषिक कौशल्यांचा विकास साधता येईल.

SYBA	MAR 2027 आधुनिक मराठी आणि उपयोजित G-2 Pattern 2013	 आत्मचरित्रात्मक वेच्यांचे आकलन आस्वाद आणि मूल्यमापन करण्याची क्षमता विकसित होते. शुद्धलेखनाची ओळख होते. पारिभाषिक संज्ञांचा परिचय होतो. चरित्र, आत्मचरित्र या साहित्यप्रकारांच्या तात्विक घटकांचे ज्ञान प्राप्त होते. मराठीतील निवड चरित्र, आत्मचरित्रांची ओळख होते.
SYBA	MAR 2028 मराठी साहित्यातील विविध साहित्यप्रवाह विशेष स्तर - 1 Pattern 2013	 मराठी साहित्यातील तात्विक घटकांचे ज्ञान प्राप्त होते. वेगवेगळ्या कालखंडातील मराठीतील अभिजात साहित्यकृतींचा संस्कार घडतो. साहित्यकृतींचा अभिरूची निर्माण होते. साहित्यकृतींला मुक्त प्रातिसाद देण्याची क्षमता निर्माण होते. साहित्यकृतीचे आकलन, आस्वाद आणि मूल्यमापन करण्याची क्षमता विकसित होते.
SYBA	MAR-2019 मध्ययुगीन मराठी साहित्याचा इतिहास 1818 ते 1960 विशेष स्तर - 2 Pattern 2013	 अभ्यासाच्या प्रारंभी विद्यार्थी मराठी साहित्याच्या ऐतिहासिक परंपरेचे ज्ञानप्राप्त करून घेतो. विशिष्ट कालखंडाच्या पाश्र्वभूमीवर साहित्यामागील प्रेरणा प्रवृत्तींचे ज्ञान करून घेतो. साहित्यप्रकारांच्या विकसनशील परंपरेचे स्थूल ज्ञान करून घेतो. विद्यार्थी पदव्युत्तर अभ्यास करण्याची तयारी करतो.
ТҮВА	MAR- 3027 आधुनिक मराठी साहित्य आणि व्यवहारिक व उपयोजित मराठी सामान्य स्तर – 3 Pattern 2013	
ТҮВА	MAR- 3028 साहित्यविचार- विशेष स्तर 3 Pattern 2013	 साहित्याचे स्वरूप समजून घेतो. वाङ्मयीन मूल्यांचा परिचय होतो. साहित्याची प्रयोजने जाणून घेतो. साहित्य आणि समाज यांच्यातील परस्पर संबंध समजून घेतो. साहित्य निर्मितीची तत्वे जाणतो

TYBA MAR- 3029 भाषाविज्ञान- विशेष स्तर-4 Pattern 2013	 भाषेचे स्वरूप व कार्य, भाषेच्या अभ्यासाचे महत्व, भाषेच्या प्रमुख अंगांचा परिचय करून घेतो. भाषेचे मानवी जीवनातील कार्य व महत्व जाणून घेतो. वेगवेगळ्या भाषाभ्यास पध्दतीचे वेगळेपण व महत्व जाणून घेतो. मराठी भाषेचा उत्पत्तीकाल जाणून तत्कालीन भाषिक स्थित्यंतराचा परिचय होतो. मराठी भाषेचा ऐतिहासिक परिचय होतो.
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Semester I & II

		10 0 0 10	
SYBSc-	MAR 83111, 83112	1.	मराठी विज्ञान साहित्याची अभिरूची निर्माण होते
	मराठी विज्ञान साहित्य		वैज्ञानिक जाणिवा निर्माण होतात.
	आणि व्यवहारिक मराठी	3.	विज्ञान, उद्योगातील विविध प्रवाह संधी इ. चा परिचय
	Sem I & II		होतो.
	Pattern 2013	4.	लेखन, वाचन, आकलन संभाषण ही भाषिक
			कौशल्ये विकसित होतात.
		5.	वैज्ञानिक कार्यालयोन व्यावसायिक माहिती घेऊन
			पारिभाषिक संज्ञांची ओळख होते.

Course Outcomes of M.A (Marathi)

Semester I

Class	Course title	Outcomes
M.A -I	MAR- 10401	 विविध स्तरावरील भाषिक कौशल्ये व क्षमता
	भाषा व्यवहार आणि	विकसित होते.
	भाषिक कौशल्य	2. भाषाव्यवहाराचे औपचारिक आणि अनौपचारिक
	भाग -1	क्षेत्रनिहाय स्वरूप समजते.
	Pattern 2019	 व्यक्तिमत्व विकासासाठी भाषिक कौशल्ये आत्मसात
		होतात.
		4. प्रासारमाध्यमांचे स्वरूप व त्यासाठी भाषाव्यवहाराचे
		स्वरूप लक्षात येते.
M.A -I	MAR -10402	1. प्राचीन धर्मपंथ संप्रदाय व वाङ्मय यांचे परस्पर संबंध
	मराठी साहित्याचा	समजून घेतो.
	इतिहास 1818 ते 1920	2. राजकीय स्थित्यंतरे आणि मराठी साहित्य निर्मितीतील
	Pattern 2019	संबंध जाणून घेतो.
		 मराठी संत परंपरेचे योगदान व महत्व जाणतो.
		4. महानुभाव संप्रादायाचे कार्य जानतो.

M.A- I	MAR-10403 ऐतिहासिक भाषाविज्ञान Pattern 2019	 स्वनिम निर्मितीची प्राक्रिया समजावून घेतो वागिद्रियाची रचना व कार्य समजावून घेतो. वाक्यविन्यास व अर्थविन्यास संकल्पनांचा भाषेचे वेगळेपण व महत्व जाणून मानवी जीवनातील कार्य व महत्व जाणून मानवी जीवनातील कार्य व महत्व जाणून घेतो. वेगवेगळ्या भाषाभ्यास पध्दतीचा परिचय होतो.
M.A-I	MAR-10404 ग्रामीण साहित्य Pattern 2019	 स्वातंत्र प्राप्ती नंतरच्या कालखंडात ग्रामीण साहित्याच्या निर्मितीची कारणपरंपरा समजावून घेतो. ग्रामीण साहित्याचे स्वरूप व कार्य यांची चिकित्सा करतो. ग्रामीण साहित्यातील विविध वाङ्मय्प्राकारांचा विकास कसा होत गेला याचे मूल्यमापन करतो. ग्रामीण साहित्याने दिलेले योगदान, त्याच्या विकासाचीगती, दिशा यांची मीमांसा करतो.
		Semester II
M.A -I	MAR-20401 भाषाव्यवहार आणि भाषिक कौशल्य भाग – 2 Pattern 2019	 व्यवहार व प्राकाशन व्यवसायाचे स्वरूप समजते. मुलाखत लेखनाची तंत्रे व कौशल्ये यांचा वापर करता येतो. अर्जलेखन आणि पत्रलेखनाचा व्यवहारिक वापर करता येतो. भाषांतर आणि अनुवादप्राकिया यांची तात्विक व व्यावहारिक माहिती मिळते. निवेदन कौशल्याची माहिती होते.
M.A-I	MAR-20402 मराठी साहित्याचा इतिहास: 1920 ते 2010 Pattern 2019	 मराठी साहित्यातील विविध धर्मसंप्रदायाचे महत्व जाणतो. मराठी साहित्यातील राजकिय स्थित्यंतरांचे स्वरूप समजून घेतो. पंडिती काव्याची वैशिष्टये जाणतो. शाहिरी काव्याचे महत्व जाणतो.
M.A-I	MAR-20403 समाज भाषाविज्ञान Pattern 2019	 समाजातील भाषा उपयोजनातील विविधता समजावून घेतो. भाषा आणि समाज यांचे परस्पर संबंध जाणतो. सामाजिक भाषाविज्ञानाची नवी संकल्पना जाणतो. भाषा आणि विविध क्षेत्रीय वापराचे महत्व समजून घेतो. प्रामाणभाषा आणि परभाषा संपर्काचे स्वरूप जाणतो.

M.A-I	MAR-20404 दलित साहित्य	 स्वातंत्र्य प्राप्ती नंतरच्या कालखंडात दलित साहित्याच्या निर्मितीची कारणपरंपरा समजावून घेतो.
	Pattern 2019	 दलित साहित्याचे स्वरूप व कार्य यांची चिकित्सा करतो.
		 दलित साहित्याने निर्माण केलेल्या विविध वाङ्मयप्राकारांच्या विकासाचे मूल्यमापन करतो.
		 दलित साहित्यातून व्यक्त होणा-या वेदनांचे व विद्रोहाचे स्वरूप जाणून घेतो.

Course Outcomes of M.A (Marathi)
Semester III

		Semester III
Class	Course title	Outcome
M.A-II	MAR-30431 प्रसारमाध्यमे आणि साहित्यव्यवहार Pattern 2013	 संधी मिळविण्याची भाषिक क्षमता विकसित होते मुद्रित माध्यमातील विविध कौशल्ये प्रसारमाध्यमातील लेखन कौशल्य आत्मसात करतो. प्रसारमाध्यमांचे समाजातील महत्व जाणतो. प्रसारमाध्यमात सेवेची संधी आत्मसात करतो. विविध कलांच्या आस्वाद प्राक्रिया जाणून घेतो.
M.A-II	MAR 30432 साहित्य ः समीक्षा आणि संशोधन Pattern 2013	 प्रसारमाध्यमातील लेखन कौशल्य आत्मसात करतो. प्रसारमाध्यमांचे समाजातील महत्व जाणतो. प्रसारमाध्यमात सेवेची संधी मिा.विण्यासाठी भाषिक क्षमता विकसित होते. मुद्रित माध्यमातील विविध कौशल्ये आत्मसात करतो. विविध कलांच्या आस्वाद प्राक्रिया जाणून घेतो.
M.A-II	MAR 30432 साहित्य : समीक्षा आणि संशोधन Pattern 2013	 एकाच लेखकाचे वाङ्मयीन आकलन, लेखकाच्या व्यक्तिमत्त्वाची जडणघडण समजून घेतो. लेखकाचा काळ व त्याची साहित्यनिर्मिती यातील संबंधाचा शोध व त्याव्दारे लेखनातील कालतत्व व चिरंतनतत्व यांचा मागोवा घेतो. साहित्य निर्मितीतील वैविध्य व त्यातील लेखकाचे स्थान व वाङ्मयीन योगदान समजावून घेतो.
M.A-II	MAR-30434 लोकसाहित्याची मुलतत्वे आणि मराठी लोकसाहित्य Pattern 2013	 लोकसाहित्याचे स्वरूप समजून घेतो. लोकसाहित्याची व्यापकता व सर्वसमावेशकता समजून घेतो. लोकसाहित्यातील विविध प्राकार समजावून घेतो. लोकसाहित्यातील सामाजिक, धार्मिक, सांस्कृतिक जाणिवा स्पष्ट होतात.

M.A-II	MAR-40431 प्रसारमाध्यमे आणि साहित्यव्यवहार Pattern 2013	 वृत्तसंकलनाची प्रक्रिया जाणून घेतो. जाहिरात लेखनाची कौशल्ये विकसित होतात. विविध माध्यमांच्या पटकथा लेखनाचे कौशल्य आत्मसात करतो. विविध साहित्यप्रकारांचे स्वरूप आणि संकल्पना समजून घेतो. रूपांतर कौशल्ये आत्मसात करून घेतो.
M.A-II	MAR-40432 साहित्यः समीक्षा आणि संशोधन Pattern 2013	 समीक्षा करण्याची दृष्टी व क्षमता विकसित होते. संशोधनाची संकल्पना, प्रायोजने आणि विविध संशोधन पध्दती समजावून घेतो. वाङ्मयीन संशोधनाच्या विविध अभ्यासक्षेत्रांचा परिचय होती. आंतर्विद्याक्षेत्रीय संशोधनाचे स्वरूप आणि महत्व लक्षात येते. संशोधन करण्याची दृष्टी व क्षमता विकसित होते.
M.A-II	MAR-40433 विशेष लेखकाचा अभ्यास Pattern 2013	 विविध कलाकृतीतून लेखकाचे योगदान व त्याचे तौलनिक आकलन करून घेतो. मध्ययुगीन वारकरी संत परंपरा व तिचे स्वरूप समजावून घेतो. मध्ययुगीन कालखंडातील सामाजिक, सांस्कृतिक व धार्मिक पर्यावरण जाणून घेतो. आधुनिक कालखंडातील लेखनाच्या प्रेरणा जाणतो. आधुनिक लेखकांची वैशिष्टये जाणतो.
M.A-II	MAR-40434 लोकसाहित्याची मुलतत्वे आणि मराठी लोकसाहित्य Pattern 2013	 जागतिकिकरणातील लोकसाहित्याचे व लोककलेचे महत्व समजून घेतो. लोकसाहित्याचे इतिहास, पुरातत्वशास्त, मानसशास्त, भाषाशास्त, मानववंशशास्त, धर्म शास्त्र इ. शास्त्रांशी असलेला अनुबंध समजून घेतो मराठी लोकसाहित्याचे विविध कलाविष्कार जाणतो. मराठी लोकसाहित्य अभ्यासकांची परंपरा जाणतो.

Department of Political Science POs/PSOs/COs

	Program Outcome :- B.A2019-20 (Political Science)		
a.	Realization of human value.		
b.	Sense of social service.		
с.	Responsible and dutiful citizen.		
d.	Creative ability.		
e.	To Understand the contribution and philosophy of Constitution of India for Good Citizens.		
f.	To make Citizens participate in structure of Local Self Government of Maharashtra.		
	Program Specific Outcomes :- B.A.2019-20 (Political Science)		

1	Understand the contribution of the main tradition in the political thought of Western political
	thinkers.
2	Understand the processes and dynamics of Indian government and politics. It also familiarize
	with the vital contemporary emerging issues of centre-state relation, political parties, emergence
	of new leadership at different levels, demand for autonomy movement, ethnic conflicts etc.
3	Acquaint with the basic concepts, principles and dynamics of public administration.
4	Familiarise with important theories and issues of international relations.
5	Understand the basic concept and ideological orientations of political discipline.
6	Understand the contribution of the main traditions of Indian Political Thought.
7	An understanding the evolution, development and trends of India's foreign policy.
8	Acquaint with the basics of International Law and the new trends in the realm of International
	law.
9	Understand the basic concept and issues concerning human rights and challenges.
10	Understand the women's issues and problems.
11	Familiarise with the problems and prospects of rural development in India.
12	Understand the cultural, social, political, economic and constitutional environment as a
	historical perspective of Indian Administration.

Department of Political Science

Class	Course -Code/ Title	Course Outcome-Sem.1 & 2
FYBA	G-1 Code11161A- Poli.Sci.G-1	1. The students are acquainted with the important features of the Constitution of India .
(Pattern-2019)		2. The student is aware with the basic framework of Indian Government .
	Paper-(Introduction to	3. The students becomes familiar to the working of the Constitution of India .
	Indian Constitution)	4. Students can know the different ideological standpoints to various concept and theories that are critically explained .
S.Y.B.A.	Poli.Sci-Gen-2	Course Outcomes Class: -
(Pattern-2019)		S.Y.B.A. General Sem.3 & 4
Sem.3 & 4	(CC-1 C (3) Code- Sem-3 –(23164) Sem.4-(24164) Paper- (AN INTRODUCTION TO POLITICAL IDEOLOGIES)	1. Students are introduced to concepts, ideas and theories in political ideologies.
		2. Students are familiar to evolution and usage, ideas and theories with reference to individual thinkers both historically and analytically.
		3. Students can know the different ideological standpoints to various concept and theories that are critically explained.
		4. Close link between an idea and its actual realization in public policy.
		5. Legacy of all the major ideologies.
S.Y.B.A.	(DSE-1A (3)	Course outcomes Class: -
(Pattern-2019)		S.Y.B.A. Special Sem.3 & 4

Sem.3 & 4	Poli.Sci.Spe-1 Sem-3 –(23161) Sem.4-(24161) Paper- (WESTERN POLITICAL THOUGHT)	 Students are introduced to the classical tradition in political theory from Plato to Marx from the point of view of analysis and understanding of political events and the problems of their time. Major traditions of thought that have shaped political discourse in different parts of the world. Students are aware about the negligence of women's concerns and issues Students can know the change within the Western political tradition The great diversity of social contexts and philosophical visions.
S.Y.B.A.	(DSE-2A (3)	 6. The history of political thought as a series of critical, interconnected and open-ended conversations about the ends and means of the good life. Course outcomes Class: -
(Pattern-2019) Sem.3 & 4	Poli.Sci.Spe-2 Sem-3 –(23162) Sem.4-(24162) Paper- (POLITICAL JOURNALISM)	 S.Y.B.A. Special Sem.3 & 4 1. Students are introduced to the classical tradition in political sociological issues with the view to analyze and understand political events and problems of their time and solution. 2. Complex relationship between the communication, media and power politics. 3. Critical appraisal of practices of political image management, campaigns, propaganda and censorship. 4. Students are aware about the political development, political importance of politics concerns and issues. 5. Students can know the change within the Sociological Problems and Issues. 6. Indian context of political Journalism.
T.Y.B.A. (Pattern-2013)	(3167)-Poli.Sci.Gen -3 Paper- Local Government	Course Outcomes Class: - T.Y.B.A. General (Yearly) 1.Students are introduced to structure of Local Self Government of Maharashtra. 2.Students are familiar to awareness of the various Local Self Institutions, function, and composition and importance. 3.Students can know the role of Local Government and Local Leadership in development Course .
T.Y.B.A. (Pattern-2013)	(3168)-Poli.Sci.Spe-3 Paper-(Public Adiministration)	Course Outcomes Class: - T.Y.B.A. Special (Yearly)1.Students are introduced to essence of Public Administration, its effectiveness in translating the governing philosophy into programmes, policies and activities and making it a part of Community living.

		 2.Students are familiar to personnel public administration in the historic context highlighting several of its categories which develops administrative salience and capabilities to deal with the process of Changes 3 Students can know the paradigm of democratic legitimacy 4.The importance of legislative and judicial control over administration is given to students in the course
T.Y.B.A. (Pattern-2013)	(3169)-Poli.Sci.Spe.4 (Pattern-2013) Paper – (International Politics)	Course Outcomes Class: - T.Y.B.A. Special (Yearly) 1.Students are introduced to concepts and dimensions of international relations 2.Students are familiar to different theories highlighting the major debates and different aspects of balance of power within. 3.Students can know the various aspects of conflict and conflict resolution, collective security and specificity of the long period of post Second World War and phase of the Cold War of Detente and Deterrence leading to theories of rough parity in armaments.

Department of Commerce POs/PSOs/COs

	Program Outcomes : B. Com.
1	To develop independent logical thinking and facilitate personality development of the students
2	To equip the students for seeking suitable careers in management and entrepreneurship

Program Outcomes : M. Com.		
1	To equip and train Post Graduate students to accept the challenges of Business World by providing opportunities for study and analysis of advanced Commercial and business methods and processes	
2	To inculcate students with methods of Data collection and interpretations.	
3	To develop among students Communication, Study and Analytical skills.	

	Program Specific Outcomes : B. Com. (Cost & Works Accounting)
1	Students got knowledge about Basic Cost concepts, Elements of cost, Ascertainment of Material and Labour Cost.

	Course Outcomes: B. Com			
2	Students obtained knowledge about the concepts and principles application of Overheads			
3	Students understood various methods of costing and their applications			
4	Students understood the concepts and utility regarding costing techniques.			
5	Students obtained the information about importance of training includes concepts, procedures and legal Provisions of cost audit.			

	Program Specific Outcomes : B. Com. (Marketing Management)		
1	Students understood the concept and functions of marketing planning and sales management		
2	Students got knowledge about marketing strategies and organization		
3	Students got information about various facets of marketing with regulatory aspects		
4	Students understood marketing in globalize scenario		
5	Students obtained knowledge regarding the concepts of Marketing Research		
6	Students understood the role of Brand and Distribution of production including Management in marketing.		
7	Students understood the basic concepts related to Marketing, Management, Productivity and Economic Development		
8	Students obtained knowledge about the importance of control on marketing activities		

	Program Specific Outcomes : M. Com. (Business Administration)		
1	Students got knowledge of concepts, nature and structure of Production and Operation Management		
2	Students got sound knowledge of concepts, nature and structure of Financial Management		
3	Students acquire sound knowledge of concepts, nature and importance of knowledge management		
4	Students got acquaint with in-depth knowledge of HRM, practices followed by HR managers and understanding about recent trends in HRM		
5	Students understood various concepts of organization behavior, knowledge about process of formation of group behaviour in an organization set up		
6	The students got familiarize with the recent advancements in business administration and developed understanding about tools and their application in the business.		
7	Students learnt the actual research process of the business organization		

Class	Course Title	Outcome
	112- Financial Accounting	 Students got knowledge of various accounting concepts Students gained knowledge about accounting procedures,
F. Y. B. Com	114- Business	methods and techniques. 1. Students got prepared for competitive examinations.
Sem. 1	Mathematics and Statistics	 Students understood the concept of Simple interest, compound interest and the concept of EMI. Students got aware with the concept of shares and calculations of Dividend
		4. Students understood the concept of population and sample.5. Students upgraded their knowledge regarding the use of frequency distribution useful for make decision.
	116- Consumer Protection and	1. Students got acquaint with concept of consumer and consumer movement.
	Business Ethics	2. The students got aware about consumer rights, duties and mechanism for resolving their disputes.
F. Y. B.	122- Financial Accounting	 Students gained knowledge about accounting procedures, methods and techniques. Students have developed exectively executed.
Com Sem. 2	124- Business	 Students have developed practical approach to accounts writing by using software package. Students understood various methods of calculation
	Mathematics	regarding averages and variations.
	and Statistics	2. Students understood the concept and application of profit and loss in business.
		 Students obtained knowledge for solving the LPP to maximize the profit and to minimize the cost. Students knew about utility of correlation and regression
		analysis and estimation about the relationship between two variables.
		5. Students understood the concept and techniques of different types of index numbers.
	126- Consumer Protection and Business Ethics	 Students got aware about laws relating to consumers. Students got aware with role of Business Ethics in various functional areas.
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S. Y. B.	231 - Business Communication	1. Students understood the concept, process and importance of communication.
Com (Sem. 3)	I	 Students acquired and developed good communication skills requisite for business correspondence. Students developed according new trends in
	224 Deseivers	3. Students developed awareness regarding new trends in business communication
	234 - Business Management-I	 Students upgraded with the basic knowledge & understanding about business management concept. Help was provided to the students to develop cognizance of the importance of management principles.
	235 - Elements of Company	1. Students imparted with the knowledge of fundamentals of Company Law.
	Law	2. The knowledge of students updated regarding the provisions of the Companies Act of 2013.
	232 - Corporate	 3. The knowledge of students improved regarding new concepts involving in company law regime. 1. The students are enabled to develop awareness about

S. Y. B. Com (Sem. 4)	241 - Business Communication II	 Companies Act and Accounting as per Indian Accounting Standards. 2. The students have learned about the conceptual aspect of corporate accounting and skills for Computerized Accounting 3. The students are capable to implement their skills about accounting standards 4. Students were updated with knowledge for preparation of final accounts of a company as per Schedule III of the Companies Act 2013 1. Students aware regarding new trends in business communication. 2. Students were provided with knowledge of various media of communication. 3. Students upgraded with the knowledge of various media of communication. 4. Students developed with various skills of business communication.
	242 - Corporate Accounting I 244 - Business Management-II	 Students are empowered with skills to interpret the financial statements in simple and summarized manner for effective decision making process Students got acquaint with knowledge about various concepts , Objectives and applicability of some important accounting standards associated with corporate accounting. An understanding among the students was developed on the difference between commencement and incorporation of a company and the accounting treatment for transactions during the two phases. Students understood various functions of management Students were provided with tools and techniques to be used
	245 - Elements of Company Law	 Students were provided with tools and techniques to be used in the performance of the managerial job. Students acquainted with the duties and responsibilities of Key Managerial Personnel. Students imparted with the provisions and procedures under company law The capacity of the learners is enhanced to seek the career opportunity in corporate sector.
T. Y. B. Com. (2013 Pattern)	3113- Business Regulatory Framework (Mercantile Law) 3153- Auditing & Taxation	 Students grasped the detailed information regarding the basic concepts, terms & provisions of Mercantile and Business Laws. Awareness improved among the students regarding these laws affecting business, trade and commerce. The students got acquaint with the concept and principles of Auditing, Audit process, Assurance Standards, Tax Audit, and Audit of computerized Systems. They got knowledge about preparation of Audit report. Students understood the basic concepts and to acquire knowledge about Computation of Income, Submission of Income Tax Return, Advance Tax, and Tax deducted at Source, Tax Collection Authorities under the Income Tax Act, 1961.
	Advanced Accounting	1. Imparted the knowledge of various accounting concepts 2. The knowledge about accounting procedures, methods and

		techniques has installed.3. Students got acquainted with practical approach to accounts writing by using software package.		
Course Outcomes: M. Com.				
Class	Course Title	Outcome		
M.Com. Part I Sem. 1	121 Management Accounting	1. Students acquired sound Knowledge of concepts, methods and techniques of management accounting and developed competence with their usage in managerial decision making and control.		
	122StrategicManagement	1. Students acquired sound knowledge of concepts, nature and structure of strategic Management		
M.Com. Part I Sem. 2	221- Financial Analysis & Control.	1. Students acquired sound knowledge of concepts, methods and techniques of management accounting and the students developed for competence with their usage in managerial decision making and control		
	222 A- Industrial Economics	 The students studied the basic concepts of 1. Industrial economics 2. The significance and problems of industrialization. 3. The impact of Industrialization on Indian Economy 		
M.Com. Part 2 Sem. 3	321- Business Finance	Students acquired sound knowledge of concepts, nature and structure of business finance.		
	322- Research Methodology	1. The students got acquaint with the areas of Business Research Activities.		
	for Business	 The students enhanced capabilities to conduct the research in the field of business and social sciences. The students got enable in developing the most appropriate methodology for their research studies. The students are familiar with the art of using different research methods and techniques 		
M. Com. Part 2 Sem. 4	421- Capital Market and Financial Services.	Students acquired sound knowledge, concept and structure of capital market and financial services.		
	422- Industrial Economic Environment.	The students studied 1. The basic concepts of Industrial Finance. 2. The effects of New Economic Policy. 3. The impact of Labor reforms on Industries.		