Deccan education society

Willingdon College, Sangli

Programme Outcomes 2018-19

Name of the Programme	Programme specific outcomes	
B.A.	 Students will realize the importance of Humanities and Languages Taken up independent creative writing or various aspects in literature, social, economic political, environmental issues. Develop Reading, Writing & Communication Skills of Students. 	
M.A.	 Emerged as a multifaceted personality who is self dependant; earning his own bread and butter and also creating opportunities to do so. Developed a flair for participating in various social and cultural activities voluntarily, in order to spread knowledge, creating awareness about the social evils, blind faith, etc. Development scientific outlook not only with respect to science subjects but also in all aspects related to life. 	
B.Sc.	 To nurture the scientific approach among the students To use the basics of science in daily life problems To make students aware about the environmental aspects. 	
M.Sc.	 To apply the knowledge of science in industries and in teaching To develop research interests among the students. To enhance the sustainable development. 	
BCS	 Students are eligible to do jobs in IT sector Students can easily crack aptitude tests of renowned IT companies Students can appoint as database developer, software testing developer, technical support and front end developer 	

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Programme Specific outcomes 2018-19

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Programme	Programme specific outcomes				
BCS	 Students are eligible to do jobs in IT sector Students can easily crack aptitude tests of renowned IT companies Students can appoint as database developer, software testing developer, technical support and front end developer 				
B.Sc. Biotechnology	• Students get opportunity to work in various field as — Agriculture, Medical, Environmental, Dairy, Pharmaceutical industries, Winery, Marine biotechnology, Bioinformatics as Technicians, Officers in Quality Control and Quality Assurance, production, Research and Development Departments, Analytical Laboratories, Biofertilizers, Biopesticides etc. And students can set up their own biotech industry.				
B.Sc. Botany	production, Research and Development Departments, Analytical Laborator				
B.Sc. Chemistry	 Students should understand the analytical techniques in chemistry. Students possibly will understand the applications of chemistry self-employment such as in small scale or large scale of some domestic chemicals industries such as phenyl, sanitary acids, liquid soaps, cold creams etc. Students can acquire basic knowledge separation science and solvent extractions Improvement in the basic knowledge of preparation of dyes & drugs and their applications in everyday life. Students acquire the knowledge of extraction some natural drugs, pigments and they are environmentally friendly keeping green approach in mind. Understand the impact of the chemicals in societal and environmental contexts, and demonstrate the knowledge and need for sustainable development. 				

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	To provide opportunities to the students to acquire sound knowledge of electronics science
	and technology
	To provide opportunities to students to learn the latest trends in electronics
	• To provide opportunities to students to become researchers and developers to satisfy the
	needs of core electronics industries.
	• To provide opportunities to students to formulate, analyze, solve real life problems faced
	in electronics industry
	Understand the current voltage characteristics of semiconductor devices, and various instruments.
	instruments.
	• The operation of various circuits and analysis and working of device will help them to
B.Sc. Electronics	design the standard application.
	• Communication Electronics will help to understand and develop the various
	communication techniques used in the day to day life and some advance communication will explore the new world.
	 Industrial Electronics will help to understand the devices operation and use in the process
	control.
	 To describe architecture of 8051 and ARM7 microcontroller as well as Interface various
	peripheral.
	 Learn to design and fabricate the various electronics devices and fault finding as well as
	repairing.
	 Every electronics students will get confidence in using the Electrical as well as Electronics
	devices as he knows the basics of the working of various components used in the system.
B.Sc. Computer	To provide opportunities to the students to acquire computer knowledge of latest software
Science	& hardware technology.
	 To provide opportunity to students to learn the latest trends in Computer Science.
	• To provide opportunities to the students to develop different software's using computer
	programming languages.
	 To provide opportunities to the students to formulate analyze and solve real life problems
	faced in IT Industry.
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B.Sc. Mathematics	• On completion of B.Sc. Degree in Mathematics the students are equipped with basic
	concepts of Mathematics and in addition they are introduced to basics of Analysis and
	Concepts of Mathematics and in addition they are introduced to basics of Analysis and Algebra, with this knowledge they will be able to teach Mathematics up to 10th Standard
	Algebra. with this knowledge they will be able to teach Mathematics up to 10th Standard by augmenting their skills of teaching they can appear for competitive exams for
	Algebra. with this knowledge they will be able to teach Mathematics up to 10th Standard
	Algebra. with this knowledge they will be able to teach Mathematics up to 10th Standard by augmenting their skills of teaching they can appear for competitive exams for
M.Sc. Mathematics	Algebra. with this knowledge they will be able to teach Mathematics up to 10th Standard by augmenting their skills of teaching they can appear for competitive exams for investigator in central and state governments, Statistical officer, Banking, LIC, MPSC,
M.Sc. Mathematics	 Algebra. with this knowledge they will be able to teach Mathematics up to 10th Standard by augmenting their skills of teaching they can appear for competitive exams for investigator in central and state governments, Statistical officer, Banking, LIC, MPSC, UPSC, etc. On completion of this course students can go for research in Mathematics as well as Computer Science, Data mining, Data Analysis and also in R and D departments of
M.Sc. Mathematics	 Algebra. with this knowledge they will be able to teach Mathematics up to 10th Standard by augmenting their skills of teaching they can appear for competitive exams for investigator in central and state governments, Statistical officer, Banking, LIC, MPSC, UPSC, etc. On completion of this course students can go for research in Mathematics as well as Computer Science, Data mining, Data Analysis and also in R and D departments of various companies and research laboratories of course one can opt for teaching profession.
M.Sc. Mathematics	 Algebra. with this knowledge they will be able to teach Mathematics up to 10th Standard by augmenting their skills of teaching they can appear for competitive exams for investigator in central and state governments, Statistical officer, Banking, LIC, MPSC, UPSC, etc. On completion of this course students can go for research in Mathematics as well as Computer Science, Data mining, Data Analysis and also in R and D departments of various companies and research laboratories of course one can opt for teaching profession. All the competitive examinations listed above are open for M.Sc. Students. Because of the
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M.Sc. Mathematics B.Sc. Microbiology	 Algebra. with this knowledge they will be able to teach Mathematics up to 10th Standard by augmenting their skills of teaching they can appear for competitive exams for investigator in central and state governments, Statistical officer, Banking, LIC, MPSC, UPSC, etc. On completion of this course students can go for research in Mathematics as well as Computer Science, Data mining, Data Analysis and also in R and D departments of various companies and research laboratories of course one can opt for teaching profession. All the competitive examinations listed above are open for M.Sc. Students. Because of the sound logic they can be good software developers. Students get opportunity to work in various field as- Agriculture, Medical, Environmental,
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B.Sc. Microbiology B.Sc. Physics B.Sc. Statistics	 Algebra. with this knowledge they will be able to teach Mathematics up to 10th Standard by augmenting their skills of teaching they can appear for competitive exams for investigator in central and state governments, Statistical officer, Banking, LIC, MPSC, UPSC, etc. On completion of this course students can go for research in Mathematics as well as Computer Science, Data mining, Data Analysis and also in R and D departments of various companies and research laboratories of course one can opt for teaching profession. All the competitive examinations listed above are open for M.Sc. Students. Because of the sound logic they can be good software developers. Students get opportunity to work in various field as- Agriculture, Medical, Environmental, Dairy, Pharmaceutical industries as Technicians, Officers in Quality Control and Quality Assurance, production, Research and Development Departments, Analytical Laboratories, Biofertilizers, Biopesticides etc. To inculcate the scientific temperament among the student. To provide opportunities to the students to acquire knowledge of Physics. To develop analytical thinking about any situation. To use basic science for the development of mankind. To motive the students for data analysis data mining and their applications in industries and real life situations. Use of R- software. M.S. Excel, to solve problems related to fitting of distribution, random sampling, data analysis & graphical representation of data set in real life situations. Statistics has wide applications in every walk of life. As per the interest of students they are guided to develop their interest in applied fields and also in research. To enable the students to flourish in society with knowledge of subject and its application.
B.Sc. Microbiology B.Sc. Physics	Algebra. with this knowledge they will be able to teach Mathematics up to 10th Standard by augmenting their skills of teaching they can appear for competitive exams for investigator in central and state governments, Statistical officer, Banking, LIC, MPSC, UPSC, etc. • On completion of this course students can go for research in Mathematics as well as Computer Science, Data mining, Data Analysis and also in R and D departments of various companies and research laboratories of course one can opt for teaching profession. All the competitive examinations listed above are open for M.Sc. Students. Because of the sound logic they can be good software developers. • Students get opportunity to work in various field as- Agriculture, Medical, Environmental, Dairy, Pharmaceutical industries as Technicians, Officers in Quality Control and Quality Assurance, production, Research and Development Departments, Analytical Laboratories, Biofertilizers, Biopesticides etc. • To inculcate the scientific temperament among the student. • To provide opportunities to the students to acquire knowledge of Physics. • To develop analytical thinking about any situation. • To use basic science for the development of mankind. • To motive the students for data analysis data mining and their applications in industries and real life situations. • Use of R- software. M.S. Excel, to solve problems related to fitting of distribution, random sampling, data analysis & graphical representation of data set in real life situations. • Statistics has wide applications in every walk of life. As per the interest of students they are guided to develop their interest in applied fields and also in research. • To enable the students to flourish in society with knowledge of subject and its application.
B.Sc. Microbiology B.Sc. Physics B.Sc. Statistics	 Algebra. with this knowledge they will be able to teach Mathematics up to 10th Standard by augmenting their skills of teaching they can appear for competitive exams for investigator in central and state governments, Statistical officer, Banking, LIC, MPSC, UPSC, etc. On completion of this course students can go for research in Mathematics as well as Computer Science, Data mining, Data Analysis and also in R and D departments of various companies and research laboratories of course one can opt for teaching profession. All the competitive examinations listed above are open for M.Sc. Students. Because of the sound logic they can be good software developers. Students get opportunity to work in various field as- Agriculture, Medical, Environmental, Dairy, Pharmaceutical industries as Technicians, Officers in Quality Control and Quality Assurance, production, Research and Development Departments, Analytical Laboratories, Biofertilizers, Biopesticides etc. To inculcate the scientific temperament among the student. To provide opportunities to the students to acquire knowledge of Physics. To develop analytical thinking about any situation. To use basic science for the development of mankind. To motive the students for data analysis data mining and their applications in industries and real life situations. Use of R- software. M.S. Excel, to solve problems related to fitting of distribution, random sampling, data analysis & graphical representation of data set in real life situations. Statistics has wide applications in every walk of life. As per the interest of students they are guided to develop their interest in applied fields and also in research. To enable the students to flourish in society with knowledge of subject and its application.

	 and vertebrate animals. Correlate physiology, toxicology, endocrinology, medical zoology, biostatics, applied zoology, environmental biology with their life and work. Carry out laboratory techniques ESR, DNA isolation, RBC, WBC count, Hb detection, estimation of protein, sugar, lipid, uric acid etc. Understood biotechnological techniques, molecular biology, developmental biology, comparative anatomy, enzymology and biochemistry. Get opportunity in post graduation, jobs in sericulture, malaria, fisheries, forest, forensic, agricultural entomology departments, dairy industries, pathological laboratories, genetic engineering, bioinformatics etc. Entrepreneurships in poultry, Emu, Goat farming, sericulture, apiculture, vermiculture, dairy etc
B.A. Economics	 Understand the nature of Indian Economy, banking and planning system in India. Distinguishes between micro and macro economics Acquaintance of research methods in economic analysis Understand economic relations of India with other countries
M.A. Economics	 Understand micro and macroeconomic policy Knowledge of Indian public finance, Indian agriculture, co-operation Acquaintance of resources and ecology Acquired knowledge of using statistics to economic analysis Understand international trade policies
B.A. Geography	 It provide opportunity to students to acquire sound knowledge of Geography and recent technology used in Geography. Students understand relationship between man and nature, conservation of ecosystem, unity in diversity; Climatic changes. Students acquire skill of map reading, cartographic techniques and knowledge of statistical techniques, surveying, GIS for solving real world problem and get opportunity to serve in GIS companies. Students learn the concept of Physical Geography; Crust and related theory, denudation agents, Human Geography; culture, population and settlement; distribution, soil problems, conservation and management, agriculture systems, Oceanography, Physical, Economical Geography of India
B.A. Hindi	 छात्रोंको रोजगार उपलब्ध कराना तथा हिंदी साहित्य के प्रति रुचि बढ़ाना । छात्रोंको हिंदी में कार्यकरनेकी विचारक्षमता, कल्पनाशीलता विकसित कराना। हिंदी साहित्य की विविध विधाओं से छात्रोंको अवगत कराना।
M.A. Hindi	 छात्रों को मानक हिंदी भाषा सेपरिचित कराना। छात्रों को प्रतियोगिता परीक्षा के लिए तैयार कराना। छात्रों को हिंदी भाषा की उपयोगिता तथा महत्त्व से परिचित कराना।
B.A. History	 To get Past Knowledge of Human history, Religion, Culture. Preparation for MPSC and UPSC Exams. To the Students about the opportunity in archaeology department. To get Knowledge about Maratha history and Indian history and world history.
B.A. Marathi	 To provide opportunities to the students to acquire sound knowledge of Marathi Literature and Language. To provide opportunity to students to learn the latest trends in Marathi. To provide opportunities to the students to become researchers and developers to satisfy the needs of the core Marathi Language and Literature. To provide opportunities to the students to formulate, analyze and solve real life problems faced in Humanities.
M.A. Marathi	 Theories and approaches to language and literature studies. Marathi Literature: Study of development and genesis of literature. Study of various branches and types of ancient, medieval and early literature. Prose literature: Ancient, medieval and modern Genres in Marathi literature, Study of various trends in and influences on literary study.

Deccan education society

Willingdon College, Sangli

Department wise Course Outcomes 2018-19

Department of Computer Science (Optional)

Program Name	Course Name/ paper	Course Outcome
	Paper I - Database Management System	 How to collect data, how to retrieve, modify and delete data. To avoid duplicate data. Normalization of data
	Paper II - Problem Solving Using Computers	 How to design algorithms and flowcharts. Basic knowledge of programming and logic development
B.Sc. I	Paper III -Relational Database Management System	 The student can create the database using queries and form some operation on that database like create table ,select data from that table, modify table data. Programming using PLSQL blocks. Software development, how to develop software ,phases of developing software like collection of data, analysis on data, designing ,coding ,testing ,maintenance.
	Paper IV -Programming Skills Using 'C'	 Creating arrays of various types Using pointers Structure for creating user defined data type of various data types File Handling, adding removing and accessing data from secondary storages.
B. Sc. II	Paper V- PHP and MySQL	 To understand basic concept of PHP. To Learn how to developing applications in PHP using MySQL. To learn and develop various PHP technology applications that definitely meets the current industry needs.
	Paper VI - Object Oriented Programming Using C++	 Perform object oriented programming to develop solutions to problems demonstrating usage of control structures, modularity, I/O and other standard language constructs. Students get the idea of creating classes and objects .the basics of oops. The initialization & declaring the object with constructor and destructor. Inheritance chapter lets to know about reusing classes. Polymorphism is used to run time binding.
	Paper VII - Cyber Security Essentials-I	 Understand concept of information security management. Learn different access controls methods. Understand wireless network security. Learn cyber security laws and importance of security audit.
	Paper VIII - Data Structure Using C++	 Understand the basic concepts such as Abstract Data Types, Linear and Non Linear Data structures. Ability to choose appropriate data structures to represent data items in real world problems. Ability to analyze the time and space complexities of algorithms. Ability to design programs using a variety of data

D C ===		 structures such as array, stacks, queues, linked list Able to analyze and implement various kinds of searching and sorting techniques.
B Sc. III	Paper IX - Computer Networks	 Basics of hardware and networking, sharing resources, LAN connectivity.
	Paper X - Visual Programming Using C#	 How to build the software, connectivity with SQL database, Programming in console application. Designing of windows and web applications.
	Paper XI - Linux Operating System	 How to use operating system, it is command line interface, how to perform commands on that operating system, printer management commands, and programming that is shell scripts in vi editors.
	Paper XII - PHP and MySQL	 Hypertext pre-processor with which you can create dynamic websites, connectivity with my-SQL server. It is server side scripting language, learn HTML for designing
	Paper XIII - Network Technology and Windows Server 2008	 TCP/IP model OSI model and its layers. How to use windows server 2008. Working with administrative tool using control panel, Graphical administrative tool & command line utility. Working with computer management: Computer management system tools, Computer management storage tools, computer management services and application tools. Using system console managing Active Directory
	Paper XIV - Java Programming	Students learn software design, introducing object oriented programming design techniques and problem solving.
	Paper XV - Advanced Linux Applications	 Using vi-Handling multiple file, copy paste, cut paste and filtering the text. Filtering text using sed, sed instructions for supplied applications, Use of filter commands. Gawk programs for generating formatted reports. Shell scripts using command line arguments, used defined functions, data validation and creating data files
	Paper XVI - E-Commerce	 Understand concept of information security management. Learn different access controls methods. Understand wireless network security. Cryptography Learn cyber security laws.

Department of Electronics

Program Name	Course Name/ paper	Course Outcome
Name	Paper I NETWORK	Understand the basic of the networks theorems
B. Sc. I	ANALYSIS AND ANALOG ELECTRONICS	Basics understanding of Analog Electronics
	Paper II DIGITAL INTEGRATED CIRCUITS	 Understand the basic of the Integrated circuits Basics understanding of Digital Electronics
	Paper III ANALOG ELECTRONIC CIRCUITS	 Understand the Analog circuit and their analysis Understand basics of amplifiers and feedback circuits
	Paper IV LINEAR AND DIGITAL INTEGRATED CIRCUITS	 Understand the sequential registers, data conversions Understanding of Shifting of Data Opamp and timer application understanding
B. Sc. II	Paper V- Communication Electronics	 Understand functioning of basic communication systems. Understand analog modulation & demodulation techniques.
		 Understand satellite communication & navigation systems.
	Paper VI Introduction to microprocessor 8085 and Microcontroller 8051	 Understand microcomputer organization and architecture of μP 8085. Understand instruction set and programming of μP 8085.
	Wheredominated and	• Understand 8051 family and architecture of μC 8051.
	Paper VII Digital modulation and mobile	Understand analog pulse modulation techniques viz. PAM, PWM & PPM.
	telephone systems	 Understand digital pulse modulation techniques viz. ASK, FSK PSK & BPSK.
		 Understand mobile telephone system and networks Viz GSM, CDMA, TDMA & FDMA.
	Paper VIII Microcontroller and	 Understand addressing modes and instruction sets of μC 8051.
	Embedded Systems	 Understand facilities in μC 8051 viz. timer, time delay calculations in different modes and serial communications.
		 Understand programming of μC 8051 and real world interfacing.
	B W.Y.	• Introduction to embedded system and programming in C.
B Sc. III	Paper IX Linear Integrated Circuits	Linear Integrated circuits will help to design the basic fabrication IC and its applications in the industry and uses.
	Paper X Communication	It gives the basic idea of the communication, Noise,
	Systems -I	atmospheric communication conditions, types, modulation, demodulation and TV communications
	Paper XI 8051	Embedded C and its applications study as well as control
	Microcontroller	based interfacing will help to design the various control
	Interfacing and Embedded C	oriented circuits
	Paper XII Power	Study of power Devices and their applications and use in the
	Electronics Devices and applications	real applications
	Paper XIII Industrial	Helps to understand PLC and Industrial process control
	Process Control and PLC Programming	applications

	Paper XIV	Understanding of Advanced communication systems as well
	Communication Systems	as Digital communication such as satellite, RADAR, TV
	-II	Mobile etc.
	Paper XV-Advanced	Study of Advanced PIC architecture and its applications
	Microcontroller	
	Architecture PIC	
	Paper XVI Electronic	Understanding the Various Industrial Instruments and their
	Instrumentation	applications

Department of Botany

Program Name	Course Name/ paper	Course Outcome
B. Sc. I	Paper I Diversity of Microbes, Algae and Fungi	 Understand the diversity among Viruses, Bacteria, Algae, fungi. Know the systematic, morphology and structure, of Viruses, Bacteria, Algae, fungi. Understand the useful and harmful activities of Viruses, Bacteria, Algae, fungi. Understand the morphological diversity of Bryophytes. Understand the economic importance of the Bryophytes.
	Paper II BIODIVERSITY OF ARCHEGONIATE- Bryophytes, Pteridophytes, Gymnosperms	 Understand the morphological diversity of Bryophytes, Pteidophytes, Gymonosperms. Know the systematic, morphology and structure, Bryophytes, Pteidophytes, Gymonosperms.
	Paper III Plant Ecology	 Understand the ecological factors and adaptations. To know the different plant communities and succession.3.Understand the different ecosystems.
	Paper IV Plant Taxonomy	• Understand the different terms in taxonomy, ICBN nomenclature and different families.
B. Sc. II	Paper V Embryology of Angiosperms	 Understand the structural organization of flower. To know the fertilization process, embryo and endosperm development.
	Paper VI Plant Physiology	 Know importance and scope of plant physiology. Understand the plants and plant cells in relation to water. Understand the process of photosynthesis in higher plants with particular emphasis on light and dark reactions, C3 and C4 pathways. Learn about the movement of sap and absorption of water in plant body. Understand the plant movements.
	Paper VII Plant Anatomy Paper VIII Plant Metabolism	 To know the organization of higher plants.2. Understand the primary and secondary structure of plant boy. Understand the respiration in higher plants with particular emphasis on aerobic and anaerobic respiration. Structure and general features of enzymes. Concept of enzyme activity and enzyme inhibition. Understand the process of Nitrogen metabolism.
B Sc. III	Paper IX Biology of Non- vascular Plants and Paleobotany	 Understand the diversity among Algae. Know the systematic, morphology and structure, of Algae. Understand the life cycle pattern of Algae. Understand the useful and harmful activities of Algae.

	 Understand the Biodiversity of Fungi Know the Economic Importance of Fungi Understand the morphological diversity of Bryophytes. Understand the economic importance of the Bryophytes. Know the taxonomic position, occurrence, thallus structure, reproduction of Bryophytes. Know the scope of Paleobotany, types of fossils, its role in global economy and geological time scale. Understand the various fossil genera representing different fossil groups.
Paper X Genetics and analytical techniques in plant Science	 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. Understand the methods used in Micrometry, Microtomy and Microphotography.
Paper XI Fundamentals of plant Physiology and Ecology	 Learn and understand about mineral nutrition in plants. Understand the growth and developmental processes in plants. Know about Photosynthesis and Respiration in plants. Understand the process of translocation of solutes in plants. Know the nitrogen metabolism and its importance.
Paper XII Plant Biochemitry	 Understand the properties of Monosaccharides, Oligosaccharides and Polysaccharides. They will learn about the Significance of Carbohydrates. Understand the Properties of saturated fatty acids, and unsaturated fatty acids. Understand lipid metabolism in plants. Understand the Beta Oxidation, Gluconeogenesis and its role in mobilization of fatty acids during germination. They will learn about the Significance of lipids. They will be able to understand Brief outline of biosynthesis of amino acid. Understand the protein - structure and classification and protein biosynthesis in prokaryotes and eukaryotes. They will learn about the nucleic acid metabolism.
Paper XIII Biology of Vascular Plants	 Understand the diversity of Gymnosperms in India. Know the evolutionary trends and affinities of living gymnosperms with respect to external and internal features. Know the conceptual development of taxonomy and systematic Understand the Phylogeny of angiosperms -A general account of the origin of Angiosperms. Understand the general range of variations in the group of angiosperms.
Paper XIV Microbiology and plant Pathology	 Understand the concept, principle and types of sterilization methods. Know the concept and characteristics of antiseptic, disinfectant and

	their mode of action.
	• Know the cultivation methods of bacteria, yeast, fungi and virus.
	• Principle, working and applications of instruments viz, pH meters,
	spectrophotometer, centrifuge, viscometer, and laminar air flow.
	• Understand the Microbial Genetics and Recombination in Bacteria.
Paper XV	• Understand the science of plant breeding.
Plants Breedi	• To introduce the student with branch of plant breeding for the
Biostatistics,	survival of human being from starvation.
ethanobotany	• To study the techniques of production of new superior crop verities.
horticulture	• Understand the modern strategies applied in Genetics and Plant
	Breeding to sequence and analyze genomes
	• Get the detail knowledge about modern strategies applied in Plant
	Breeding for crop improvement i.e. Mass selection, Pure line
	Selection and Clonal selection.
Paper XVI	• Know about the genomic organization or living organisms, study of
Molecular Bio	
and Biotechno	C. C
	required for prokaryotic DNA replication.
	• Understand the fundamentals of Recombinant DNA Technology.
	• Know about the Genetic Engineering.
	• Understand the principle and basic protocols for Plant Tissue
	Culture.
	• The concept of operon and its structure and regulation.

Department of Chemistry

Program Name	Course Name/ paper	Course Outcome
B. Sc. I	Paper I Inorganic Chemistry	 Basic concepts regarding nature of chemical bonds. Chemical bonding according to VBT and MOT.
	Paper II Organic Chemistry	 Understanding the stability of compounds on the basis of aromaticity. Basic knowledge of reactive intermediates.
	Paper III Physical Chemistry	 Basic concepts of Thermodynamics and Chemical Kinetics. Entropy and enthalpy of chemical system.
	Paper IV Analytical Chemistry	Basic skills of various analytical unit operations.
B. Sc. II	Paper V Physical Chemistry	 Understand functioning and construction of Electrochemical cell. Physical properties of liquids.
	Paper VI Industrial Chemistry	 Chemical constitution in soap and detergents and its applicability Concepts of corrosion and electroplating in metals
	Paper VII Inorganic Chemistry	 Understanding the basics of coordination chemistry. Understand the concept of catalysis
	Paper VIII Organic Chemistry	 Stereo chemical aspects of various organic compounds. Industrially important Name reactions and its applicability in various field.

B Sc. III	Paper IX Physical Chemistry	 Quantum theory and its applicability in chemistry. Elucidation of structure of chemical compounds by
		studying the spectroscopic techniques.
	Paper X Inorganic	• Detail study of organometallic compounds and
	Chemistry	semiconductors.
		 Applicability and hazards of various polymers
	Paper XI Organic	• Elucidation of structure of various organic compounds
	Spectroscopy	by using UV-VIS, IR, NMR and Mass spectroscopic techniques
	Paper XII Industrial Chemistry	 Understanding of different chemical processes in industry.
	Paper XIII Physical	 Radioactivity of various elements and its usefulness.
	Chemistry	 Rate of simultaneous reactions can be studied by chemical kinetics
	Paper XIV Inorganic	Radioactivity and its applications in various field.
	Chemistry	 Kinetic and thermodynamic stability of complexes.
	Paper XV Organic	• Reaction mechanism and industrial applicability of
	Spectroscopy	various name reactions and reagents.
		 History and chemistry of Natural products and its pharmaceutical applications.
	Paper XVI Analytical	 Chromatographic techniques for chemical analysis.
	Chemistry	• Applicability of various instruments like
		Potentiometer, conductometer, etc.
	Paper I Inorganic	To study properties of transition metals.
M.Sc. I	Chemistry	• To study the coordination compounds and their
		applications
	Paper II Organic	To understand organic reactions mechanisms and
	Chemistry	basics of stereochemistry.
	Paper III Physical Chemistry	To understand the phenomenon of thermodynamics and macromolecular chemistry.
	Paper IV Analytical Chemistry	 To study basic analytical concepts and methods of analysis,
	Paper V Inorganic	• To understand the applications of non-transition
	Chemistry	elements and their compounds
	Paper VI Organic Chemistry	 Study of photochemistry and organometallic compounds
	Danas VII Dissain - 1	Oxidation and reduction reagents and processes. Lindarytand the concept of guartum characters and
	Paper VII Physical Chemistry	Understand the concept of quantum chemistry and electrochemistry.
	Paper VIII Analytical Chemistry	 Structure elucidation using different spectroscopic techniques.
	Paper IX: Organic	Study & implementation of reaction mechanism via
	reaction Mechanism	various pathways.
	Paper X:	• Elucidation of structure of various organic compounds
	Advanced	by using UV-VIS, IR, NMR and Mass spectroscopic
M.Sc. II SEM I	Spectroscopic Methods Paper VI. Advanced	techniques.
	Paper XI: Advanced Synthetic Methods	• Detail study of various catalysts for their synthetic utility & their roll in retrosynthetic approach.
	Synthetic Methods	 Study of synthesis of some important drugs.
	i .	- Study of synthesis of some important drugs.
	Paper XII:	
	Paper XII: Drug & heterocycles.	• Synthesis & application of industrially important heterocyclic compounds.

SEM II	Organic Chemistry.	
	Paper XIV:	• Study of stereo chemical aspects, Their effects on
	Stereochemistry.	organic synthesis & their properties.
	Paper XV: Chemistry of Natural Products.	Detail study of Chemistry of Natural Products.
	Paper XVI: Applied Organic Chemistry.	 Study of agrochemicals, synthetic flavors, dyes & polymers with unit processes involved in their synthesis.

Department of Computer Science (Entire)

Program Name	Course Name/ paper	Course Outcome
	Computer science Paper-I (Fundamentals of computer)	Understanding of internal structure of computer, information about hardware and working of hardware.
	Computer science Paper-II (programming in 'C' part-I)	Logical development of programming knowledge.
	Electronics paper-I (Electronic device and circuit part-I)	Basic of electronics and knowledge of electronics components.
	Electronics paper-II (Digital electronics-I)	Concept of bits and bytes.
BCS Sem I	Mathematics paper-I (Discrete mathematics)	Logical arguments & logical constraints.Permutation and combination.
	Mathematics paper-II (Algebra)	Vocabulary of algebraic expression.Solving of word problem.
	Statistics paper-I (Descriptive Statistics-I)	Data analysis using statistical tools to construct hypothesis and different test procedures
	Statistics paper-II (probability theory and discrete probability distribution)	Data analysis using statistical tools to construct hypothesis and different test procedures
	English paper-I	Understanding of different phases of software development.
	Computer science Paper-III (Linux operating system)	Understanding of different phases of software development.
	Computer science Paper-IV (programming in 'C' part-II)	Logical development of programming knowledge
	Electronics paper-III (Electronic device and circuit part-II)	Basic of electronics and knowledge of electronics components.
BCS I	Electronics paper-IV (Digital electronics-II)	Basic structure and architecture of processors
Sem II	Mathematics paper-III (graph theory)	Important classes of graph.
	Mathematics paper-IV (calculus)	Concept of continuityFunction differential.
	Statistics paper-III (Descriptive Statistics-I)	Data analysis using statistical tools to construct hypothesis and different test procedures.
	Statistics paper-IV (continuous probability distribution and testing of hypothesis)	Data analysis using statistical tools to construct hypothesis and different test procedures
	English paper-II	Development of communication skills.

BCS II Sem III	Computer science Paper-V (object oriented programing using C++) Computer science Paper-VI (System analysis and design)	 Understanding of basic concepts of object oriented programing. Designing of classes, objects. Use constructor and destructor. Understanding of different phases of software development.
	Electronics paper-V (Computer Organization)	Design of CPU, memory, hardware.
	Electronics paper-VI (Computer instrumentation)	Hardware interfacing in project implementation.
	Mathematics paper-V (Linear Algebra)	Composing clear and accurate proofs.
	Mathematics paper-VI (Numerical Method)	Linear and non-linear equations.Differentiation.Integration.
	Environmental studies (theory paper)	Foundation of environmental concepts.
	English paper-I	Development of communication skills.
	Computer science Paper- VII (Data Structure using C++)	Understanding of the most basic aspects of data structure including stack, queue, linked list and tree.
	Computer science Paper- VIII (Relational database management system)	• Skill improvement regarding data operations, ability to handle database & SQL helps to get knowledge about data operations.
BCS Sem IV	Electronics paper-VII (Microcontroller Architecture and Program)	Designing of embedded system using microcontroller.
	Electronics paper-VIII (Communication Techniques)	Atomization in real time application.
	Mathematics paper-VII (Computation Geometry)	Computational range searching and Bezier curve.
	Mathematics paper-VIII (Operation research)	Linear programming.Maximum and minimal flow.
	Environmental studies (project)	Concept of sustainable development.
	English paper-II	 Development of communication skills.
BCS III Sem V	Computer science Paper-IX (Operating system)	 understanding of basic components of computer operating systems & interactions among various components
	Computer science Paper-X (Introduction to Vb.net)	Application developments
	Computer science Paper-XI (Data communication)	Basics of computer networking.
	Computer science Paper- XII (Software engineering)	Understanding of different phases of software development
	Computer science Paper- XIII	Basic concepts of java
	(java programing) Computer science Paper-XV	Components, types and goal of E-Commerce.
BCS III	(E-Commerce) Computer science Paper-	Inbuilt commands of operating system.
Sem VI	XVI (Linux operating System)	

Computer science Paper- XVII	Application developments
(object oriented programing with Vb.net p)	
Computer science Paper-XVII (Computer networking)	Working of computer networking
Computer science Paper- XIX (UML)	Relationship between different components of system and conceptual ideas.
Computer science Paper-XX (Advanced java programing)	Application development.
Computer science Paper- XXII (Web technology)	Concepts of HTML for web designing.

Department of Physics

Program Name	Course Name/ paper	Course Outcome
B.Sc. I	Paper I Mechanics I	Understand the basic of the Vectors, Motion of body and conservation theorems.
	Paper II Mechanics II	• Understand the basic concepts of gravitation, Oscillations and properties of matter.
	Paper III Electricity & Magnetism I	Understand the basics of Vector Analysis and Electrostatics.
	Paper IV Electricity & Magnetism II	Understand the basics of AC circuits and Maxwell's equations.
B. Sc. II	Paper V- Thermal physics &statistical mechanics I	Learning the thermometry & thermodynamics
	Paper VI Waves & optics I	Understand the superposition principle, coupled oscillations & acoustics.
	Paper VII Thermal physics & statistical mechanics II	Understand the distribution laws & radiation.
	Paper VIII Waves & optics II	Understanding the polarization, interference &diffraction.
B Sc. III	Paper IX Mathematical & statistical physics	 Understanding the orthogonal curvilinear coordinates Understand the distribution laws & radiation
	Paper X Quantum Mechanics	To understand Schrodinger equation & its applications, operators in Q.M.
	Paper XI Classical Mechanics	To understand the Larangian& Hamilton's equations of motion.
	Paper XII Atomics & molecular spectra, Astronomy &	To understand the Zeeman effect & Cosmology.

Astrophysics	
Paper XIII Nuclear & particle Physics	Understanding of detectors, accelerators & elementary particles.
Paper XIV Energy studies & material sciences	Understanding of non conventional energy sources & Nano science.
Paper XV Electrodynamics & Electromagnetic Waves	Understanding of Maxwell's equations in vacuum, conductors etc.
Paper XVI Solid state physics	Understanding the crystal structure & lattice vibrations.

Department of Statistics

Program	Course Name/ paper	Course Outcome
Name		
BA/BCS/ B. Sc. I	Paper I DESCRIPTIVE STATISTICS - I	 To compute various measures of central tendencies, dispersion, moments, skewness, kurtosis and to interpret them. To analyze data pertaining to attributes and to interpret the results.
	Paper II ELEMENTARY PROBABILITY THEORY	 To distinguish between random and non-random experiments. To find the probabilities of various events. To understand concept of conditional probability and independence of events.
	Paper III DESCRIPTIVE STATISTICS –II	 To compute correlation coefficient, interpret its value. To compute regression coefficient, interpret its value and use in regression analysis. To compute various index numbers.
	Paper IV DISCRETE PROBABILITY DISTRIBUTIONS.	 To apply discrete probability distributions studied in this course in different situations. Distinguish between discrete variables and study of their distributions. Know some standard discrete probability distributions with real life situations. Understand concept of bivariate distributions and computation of related probabilities.
BA/BCS/ B. Sc. II	Paper V- PROBABITITY DISTRIBUTION - I	 To understand concept of discrete and continuous distributions with real life situations. To distinguish between discrete and continuous distributions. To find various measures of r.v and probabilities using it's probability distribution. To know the relations among the different distributions. To understand the concept of transformation of univariate and bivariate continusous random variable.
	Paper VI STATISTICAL METHOD –I	 To know the concept and use of time series. To understand the meaning the purpose and use of Statistical Quality Control, construction and working of control charts for

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	Paper VII PROBABITITY	 variables and attributes. To understand the need of vital Statistics and concept of mortality and fertility. Computation of Index No. and their interpretation. To know some standard continuous probability distributions
	DISTRIBUTION – II	 with real life situations. To distinguish between various continuous distribution. To find the various measures of continuous random variable and probabilities using its probability distribution. To understand the relations among the different distributions. To understand the Chi-square, t and F distributions with their applications and inter relations.
	Paper VIII STATISTICAL METHOD –II	 To calculate Reliability of a system and ageing properties of a system of independent components. To apply the small sample tests and large sample tests in various real life situations.
BA/BCS/ B Sc. III	Paper IX Probability Distribution I	 To understand the concept, application skewness and fitting of univariate continuous distribution with two parameters To understand the concept, application of multi varivatite and truncated discrete distribution.
	Paper X Statistical Inference - I	 To understand the concept of theory of estimation, criterian for good estimator and their application To study different method of estimation and their application in many real life situation.
	Paper XI Design of experiments	 To understand the basic concepts and basic principles of design of experiments. To application of principles of design of experiment in CRD,RBD,LSD and their efficiency. To understand the concept of analysis of co variance and factorial experiments its application in real life situations.
	Paper XII Operations Research	 To understand the basis concepts of Linear programming problem. To obtain optimal solution by graphical method and simplex method. To understand transportation and assignment problem, sequencing problem and their application in many real life situations. To know about different types of decision making environments, different criterion to take the decision under uncertainty and under risk and their applications. To understanding different simulation techniques to draw sample from standard distribution.
	Paper XIII Probability Theory. II	 To understand the concept of order statistics conversance and limit theorems ,WLLN and central limit theorem and their proof for various standard distributions. To understand the concept of stocastic process finite Markov chain, Queuing theory and their applications.
	Paper XIV Statistical Inference II	 To Derivation of interval estimator for different standard distribution and their applications. To understand the concept of parametric test, sequential test and non parametric tests and their applications to standard distribution, industrial and sociological problems.

Paper XV Sampling Theory	 To understand different methods of sampling and their application in many real life situations. To know the significance of different methods of sampling using auxiliary variables.
Paper XVI Quality Management and Data Mining.	 To understand the meaning and application of quality management tools, process control and product control. To understand the meaning of data mining methods and processes and their application in day to day life.

Department of Microbiology

Department of Microbiology		
Program Name	Course Name/ paper	Course Outcome
B. Sc I	Paper I - Introduction to Microbiology	Basic understanding of the subject & techniques
	Paper II - Microbial Diversity	 Microbial types & Control, Nutrition of microorganisms
	Paper III - Bacteriology	• Cell structure & organization, Isolation & study of microorganism
	Paper IV - Microbial Biochemistry	Understanding of biomolecules & metabolism
B. Sc II	Paper V- Cytology, Physiology & Metabolism	• Study of cell structure & cell – growth & metabolism
	Paper VI – Microbial Genetics	Understanding of genetic material, gene transfer
	Paper VII – Fundamentals of	• Basic concept of Fermentation, Introduction &
	Industrial Microbiology, Biostatistics	application of Biostatistics & Bioinformatics.
	& Bioinformatics	
	Paper VIII – Basics of Immunology	• Understanding of concepts of immunology & study
	& Medical Microbiology	of various diseases
	Paper IX – Virology	• Understanding of viral structures &oncogenesis, Isolation of viruses
	Paper X – Immunology & Serology	 Learning of cell of immune system & their functioning, & allergy
B. Sc III	Paper XI – Food & Industrial Microbiology	• Study of production & recovery of industrial products
	Paper XII – Agricultural Microbiology	• Study of compost & manure, Plant pathology, Biofertilizer
	Paper XIII – Microbiology Genetics	• Understanding of Transposones, r – DNA technology
	Paper XIV – Microbial Biochemistry	• Study of extraction & purification of enzymes, various metabolic pathways
	Paper XV – Environmental Microbiology	 Learning of environmental pollution & waste treatment
	Paper XVI – Clinical Microbiology	Study of various human diseases

Department of Biotechnology

D	Department of Diotectinology		
Program Name	Course Name/ paper	Course Outcome	
B. Sc I	Paper I - Basics of biotechnology I	Basic understanding of the subject and techniques	
	Paper II - Basics of biotechnology II	Basic understanding of the subject and instruments	
	Paper III - Basics of Cell biology and Microbiology	Study of cell structure and microbial morphology and types	
	Paper IV - Basics of Microbiology	• Study of nutrition, control and identification of microorganisms	
B. Sc II	Paper V- Biophysics and Enzyme technology	Basic understanding of enzyme, enzyme kinetics, immobilization and instrumentation	
	Paper VI – Molecular biology	 Understanding of central dogma of life, modes of gene transfer and DNA repair mechanisms 	
	Paper VII – Immunology	Learning of cells of immune system and functioning and hypersensitivity	
	Paper VIII – r-DNA technology	Basics understanding of r-DNA technology and techniques. (PCR, blotting, DNA sequencing, gene silencing)	
	Paper IX – Biochemical techniques	• Study of advanced techniques. (chromatography, electrophoresis, tracer techniques, centrifugation, cell disruption, precipitation, dialysis)	
B. Sc III	Paper X – Animal cell culture	Basic understanding of animal cell, techniques and applications	
	Paper XI – Bioprocess engineering	Basic understanding of concept of fermentation, requirements and downstream processing	
	Paper XII – Fermentation technology	• Study of production, recovery and fermentation economics of industrial products	
	Paper XIII – Plant biotechnology	Basic understanding of plant cell culture, techniques and applications	
	Paper XIV – Environmental biotechnology	Learning of environmental pollution, waste management and biofertilizers	
	Paper XV – Cell metabolism and Virology	Study of metabolic pathways and virology	
	Paper XVI – Gene biotechnology and Bioinformatics	Understanding of techniques in gene biotechnology and bioinformatics	

Department of Zoology

Program Name	Course Name/ paper	Course Outcome	
	Paper I Animal Diversity-I	• Study distinguishing identification characters of non –chordate animals.	
B. Sc. I	Paper II Physiology	Understanding structure, physiology and biochemistry of tissues and organs.	
	Paper III Cell biology and Evolutionary biology	 Study Cell organelles with their structure and function, difference between plant and animal cells. Understanding origin, evolutionary theories and 	

		evolutionary evidence.
	Paper IV Genetics	Study Mendelian principles, linkage, crossing over and mutations.
	Paper V Animal diversity-II	 Understanding of distinguishing identification characters of chordates. Identification of venomous and non- venomous snakes and origin of mammals.
B. Sc. II	Paper VI Biochemistry	 Study of nucleic acid, metabolism of macromolecules. Classification and kinetics of enzymes.
	Paper VII Reproductive biology	 Understanding male and female reproductive organs, hormonal regulation. Reproductive and modern contraceptive technologies.
	Paper VIII Applied Zoology	 Acquiring knowledge of different types of associations in animals Awareness about epidemiology of diseases, disease causing agents and their control measures Importance of insects, poultry farming.
	Paper IX Functional anatomy of non-chordates	 Understanding diversity among various groups of non- chordates with peculiar characters with respect to classes. Morphology, anatomy and physiology of Sea star and Leech.
	Paper X Biostatistics, Bioinformatics and Medical zoology	 Able to apply statistics and calculus for biological data. Understand various disease causing agents and their control.
B. Sc. III	Paper XI Molecular biology, Biotechnology and Biotechniques	 Study DNA replication, damage and repair. Tools and techniques in biology
	Paper XII Endocrinology, Environmental biology and Toxicology	 Knowledge of endocrine glands, hormonal receptors and mechanism. Biodiversity and its conservation. Classification and mode of action of toxicants.
	Paper XIII Comparative anatomy of vertebrates	 Comparative study of systems in vertebrates. Integuments and its derivatives.
	Paper XIV Developmental Biology	 Understand gametogenesis and development process of chick, Amphioxus and insects. Types of placenta and fetal membranes.
	Paper XV Physiology	Study of nutrition, vitamins and different organ systems with diagnostic tools.

Department of Mathematics

Program Name	Course Name/ paper	Course Outcome
B.Sc. I	Differential calculus	To introduce Hyperbolic functions, Higher order derivatives and applications of De-Moivre's Theorem.
	Calculus	To familiarize limits and continuity of real valued functions and applications of Mean Value Theorems.
	Differential equations	To introduce first order differential equations and nth order linear differential equations
	Higher order ordinary differential equations and partial differential equations	To introduce second and higher order linear differential equations and partial differential equations.
B.Sc. II	Differential calculus	To study limits and continuity of real valued functions, Jacobian and extreme values, vector calculus.
	Differential equations	To study Homogeneous, second order, ordinary simultaneous and total differential equations.
	Integral Calculus	To Introduce beta and gamma functions, multiple integrals, Fourier and differentiation under integral sign.
	Discrete Mathematics	To introduce relation, division algorithm, logic and graph theory.
B.Sc. III	Real Analysis	To familiarize properties of functions, sequence, series, Riemann integral and improper integrals.
	Modern Algebra	To introduce basics of Modern Algebra in the form of group theory and ring theory.
	Partial Differential Equations	Student will learn techniques of formulation and solution of partial differential equations.
	Numerical Methods-I	To familiarize methods to find solutions of algebraic equations by iterative methods and solution of system of linear equations.
	Metric Spaces	To introduce Metric space, continuity, connectedness and compactness.
	Linear Algebra	To introduce basics of vector space, dimension, inner product spaces and eigen values and eigen vectors.
	Complex Analysis	To introduce analyticity of complex valued functions and concept of complex integration and residue calculus.
	Numerical Methods-II	To familiarize concepts of forward and backward differences and use them in interpolation. Some techniques of numerical differentiation and integration.

Program Name	Course Name/ paper	Course Outcome
M. Sc. I	Advanced Calculus	Analyze convergence of sequence and series of function and check differentiability of functions of several variables
	Linear Algebra	To introduce basic notions in linear algebra and use the results in developing advanced mathematics.
	Complex Analysis	To familiarize fundamental concepts of complex analysis such as analytic functions, conformal maps, Taylor and Laurent series, Singularity.
	Classical Mechanics	Discuss the motion of system of particles using Lagrangian and Hamiltonian, Solve extremization problems and discuss motion of rigid body.
	Ordinary Differential Equations	To introduce basic notions in differential equations and use the results in developing advanced mathematics.
	Functional Analysis	To familiarize fundamental topics, principles and methods of functional analysis.
	Algebra	To study group theory and ring theory in some details, discuss module structure over a ring.
	General Topology	To introduce the fundamental concepts in topological spaces, Continuous functions on topological spaces, compact and connected sets in topological spaces, separation and countability axioms and product spaces
	Numerical Analysis	Discuss the methods to solve the linear and non-linear equations, find numerical integration and analysis error in computation. Solve differential equation using various numerical methods.
	Partial Differential Equations	Classify partial differential equations and transform into canonical form. Solve linear partial differential equations of both 1st and 2nd order, solve boundary value problem for Laplace equation, Heat equation, The wave equation by separation of variables in Cartesian, polar, Spherical and cylindrical co-ordinates.
M.Sc.II	Functional Analysis	To familiarize fundamental topics, principles and methods of functional analysis.
	Advanced Discrete Mathematics	To classify the graphs and apply to real world problems, simplify the graphs using matrix, study Binomial theorem and use to solve various combinatorial problems, simplify the Boolean identities and apply to switching circuits
	Number Theory	To learn more advanced properties of primes and pseudo primes, apply Mobius Inversion formula to number

	theoretic functions, explore basic idea of cryptography, understand concept of primitive roots and index of an integer relative to a given primitive root, derive Quadratic reciprocity law and its apply to solve quadratic congruences.
Operation Research-I	To identify Convex set and Convex functions, Construct linear integer programming models and discuss the solution techniques, Formulate the nonlinear programming models, Propose the best strategy using decision making methods, solve multi —level decision problems using dynamic programming method
Fuzzy Mathematics	• To acquire the knowledge of notion of crisp sets and fuzzy sets, understand the basic concepts of crisp set and fuzzy set, develop the skill of operation on fuzzy sets and fuzzy arithmetic, demonstrate the techniques of fuzzy sets and fuzzy numbers, apply the notion of fuzzy set, fuzzy number in various problems

Department of Marathi

Program Name	Course Name/ paper	Course Outcome
B.A. I	Paper ICompulsory Generic elective (CGE -1): Course A	 Basic understanding of the Language and Literature Basics knowledge of the poet, Author and culture of Marathi literature. To make student eligible for the competitive Examination Develop personality of the student. To create a social, cultural and National integrated student.
	Paper ICompulsory Generic elective (CGE -2): Course B	 Basic understanding of the Language and Literature Basics knowledge of the Poet, Author and Culture of Marathi literature. To make student eligible for the competitive Examination Develop personality of the student. To create a Social, Cultural and National integrated student.
	Paper I Discipline Specific Core (DSC-A1) : Course- I	 Basic understanding of the Marathi Movies, Social Media. Basic understanding of the Language and Literature. Basics knowledge of the Poet, Author and Culture of Marathi literature. To make student eligible for the competitive Examination. Develop personality of the student. To create a social, cultural and National integrated student.
	Paper I Discipline Specific Core (DSC- A13) : Course- II	 Basic understanding of the Social Media and New Media. To develop newspaper writing skills. To develop Journalistic register.

		 Basic understanding of the Language and Literature. Basics knowledge of the Poet, Author and Culture of Marathi literature. To make student eligible for the competitive Examination. Develop personality of the student. To create a social, cultural and National integrated student.
B.A. II	Paper III Discipline Specific Core (DSC-C1) : Paper No III Kaydenjarwarasutalay- Jayant Pawarani Bhashik Kaushalye	 Emergence and History of the Drama. Literary and aesthetic values of the Dram: structure, formats and type of the drama. To learn form of Drama. Understanding of the Dramatist with reference to modern literature. To create a modern Dramatist and writer. To generate value oriented, fellow feeling, Ethical balanced human being. To develop communication skill.
	Paper IV Discipline Specific Core (DSC-C2) : Paper No IV Kavyagandhani Bhashik Kaushalye	 Imparting new trends in Modern Poetry. Understanding of Poets with reference modern literature. Evolution new Poets and Writers. Create Ethical person and human being. To develop communication skill
	Paper V Discipline Specific Core (DSC- C25): Paper No V Autobiography: Mati, Pankhaaniaakash Ani Bhashik Kausley	 Understand of literature form of Autobiography. Understand of type of literature and difference between biography and autobiography. Understand life style of the different states and countries. To generate value oriented, fellow feeling, Ethical balanced human being To develop writing skill (diary, autobiography, Migration description.)
	Paper VI Discipline Specific Core (DSC- C26): Paper No VI Novel: Jugad –Kiran Guar and Bhashik Kausley – Vuttantlekhan	 Understanding Novel. Understanding of types of literature. To create a social, cultural and National integrated student. To develop writing skill. To study features and characteristic of Novel. To develop news writing skills.
B.A. III	Semester V Paper VII Kavyashatra	 To understand the origin and nature. To understand figures of speech. An introduction of an ancient poetry.
	Semester V Paper VIII Bhashavidnyanaani Marathi Bhasha	 To introduce to modern linguistics. To understand the correlation between linguistics and Marathi language. To teach origin, nature and function of language. Give information of the transformation of sound. To develop student's interest in Marathi Language.
	Semester V Paper IX Marathi Vangmayacha Itihas	 To introduce Marathi medieval literature, its tradition and history. To introduce various forms of medieval literature. To introduce the source of inspiration for medieval literature.

		To introduce cultural background of the medieval literature.
		 To elaborate the bond between sets and literary work of medieval literature.
	Semester V Paper X Marathi Bhasha	 To explain formal and informal communication. To develop different sector's language skills and capacity.
	Upayojananisarjan	 To develop four fundamental skills. That is i.e. Listening, Reading, Writing, Speaking. To develop sound vesselvelers.
		To develop sound vocabulary.With respect of the implementation of language.
	Semester V Paper XI	To introduced different tends in Marathi literature.
	Vangmay Pravahanche Adhyayan	To explain the inspiration, nature, characteristic development of rural literary trends.
		To make them understand the different trends with reference to the prescribed literary works.
	Semester VI Paper XII	To explain the nature and types of sound vocabulary.
	Kavyashatra Semester VI Paper XIII	To explain the rasa therapy. To inform the rasson and the types of transformation of
	Bhashavidyanani Marathi	• To inform the reason and the types of transformation of meaning.
	bhasha	 To develop student's interest regarding Marathi language.
	Semester VI Paper XIV Marathi Vangmayacha	To introduce the tradition and history of medieval Marathi literature.
	Itihas	To introduce types of medieval Marathi literature.
	Semester VI Paper XV Marathi Bhasha	To explain formal and informal communication. To develop different actor's language deith, and consists.
	Upayojananisarjan	 To develop different sector's language skills and capacity. To develop four fundamental skills. That is i.e. Listening,
		Reading, Writing, Speaking.
		To develop sound vocabulary.
		With respect of the implementation of language.
	Semester VI Paper XVI	To introduced different tends in Marathi literature.
	Vangmay Pravahanche Adhyayan	To explain the inspiration, nature, characteristic development of rural literary trends.
	1 Idily a y ali	To make them understand the different trends with
		reference to the prescribed literary works.
Program Name	Course Name/ paper	Course Outcome
M.A. I	SEM I Paper 1	• To understand the nature of language invention.
	Bhashik Awishkarachi Rupe	To understand the creative nature of Language. To understand the relation between language and
	7 Wishkarachi Rupe	To understand the relation between language and literature.
		 To understand the bond between language and types of
		literature.
	SEM I Paper 2.1	How to make use of writer's study strategy.
	Vishesh Sahitya	To understand writers literary personality and writer and
	Krutincha Abhyas	his/her contemporary.
	SEM I Paper 3 Aadhunik Marathi	To understand the background of Maharashtrian social, political, cultural life before independence and its
	Vangmayacha Itihas	correlation with the literature.
	SEM I Paper 4.3	To study the nature of language communication and to
	Aadhunik Bhasha	study linguist concepts of language.
	Vidhnyan	To introduce modern linguistics with reference to Marathi language
	CEM II Dania 5	To examine transformation of language
	SEM II Paper 5	To understand the concepts of literary works.

	Sahity Prakarancha Sukshmvichar	To study the nature of narration with respect of deferent literary work.
	SEM II Paper 6.1 Vishesh Sahity Kruticha Abhyas	 How to make use of writer's study strategy. To understand writers literary personality and writer and his/her contemporary.
	SEM II Paper 7 Aadhunik Marathi Vangmayacha Itihas	To understand the background of Maharashtrian social, political, cultural life before independence and its correlation with the literature: 1950 to 2000
	SEM II Paper 8.3 Aadhunik Bhashavidhnyan	 To examine the influence of other language on Marathi. To exercise grammatical practices with respect of Marathi language.
M.A. II	SEM III Paper 9 Samaj Bhashavidhnyan	 To understand the nature of dialect. To understand the correlation between Society, Culture and Language. To understand the scope of dialect.
	SEM III Paper 10.1 Vangmay in Sanskrit	 To understand the scope of dateet. To understand the literary culture. To understand the correlation between Society and Culture.
	SEM III Paper 11 Samiksha Siddhanta ani Upyojan	 To understand the nature of criticism and implementation of criticism. To study selective literary work of art with respect of practical implementation of criticism.
	SEM III Paper 12.3 Boliabhyas	 To understand the correlation between Language, Dialect and Society. To understand the importance of the study of Dialect.
	SEM IV Paper 13 Samaj Bhashavidhnyan	 To understand the nature of dialect. To understand the correlation between Society, Culture and Language. To understand the scope of dialect.
	SEM IV Paper 14.1 Vangmayin Sankruti	 To understand the literary culture. To understand the correlation between Society and Culture. To study the nature of literary culture. To think on how literary culture is responsible for awakening of the Society.
	SEM IV Paper 15 Marathi Samikshechi Vatachal	 To understand the nature and traditions of Marathi criticism. To introduce prominent critical thinking in the development of Marathi criticism.
	SEM IV Paper 16.3 Boli Abhyas	 To understand the correlation between Language, Dialect and Society. To understand the importance of the study of Dialect. To understand geographical impact on dialect. To do the research on Kolhapuri Dailect.

Department of Economics

Course	Sem	Paper and number	Outcomes
Course		•	
	I	Indian Economy – I (I)	Know the basic problems of Indian Economy
	II	Indian Economy – II (II)	• Know sector wise development of Indian
	III	Macro Economics – I (III)	economy
	111	Banks and Financial	To sustain Economic development with the help
		Institutions -I (IV)	of banks.
		institutions 1 (1 v)	To help the citizens of India to overcome from
BA			economic crises.
			To help to maintain foreign currency reserve for
			foreign trade
	IV	Macro Economics – I (V)	• Students can understand the various ways for
			increasing national income
			Variables and fluctuations in economy
		Banks and Financial	Understand Indian financial system
	* 7	Institutions -II (VI)	***
	V	Micro Economics (VII)	Understand basic economic problems
		Research Methodology In	• Understand the basic concepts and methodology
		Economics(Part -I) (VIII)	of research in economics Importance of research in the development
		History Of Economic	Importance of research in the developmentKnow the economic thought of International as
		Thoughts.(Part-I) (IX)	well as Indian economists
		Economics of Development	To help to formulate economic policies.
		and Planning (X)	To regulate Indian economic development
			through laws & models.
		International Economics (Part-	• Understand various concepts of international
	T 17	I) (IX)	trade
	VI	Market and Pricing (XII)	Understand the factor pricing
		Research Methodology In	• To develop research interest among the students
		Economics(Part -II) (XIII)	in economics.
		History Of Economic Thoughts.(Part-II) (XIV)	• Know the economic thought of International as well as Indian economists
		Economics of Development	To help to formulate economic policies.
		(XV)	To regulate Indian economic development
			through laws & models.
		International Economics (Part-	Understand international trade and trade policies
		II) (XVI)	1
	Sem I	Micro Economic Analysis	Analysis micro economic policy and its theories
		Monetary Economics	• To adjust the money supply in the country as per
			requirement.
			To suggest the monetary policy suitable to India formulate the accompanie policy as per monetary.
			& formulate the economic policy as per monetary situation in the country.
		Agricultural economics	Understand agricultural problems
		Principles and Practice of co-	To understand co-operative movement and
		operation	development in India
3.5.4	Sem II	Public Economics	Understand Indian public finance
MA	——		•
		Economics of Resource and	• To aware students regarding the resources that
		Economics of Resource and Ecology	• To aware students regarding the resources that required for the economical increase

	Financial Institutions and Markets	Understand Indian financial system and markets
	Agriculture Development in India	Understand agricultural development in India in five year plan
Sem III	Statistics in Economic Analysis	Knowledge of statistics in economic analysis
	Macro Economic Analysis	Developments aim empirical analysisAnalysis of macro economic variables
	Demography	• To know World and Indian demographic profile and related issues
	Labour Economics	 To formulate labor policies for labour development To provide social security & welfare services to labour
Sem IV	International Economics	Understand trade related theories and policies
	Economics of Growth and Development	 Understanding of social and sectorial aspects of developments Inclusive growth in the process of developments
	Advanced Banking	 To sustain Economic development with the help of banks. To adjust the money supply in the country as per requirement. To suggest the monetary policy suitable to India & formulate the economic policy as per monetary situation in the country.
	Co-operative Thoughts and Administration	Knowledge of co-operative thoughts of various thinkers and co-operative administration

Department of Geography

Class	Semester	Paper Name & Number	Outcomes
B.AI	I	Physical Geography(I)	 To inculcate branches of physical geography, importance. Students understand composition and structure of atmosphere, insolation, pressure belts and distribution of temperature. Students learn interior structure of earth, causes and effects of volcanos and earthquakes, continental drift theory. Students to understand concept of weathering and denudation agents, erosional and depositional landforms.
	II	Human Geography (II)	 To inculcate the concepts of human geography, branches of human geography and its importance. Students understand causes and effects of population growth theory, distribution and problems of migrants. Students recognize types and patterns of rural settlements, functions of settlements and urbanization. Students learn about agriculture and its problem.

B.AII	III	Soil Geography (III)	• Students learn the soil formation processandproperties.
			• Students classified soil and understand soil erosion and soil management.
		Human Geography (IV)	 To inculcate the concepts of human races, religion. Students understand man and environment relation. Population growth, distribution and migration, Functions of Rural Settlements, Demographic transition theory, Malthus theory of population growth.
	IV	Oceanography (V)	 Students understand properties of ocean water, ocean currents. Student learn Applied oceanography, ocean basin and ocean ridge, types of sediments.
		Agriculture Geography (VI)	 Students understand types of agriculture and related theory Students study agriculture systems & their distribution, crop diversification, combination, Concentration, productivity and intensity Students study advanced technology in agriculture geography.
B.AIII	V	Physical Geography of India (VII)	 Students learn about location of India, Physiographic divisions of India. Students learn climate and rivers system. Students study distribution of Soil, Vegetation with map.
		Economic Geography (VIII)	 Students get knowledge about resources and economic activities. Students learn manufacturing industries and World organization of trades. Students study in Industrial location theory of Weber and Losh
		Research Methodology (IX)	 Students learn the concept of research, approaches and types of research. Students in calculate steps in research design and importance of research design. Students study types of data, types of data collection, research techniques, and processing. Students learn research writing style and, citation.
B.AIII	VI	Economic Geography of India (X)	 Students get knowledge of Indian resources, 2 Students studied agriculture major crop green revolution and agricultural problem Students studied agro based and mineral based Industries.
		Urban Geography (XI)	 Students understand the urbanization process, world urbanization, problems of urbanization. Students studied structure and morphology of urban center. Students go through urban problem and urban planning.
		Political Geography (XII)	 Students learn the major concepts of political geography. Students inculcate element of political geography. Students learn geostrategic views of Makinder and

		Spykman and geopolitical issues.
Annual Pattern	Map work and map interpretation (XIII)	 Students get knowledge of skill types of maps. Students learn scale, map reading of toposheet, whether maps. Students acquire skills of calculation slopes and gradient. students learn presentation of statistical data, projection, cartographic techniques.
	Advanced tools, techniques and fieldworks (XVI)	 Students opportunity to get knowledge use of computer for geography. Students acquire knowledge of Remote sensing and GIS, GPS statistical techniques, surveying and project.

Department of History

Program Name	Course Name/ paper	Course Outcome
B.AI	Paper I –Rise of Maratha Power	To give Complete Knowledge about Chhatrapati Shivaji Maharajas and origin of Maratha Swarajya and expansion and administration.
	Paper – II History of Modern Maharashtra	To give information about the history of modern Maharashtra.
	Paper- III History of India(1757-1857)	• To give information about the establishment of E.I.C. and Expansion, administration in India
B.A II	Paper IV History of Ancient India (from prehistory to 3rd B.C.	To give knowledge of ancient Indian History.
	Paper V Political History of Medieval India(1206 to 1707)	To give knowledge of ancient Indian History
B.A III	Paper VI India since Independence.	To give information about Sultans and Mughal Empire.
D.A III	Paper VII History of Marathas (1707 to 1818 A.D.)	To give knowledge of the Expansion of Maratha Empire through all over India and decline of Maratha Empire.
	Paper VIII Introduction of Historiography	To give knowledge of process of History writing.

Department of Hindi

Class	Course	Outcomes
	अनिवार्यहिंदी	
	सत्र ।	हिंदीभाषा तथा व्याकरण का अध्ययन कराना।
B.A.I	सत्र II	हिंदी के विविध रुपोंका परिचय कराना।
	ऐच्छिक हिंदी	छात्रों की हिंदी साहित्यके प्रति रूचिबढ़ाना तथा छात्रोंको साहित्य
	सत्र ।	की विविध विधाओंसे परिचित कराना।
	सत्र II	छात्रोंको हिंदी के प्रतिनिधिगद्यकारों एवं कवियोंसे परिचित कराना।
B.A.I	सत्र III	
I	प्रश्नपत्रIII	कथा साहित्य का स्वरूप, तत्त्व और साहित्य का अध्ययन कराना।

	अस्मितामूलकविमर्श और	
	हिंदी गद्य साहित्य	
	प्रश्नपत्राV २: ०	
	हिंदी संत काव्य तथा	छात्रोंकीहिंदीसाहित्यकेप्रतिरूचिबढ़ानातथाछात्रोंकोसाहित्यकीविविधविधा
	राष्ट्रीयकाव्य धारा	ओंसेपरिचितकराना।
	सत्र IV	
	प्रश्नपत्र ∨	छात्रों को हिंदी में कार्य करने की विचार क्षमता, कल्पनाशीलता एवं
	रोजगारपरकहिंदी	रुचि विकसित करना।
	प्रश्नपत्र VI	रान विकासिस कर्गा
		छात्रोंको हिंदी कवियोंसे परिचित कराना।
	अस्मितामूलकविमर्शऔरहिंदीप	अत्रापम हिदा पमपपास पारापरा परशामा
	द्यसाहित्य	
B.A.I	सत्र V	
II	प्रश्नपत्रVII	_
	विधाविशेष का अध्यन	उपन्यास और आत्मकथा के तात्विक स्वरूपका परिचय देना।
	सत्र VI	
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	प्रश्नपत्र XII	mercus company of an analysis of an
	विधाविशेष का अध्यन	पाठ्यक्रममें निर्धारित उपन्यास एवं आत्मकथन की प्रासंगिकतासे
		अवगत कराना।
	सत्र V	
	प्रश्नपत्र VIII	
	साहित्यशास्त	साहित्यकी मर्म ग्राहिणीक्षमताका विकास कराना।
	सत्र VI	
	(IAVI	
	प्रश्नपत्र XIII	
	साहित्यशास्त्र	साहित्य समीक्षा की दृष्टि विकसित कराना।
	सत्र ∨	
	प्रश्नपत्राX	
	हिंदी साहित्यका इतिहास (सन	हिंदी साहित्य के इतिहाससे छात्रोंको अवगत कराना।
	2000 इ.स.तक)	
	सत्र VI	
	प्रश्नपत्रXIV	
	हिंदी साहित्यका इतिहास (सन	हिंदी साहित्य के इतिहाससे छात्रोंको अवगत कराना।
	2000 इ.स.तक)	
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	सत्र ∨	
	у ү ү ү	
	प्रयोजनमूलक हिंदी	प्रयोजनमूलक हिंदीके विविधरुपोंसे अवगत कराना।
	सत्र VI	
	уячяхv	
		प्रयोजनमूलक हिंदीके विविधरुपोंसे अवगत कराना।
	प्रयोजनमूलक हिंदी	त्रवाजासूराकः विदानः विविध्वरारा अपनारा प्रशास
	सत्र ∨	
	у үч хүр үч хүр үч хүр үч хүр үч хүр үч хүр	
	भाषाविज्ञान और हिंदीभाषा	भाषाके विविधरूपोंका परिचय कराना।
	सत्र VI	
	प्रश्नपत्रXVI	
	la in the contract of the cont	मानक हिंदी वर्तनी और व्याकरणसे छात्रोको परिचित कराना।
N/ A	भाषाविज्ञान और हिंदीभाषा	
M.A.	सत्र I	

I	प्रश्नपत्र I-	प्राचीन तथामध्ययुगीनक वियों एवं उनकी कृतियोंसे परिचित कराना।
	प्राचीन तथा निर्गुण	· · · · ·
	भक्तिकाव्य	
	सत्र ।।	
	प्रश्नपत्र ∨-	युगीनपरिवेश तथा काव्य प्रवृत्तियोंसे परिचित कराना।
	सगुणभक्तिकाव्य एवं	
	रीतिकाव्य	
	सत्र ।	
	प्रश्नपत्र II-	साहित्य इतिहासके लेखनकी आवश्यकता तथा महत्त्व से परिचित
	हिंदी साहित्य का इतिहास	कराना।
	सत्र ॥	
	प्रश्नपत्र VI-	आधुनिककालीन हिंदी के युगीन परिवेशका अध्ययन कराना।
	हिंदी साहित्यका इतिहास	
	सत्र ।	
	प्रश्नपत्र ।।।-	भाषाके स्वरूप तथा भाषा के विभिन्न रुपोंसे परिचित कराना।
	भाषाविज्ञान- ।	
	सत्र ।।	
	प्रश्नपत्र VII-	भाषा विज्ञानके विविध शाखाओंसे परिचित कराना।
	भाषाविज्ञान- II	
	सत्र ।	
	प्रश्नपत्र _{IV}	अनुवादका सैध्दांतिक परिचय कराना।
	वैयकल्पिक प्रश्नपत्र	
	अनुवाद प्राद्यौगिकी -I	
	सत्र II	
	प्रश्नपत्र VIII	अनुवादकी उपयोगिता तथा महत्त्व से परिचित कराना।
	वैयकल्पिक प्रश्नपत्र	
	अनुवाद प्राद्यौगिकी -II	
M.A.	सत्र III	
II	प्रश्नपत्र IX-	छात्रोंको आधुनिक हिंदी कविता की प्रवृत्तियोंसे परिचित कराना।
	आधुनिक हिंदी कविता-I	
	सत्र IV	
	प्रश्नपत्र XIII-	छात्रोंको नई कविता के गद्य-पद्यात्मककाव्यशैली से परिचित
	आधुनिक हिंदी कविता-II	कराना।
	सत्र ।।।	
	уячя x-	छात्रोंको भारतीय तथा पाश्चात्य काव्यशास्त्र से परिचित कराना।
	भारतीय काव्यवशास्त्र तथा	
	हिंदी अलोचना	
	संत्र IV	
	प्रश्नपत्र XIV-	पाश्चात्य काव्यशास्त्रके विविधसिध्दांतोंसे परिचित कराना।
	पाश्चात्य काव्यशास्त्र	
	सत्र III	
	प्रश्नपत्र XI-	छात्रोंको प्रयोजनमूलक हिंदी की संकल्पना, स्वरूप, एवं उपयोगितासे
	प्रयोजनमूलक हिंदी	अवगत कराना।
	सत्र IV	
	प्रश्नपत्र XV	संगणकीय हिंदी के सामान्य स्वरूप से ज्ञात कराना।
	प्रयोजनमूलक हिंदी	
	सत्र III	

प्रश्नपत्र XII	
ब) अनुवाद प्राद्यौगिकी -III	अनुवाद का एक स्वतंत्र साहित्यविधाके रूपमें महत्त्व जानना।
अनुवाद प्राद्यौगिकी -I	
सत्र ।।	
प्रश्नपत्र VIII	अनुवाद की उपयोगिता तथा महत्त्वसे परिचित कराना।
वैयकल्पिक प्रश्नपत्र	
अनुवाद प्राद्यौगिकी -II	
प्रश्नपत्र IX	अनुवाद का स्वतंत्र विधाके रुपमें महत्त्व जानना।
प्रश्नपत्र - XVI	
अनुवाद प्राद्यौगिकी -IV	