

Godhatma Shaikshanik Bahuuddeshiya Sanstha's M G Tele Commerce College, Chindha and Baraku Ramaji Tele Science College, and Kesharbai Tele College of Management Thalner, Tal- Shirpur, Dist- Dhule. Thalner - 425421 (MS) Website: <u>www.mgtele.org</u>, Email: <u>alltelecollege@gmail.com</u> Mob: 7057340393 / 9423905823

Prof. V. S. Shrivastava	Dr. C. G. Tele
Ph.D., D.Lit. (Hon.), Post Doct. (South America)	M. Sc. (IIT), Ph. D (U.K)
Principal	Chairman

Programme Outcomes (PO's), Programme Specific Outcomes (PSO's) and Course Outcomes (CO's)

http://nmu.ac.in/en-us/usefullinks/circulars.aspx

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DEPARTMENT OF CHEMISTRY Programme Outcomes (B.Sc. Chemistry)

OUTCOMES:

Programme Outcomes:-

After completing BSc Chemistry, the students are able to:

- Student will have a firm foundation in the fundamentals and application of current chemical reaction.
- 2. Students are able to take higher education (Post Graduation).
- Student will be able to design and carry out scientific experiment as well asaccurate record and analyse result of such experiment.
- Student will be skilled in problem solving, critical thinking and analyticalrezoning.
- Student will be able to explain why integral activity for addressing social, economic and environmental problem.
- 6. Get job placements in various companies and sectors.
- Provide a broad foundation in chemistry that stresses scientific reasoning and Analytical problem solving with a molecular perspective.
- 8. Understand the interdisciplinary nature of chemistry and to integral knowledge of mathematics, physics and other disciplines to a wide variety of chemical

DEPARTMENT OF CHEMISTRY

Course Specific Outcomes (B.Sc. Chemistry)

Class	Course Title	Course Specific Outcomes
	Physical & Inorganic Chemistry	 To aware students about Conductance with Acid and base. To know the theories of Mathematical Chemistry. To Knowledge about Surface Chemistry. To understand the importance of periodic table.
F. Y. B. Sc.	Organic & Inorganic Chemistry	 Interpret the concept of aromaticity and the main properties of aromatic compound. To understand How to Draw the Structure and its Properties To understand about Inorganic Bonding
	Physical & Inorganic Chemistry	 Associate different bond type of carbon and its hybrid orbital. To study Inorganic Chemistry of the non-organic compound and overlap with organic compound. Have firm foundation in the fundamentals and application of current chemical and scientific theories.
S. Y. B.Sc.	Organic & Inorganic Chemistry	 To understand the study of the synthesis reaction, structure and properties. Understand nucleophile and electrophile groups and their properties.
	Basic & Advanced Analytical Chemistry	 Explain fundamental of analytical chemistry and steps of a characteristics analysis. Expresses role of analytical chemistry in science compare Qualitative and Quantitative analysis.
	Principles of Physical Chemistry-I & II	 To understand the physical chemistry concerned with application of the techniques and theories of physics to the chemical system. Have a basic understanding of how physical models explain chemical properties and reactivity. Interpreting the phase equilibrium simple system, student will able to question them.

	Inorganic Chemistry &	1.	Debate the atomic structure.
	Inorganic Solids	2.	Evaluate the periodic properties of elements.
		3.	Relate the quantum numbers and atomic orbitals.
		4.	Connection between the structure & properties of solids.
	Organic reaction	1.	Study about reaction mechanisms, reaction rearrangements
	mechanism &		and different types of reactions.
	Spectroscopic method	2.	Study about the designing of organic synthesis.
	for structure	3.	Study different types of spectroscopy in the structure
	determination		determination.
		4.	To understand the chemical processes.
		5.	Describe molecular concept.
		1.	Knowledge of important chemical industries.
	Industrial Chemistry &	2.	Understand the basic concept of various management.
	chemistry of industrially	3.	Commercial manufacturing process technology of various
	important product		chemical and solvent.
		1.	Will be able to implement the equilibrium calculation to
	Analytical Instrumentation&		complex system.
		2.	Solve problem related to ion separation by control of the
	Techniques		concentration of precipitating agent
T. Y. B. Sc.		3.	Expresses terms as standard solution, fitration back fitration
			equivalence point, end point, primary and secondary
		4	Standard.
		1.	Demonstrate knowledge of chemical principle of various
			fundamental environment phenomenon and process land,
			water and air.
		2.	The environment functions and how it is affected by human
	Green Chemistry &		activities.
	Polymer Chemistry	3.	Indicate how the properties of polymeric materials can be
	r orymer chemistry		exploited by a product designer.
		4.	Estimate the number and weight average molecular masses
			of polymer sample given the degree of polymerization
		5	To study the emerging Environmental Issues
		Э. Е	To acquire the knowledge of Conservation of Descurress
			To acquire the knowledge of Conservation of Resources.







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COURSE OUTCOMES OF PHYSICS

Class	Title of the Course	Course Specific Outcomes		
		(The students would be able to)		
F.Y.B.Sc. Sem I	PHY 101: Basic Mechanics	 Apply the concept of use of knowledge of mechanics to real life problems. Understanding of the course will create scientific temperament. To provide education in physics of the highest quality at the undergraduate level and generate graduates of the caliber sought by industries and public service as well as academic teachers and researchers of the future. To acquire deep knowledge in fundamental aspects of Physics and basic knowledge in the specialized thrust areas like Mechanics, electricity and magnetism electrostatics and mathematical physics. 		
	PHY-102 Dynamics and Elasticity	1. To acquire deep knowledge in fundamental aspects of Physics and basic knowledge in the elasticity and mathematical physics.		
	PHY-103 Course Code LAB -I	 Acquire knowledge, skills, working methods and ways of expression which will reflect on all round development of the students' attitudes towards scientific thinking and its applications To develop attitudes such as concern for accuracy and precision, objectivity, and enquiry. 		
F. Y.B. Sc. Sem II	PHY-201 Electricity and Electrostatics	 To impart knowledge of basic concepts in Electricity and Magnetism. To provide the knowledge and methodology necessary for solving problems in Physics. The course also involves the related experiments based on the theory. Apply the concept of use of knowledge of Electricity and Magnetism to real life problems. Understanding of the course will create scientific temperament 		

	PHY-202 Magnetism and Electromagnetism	1. To acquire deep knowledge in fundamental aspects of Physics and basic knowledge in the specialized thrust areas like Mechanics, electricity and magnetism, electrostatics and mathematical physics.	
	РНҮ-203 LAB -II	 Acquire knowledge, skills, working methods and ways of expression which will reflect on all round development of the students' attitudes towards scientific thinking and its applications To develop attitudes such as concern for accuracy and precision, objectivity, and Enquiry. 	
	PHY 301 Thermodynamics and Kinetic theory of gases	 Apply the concept of use of knowledge of Thermodynamics and kinetic theory of gases to real life problems. Understanding of the course will create scientific temperament. 	
S. Y.B. Sc. Sem III	PHY 302(A) Electronics-I	 Apply the concept of use of knowledge of Electronics to real life problems. Understanding of the course will create scientific temperament. 	
	PHY 303 LAB-III	 Apply the concept of use of knowledge of Instrumentation to real life problems. Understanding of the course will create scientific temperament. 	
	PHY 304: (Skill enhancement course I) Renewable energy and Energy Harvesting	1. The aim of this course is not just to impart theoretical knowledge to the students but to provide them with exposure and hands-on learning wherever possible.	
	PHY 401 Waves, Oscillations and acoustics	 Apply the concept of use of knowledge of Waves and Sound to real life problems. Understanding of the course will create scientific temperament. 	
S. Y.B. Sc. Sem IV	PHY 402 Optics and LASERS	 Apply the concept of use of knowledge of Optics and LASERS to real life problems. Understanding of the course will create scientific temperament. 	
	PHY 403 Lab IV	 Apply the concept of use of knowledge of Instrumentation to real life problems. Understanding of the course will create scientific temperament. 	
	PHY 404: (Skill enhancement course II) Electrical Circuit and Network Skill	1. The aim of this course is to enable the students to design and trouble shoots the electrical circuits, networks and appliances through hands-on mode	



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MATHEMATICS

Class	Subject	ct		
CidSS	Subject			
		 understand concepts on matrix operations and rank of the matrix. understand use of matrix for solving the system of linear 		
		equations. 3. understand basic knowledge of the eigen values and		
1.1.D3C-1	Macin Algebra	eigen vectors.		
		 apply Cayley-Hamilton theorem to find the inverse of the matrix. 		
		5. know the matrix transformation and its applications in		
		rotation, reflection, translation		
		1. understand basic concepts on limits and continuity.		
		2. understand use of differentiations in various theorems.		
	Calacha	3. know the Mean value theorems and its applications.		
		4. make the applications of Taylor's, Maclaurin's theorem.		
		5. know the applications of calculus		
F. T. DSC-1	Calculus	6. understand basic concepts on limits and continuity.		
	Co-ordinate Geometry	7. understand use of differentiations in various theorems.		
		8. know the Mean value theorems and its applications.		
		9. make the applications of Taylor's, Maclaurin's theorem.		
		10. know the applications of calculus		
		1. Students can visualize geometrical concepts and draw		
		two dimensional figures and can find their standard forms		
F. Y. BSc -I		by shifting and rotation of axes.		
		2. Students also can draw three dimensional figures and their		
		equations particularly Sphere, Cone and Cylinder		
	Ordinary	1. understand basic concepts in differential equations.		
F. Y. BSc -II	Differential	2. understand method of solving differential equations		
	Equation	3. understand use of differential equations in various fields.		
		1. Students can find out roots of any equation of degree less		
F. Y. BSc -II	Theory of	than or equal to five.		
	Equation	2. Theory of equations is highly useful in various subjects like		
		algebra, linear algebra, calculus, ordinary and partial		
		differential equations etc.		

		 understand basic concepts on Laplace and Inverse
F. Y. BSc -II	Laplace	Laplace transforms.
		2. Understand convolution theorem.
		3. understand use of Laplace transform in solving Differential
		Equations.
		1. limit and continuity of functions of several variables
		2. fundamental concepts of multivariable Calculus.
		3. series expansion of functions.
	Calculus of	4. extreme points of function and their maximum, minimum
S. Y. BSc -III	Several	values at those points.
	Variables	5. meaning of definite integral as limit as sums.
		6. how to solve double and triple integration and use them to
		find area by double integration and volume by triple
		integration.
		1. understand group and their types which is one of the
		building blocks of pure and applied mathematics.
		2. understand Lagarnge, Euler and Fermat theorem
S. Y. BSc -III	Group Theory	3. understand concept of automorphism of groups
		4. understand concepts of homomorphism and isomorphism
		5. understand basic properties of rings and their types such as
		integral domain and field.
		1. Uses of the language of set theory, designing issues in
		different subjects of mathematics
		2. understand the issues associated with different types of
		finite and infinite sets via countable uncountable sets
		knowledge of the concepts and methods of
	Set theory and	mathematical logic, set theory, relation calculus, and
5. T. DSC -III	logic	concepts concerning functions which are included in the
		fundamentals of various disciplines of mathematics
		4. understanding the role of propositional and predicate
		calculus
		5. able to provide the logical mathematical reasoning,
		formulate theorems and definitions
		1. The course is aimed to introduce the theory for functions of
S. Y. BSc -IV		complex variables
		2. Students will understand the concept of analytic function
	Complex	3. Students will understand the Cauchy Riemann Equations
	Variables	4. Students will understand harmonic functions
		5. Students will understand complex integrations
		6. Students will understand calculus of residues.
		7. Students will acquire the skill of contour integrations.

S. Y. BSc -IV	Differential Equation	 Students will aware of formation of differential equations and their solutions Students will understand the concept of Lipschitz condition Students will understand method of variation of parameters for second order L.D.E. Students will understand simultaneous linear differential equations and method of their solutions Students will understand Pfaffian differential equations and method of their solutions Students will understand difference equations and their solutions
S. Y. BSc -IV	Vector Algebra	 understand scalar and vector products understand vector valued functions and their limits and continuity and use them to estimate velocity and acceleration of partials. Calculate the curl and divergence of a vector field. Set up and evaluate line integrals of functions along curves.







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COMPUTER SCIENCE

Programme Outcomes

After completing B.SC (COMPUTER SCIENCE), the students are able to :

1. Web Developer :

- Individuals at this job are responsible for designing and maintaining web-based applications that include static and dynamic content. This includes the design, layout and coding of a website. They may work standalone or along with application/functional developers as part of the overall solution that includes a web-based component.
- The role is responsible for designing, coding and modifying websites, from layout to function and according to a client's specifications.

2. Office Assistant :

• Office Assistants are a vital part of any office. They may go by other related names, such as an Administrative Assistant or Secretary, but they all have one thing in common; their role is to support the staff members at hand and make sure everything runs smoothly behind the scenes.

3. Hardware Technician :

- This involves installing and updating desktops or laptops, ensuring software is working efficiently, and troubleshooting all IT issues within the company.
- Hardware technicians work for a variety of organizations that use computers. It is usually a full-time role typically performed in an office-based environment.

4. Desktop Application Developer :

- The Junior Software Developer is part of an agile development team building and working on enterprise grade software systems on top of the Microsoft .NET development stack. The Junior Software Developer is involved in all areas of development from design to development to testing.
- An entry-level software engineer, also called a junior engineer, works with a team of mid-level and senior engineers to develop, test, and maintain software applications and programs. ...
- As software engineers gain more years of experience, they work on more complex development projects.

5. Jr DBA :

- Monitor performance of database systems resources and query throughput. Optimize SQL Code as necessary. Monitor and maintain database storage resources.
- Monitor and maintain database maintenance plans for backups, index rebuild/defragment, and database statistics.

6. Software Developer :

- Modifying software to fix errors, adapt it to new hardware, improve its performance, or upgrade interfaces. Directing system testing and validation procedures. Directing software programming and documentation development.
- Consulting with departments or customers on project status and proposals. Working with customers or departments on technical issues including software system design and maintenance. Analysing information to recommend and plan the installation of new systems or modifications of an existing system.
- Consulting with engineering staff to evaluate software hardware interfaces and develop specifications and performance requirements. Designing and developing software systems using scientific analysis and mathematical models to predict and measure outcomes and design consequences.
- Preparing reports on programming project specifications, activities, or status. Conferring with project managers to obtain information on limitations or capabilities.

7. Software Engineer :

- A Software Engineer is an IT professional who designs, develops and maintains computer software at a company.
- They use their creativity and technical skills and apply the principles of software engineering to help solve new and ongoing problems for an organization.

8. System Analyst :

- Systems analysts analyze how well software, hardware and the wider IT system fit the business needs of their employer or of a client.
- They write requirements for new systems and may also help implement them and monitor their effectiveness.

9. Program Developer :

- Integrate software components and third-party programs. Verify and deploy programs and systems.
- Troubleshoot, debug and upgrade existing software. Gather and evaluate user feedback.







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ZOOLOGY Course Outcomes

Class	Title of Course	Course specific Outcomes	
	Zoo- 101 Animal Diversity-I	 To know different forms of Invertebrates . To understand the systematic position and classification of animals. To know about anatomy of animals. 	
	Zoo- 102 Animal Diversity- II	 To understand the systematic position and classification of Vertebrates animals. To know about anatomy of animals. To understand how complex animals are evolved. 	
	Zoo-103 Practical-Animal Diversity I & II	 To know about different forms of animals. To understand the different size and shape of body parts 	
F.Y.B.Sc	Zoo- 201 Comparative Anatomy of Vertebrates	 To understand the size and shape of skeleton of birds, mammals To know different type of carapace in turtle and tortoise To understand the difference in skull of herbivores and carnivores. 	
	Zoo- 202 Developmental Biology of Vertebrates	 Student will learn developmental process of animals like frog Student will learn development of Human. 	
	Zoo- 203 Practical- Comparative Anatomy & Developmental Biology of Vertebrates	 Student will identifies bones of birds and mammals Differentiate between skull of herbivores and carnivores Identifies developmental stages of vertebrate animals 	
	Zoo- 301 Mammalian Physiology	 Students get knowledge of physiological processes of animals. Student knows mechanism and control of physiological 	
S.Y.B.Sc	Zoo 202 Piochomistry	processes of different systems	
	Z00- 302 Biochennistry	 Students learn the biochemical processes, reaction and their role in life. Students knows different bio molecules their types 	

Zoo- 303 Practical- Physiology & Biochemistry	
SEC I Apiculture	To know culturing, handling and raring of honey bees to get valuable by products.
Zoo- 401 Genetics	Students learn the heredity of characters from generation to next generation.
	Students know chromosome mapping and crossing over and linkage as well as mutation and sex determination
Zoo- 402 Evolutionary	Student will know about process of evolution in animals.
Biology	> To know about theories of evolution
	To understand evolutionary changes;
	To know about process of extinction
Zoo- 403 Practical- Genetics	To know Mendelian inheritance and gene interaction
& Evolutionary Biology	\succ To study the fossils and homology and analogy in animals
SEC II Medical Diagnostic Techniques	Students will get knowledge of pathological and medical techniques.



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DEPARTMENT	OF BOTANY
	OF DUTANT

CLASS	COURSE	OUTCOMES
F.Y.B.Sc. (Botany);	Paper: I: Bot. 101: Microbial Diversity, Algae & Fungi	 The specific objectives of this course are to expose students to the following topics and Students who successfully complete this course will be able to: 1. To Study, Describe and explain the diversity among Microbes. 2. To study and Explain the systematic, morphology & structure of Bacteria, Viruses, Algae & Fungi. 3. To study, Describe and explain the life cycle pattern of Bacteria, Viruses, Algae and Fungi. 4. To study, Describe and explain the useful and harmful activities of Bacteria, Viruses, Algae and Fungi. 5. Student also participating in activates like seminars, quiz, debate, assignments, field work, study Project & models etc. are part of curriculum for all units in all papers.
	Paper: II: Bot. 102: Plant Taxonomy	 The specific objectives of this course are to expose students to the following topics and Students who successfully complete this course will be able to: 1. To Study, Describe and explain diversity of angiosperms. 2. To study, Describe and explain the comparative account among the families of angiosperms. 3. To study, Describe and explain the economic importance of the angiospermic plants. 4. To study, Describe and explain the distinguishing features of angiosperm families.
	Paper: III: Bot. 103: Practical (Based on Bot.101 and Bot.102)	 The specific objectives of this course are to expose students to the following topics and Students who successfully complete this course will be able to: 1. To get experimental knowledge of Microbial Diversity, Algae & Fungi and Plant Taxonomy. 2. Study of equipments used in botany. 3. Student also participating in Short or long excursion tour and visit to any botanical garden.
F.Y.B.Sc.	Paper: I: Bot.	The specific objectives of this course are to expose students to the

(Botany)	201: Diversity	following topics and Students who successfully complete this course will be able
	of	to:
	Archegoniates	1. To Study, Describe and explain salient features of Archegoniates.
		2. To Study and explain the status of higher cryptogams& gymnosperms as a
		group in plant kingdom.
		The specific objectives of this course are to expose students to the
		following topics and Students who successfully complete this course will be able
		to:
	Paper: II: Bot.	1. To know scope and importance of the discipline.
	202: Plant	2. To Study, Describe and explain plant communities and ecological adaptations
	Ecology	in plants.
		3. To Study, Describe and explain about conservation of biodiversity.
		4. To Study, Describe and explain botanical regions of India and vegetationtypes
		of Maharashtra.
		The specific objectives of this course are to expose students to the
	Paper: III: Bot.	following topics and Students who successfully complete this course will be able
	103: Practical	1. To get experimental knowledge of Microbial Diversity. Algae & Fungi and
	(Based on	Plant Taxonomy
	Bot.101 and	2. Study of equipments used in botany.
	Bot.102)	3. Student also participating in Short or long excursion tour and visit to any
		botanical garden.
		The specific objectives of this course are to expose students to the
		following topics and Students who successfully complete this course will be able
S.Y.B.Sc	Paper: I: BOT.	
(Botany)	301: Plant	1. To know scope and importance of plant anatomy
(200001))	Anatomy	2. To study various tissue systems and To know primary structure of dicot and monocot plants
		3 To study normal secondary growth in plants and their causes
		4. To study protective tissue system
		The specific objectives of this course are to expose students to the
		following topics and Students who successfully complete this course will be able
	Paper: II:	to:
	BOT.302:	1. To know importance and scope of plant physiology.
	Plant	2. To study plant and plant cell in relation to water.
	Physiology	3. To study different process in relation with structure of organism and its
		A. To understand mechanism of absorption of water, gases and solutes
		5. To understand growth at various level
		The specific objectives of this course are to expose students to the
	Paper: III:	following topics and Students who successfully complete this course will be able
	BOT.	to:
	303:Practical	1. To get experimental knowledge of Plant Anatomy and Plant Physiology.
	(Based on	2. Study of equipments used in botany.
	BOT. 301 and	3. Student also participating in Short or long excursion tour and visit to any
	BOT. 302)	botanical garden.
	Dener IV	4. Subject Code and Subject:
	Paper: IV:	I ne specific objectives of this course are to expose students to the following topics and Students who successfully complete this course will be able
	303:Practical (Based on BOT. 301 and BOT. 302) Paper : IV : Skill	 To get experimental knowledge of Plant Anatomy and Plant Physiology. Study of equipments used in botany. Student also participating in Short or long excursion tour and visit to any botanical garden. Subject Code and Subject: The specific objectives of this course are to expose students to the following topics and Students who successfully complete this course will be able

	Enhancement	to:
	Course (Sec):	1. To learn the history, scope and importance of mushroom technology
	Bot. 304:	2. To understand nutritional and medicinal values of edible mushrooms
	Mushroom	3. To know about the storage, marketing and various food preparations of
	Culture	mushrooms.
	Technology.	4. To understand the economics of mushroom cultivation.
S.Y.B.Sc. (Botany)	Paper: I: BOT. 401: Plant Embryology	 The specific objectives of this course are to expose students to the following topics and Students who successfully complete this course will be able to: 1. To know the scope and Importance of Embryology 2. To study structure of micro and megasporangium. 3. To study pollination, fertilization, Endosperm and Embryogeny. 4. To give exposure of techniques in embryology
	Paper: II: BOT. 402 : Plant Metabolism	 The specific objectives of this course are to expose students to the following topics and Students who successfully complete this course will be able to: 1. To know the scope and importance of plant metabolism. 2. To study the properties, mechanism and classification of enzymes. 3. To study the process of photosynthesis in higher plants, C3, C4 and CAM pathways. 4. To study respiration in higher plants.
	Paper: III: BOT.403: Practical (Based on BOT. 401 and BOT. 402)	 The specific objectives of this course are to expose students to the following topics and Students who successfully complete this course will be able to: 1. To get experimental knowledge of Plant Embryology and Plant Metabolism. 2. Study of equipments used in botany. 3. Student also participating in Short or long excursion tour and visit to any botanical garden. 4. Subject Code and Subject:
	Paper: IV: Skill Enhancement Course (Sec): Bot.404: Nursery And Gardening	 The specific objectives of this course are to expose students to the following topics and Students who successfully complete this course will be able to: 1. To know the concept of nursery and Gardening. 2. To improve the skills for growing fresh and safe vegetables. 3. To create awareness about home gardening. 4. To develop different skills regarding the gardening operations among the students





Marathi

Programme Outcomes:

BSc Marathi

Department of Marathi	After successful completion of three year degree program in Marathi a student should be able to;
Programme Outcomes	 गटकाची अभिरुची विकसित करून घेतो तसेच नाटकाच्या चिकित्सक अभ्यासाची क्षमता विकसित होते.
	 मराठी एकांकिकांच्याद्वारे विद्यार्थांमध्ये लेखन कौशल्यविषयक दृष्टीकोन निर्माण करता येतो.
	 संवादाची क्षमता विकसित करता येते आणि भाषिक कौशल्य विकसित करणे.
	 ४. दलित एकांकिकांमधून सामाजिक निर्माण करून समाजकार्यासाठी दिशा दाखविता येते.
	 एकांकिकांची आस्वाद क्षमता विकसित होते.
	६. ललित गद्यातून थोर पुरुष व स्रीयांच्या जीवनचरित्रातून नीती-आचरण चिंतनशीलता व भावात्मकता सूत्रांचा परिचय करून देता येतो तसेच स्री व पुरुष यांच्या जीवनाच्या विविध पैलंचे दर्शन घडविता येते.
	७. मध्ययुगीन मराठी वार्ड्मयाच्या निर्मितीमागील प्रेरणा, इतिहास, स्वरूप व वैशिष्टये तसेच विविध साहित्यकृतींचा स्थूल परिचय करून घेता येतो.
	८. वारकरी संप्रदायातील संतकवींच्या काव्यनिर्मितीचे स्वरूप, बखर वाड्मयाचे स्वरूप व वैशिष्टयांचा परिचय करून देऊन बखर व अभंग यांची आस्वाद क्षमता विकसित करता येते.
	 नाट्य अभिरुची विकसित करता येते तसेच नाट्य संकल्पना नाट्य आस्वादाची डोळस क्षमता विकसित करता येते.
	१० भाषेचे स्वरूप, कार्य, भाषा उत्पतीचे सिद्धांत, भाषाकुल संकल्पना, प्रांतिक भेद, मराठीच्या प्रमुख बोलीचा परिचय, भाषाविषयक असलेले गैरसमज, मराठीवरील अन्य भाषांचा पडलेला प्रभाव तसेच मराठी भाषा उत्पतीविषयीची मते जाणून घेऊन मराठीची पूर्वपीठीका लक्षात घेता येते.

११ मराठी व्याकरणाची आस्वाद क्षमता विकसित करून आकलन क्षमता विकसित करणे.
१२ लोकरंगभूमीची संकल्पना, स्वरूप, वैशिष्टये, लोकसाहित्य व लोकरंगभूमी यांचा परस्परसंबंध तसेच वही, भारुड, दशावतार,तमाशा, लोकनाट्य, पथनाट्य, सत्यशोधक जलसे,रिंगणनाट्य व कीर्तन यांच्या स्वरूप, वैशिष्टयांचा परिचय करून देऊन लोकसाहित्यविषयक अभिरुची विकसित करता येते.
१३ हकश्राव्य माध्यमांचा परिचय करून घेऊन त्यासाठी लेखन व संवाद कौशल्य यांचा परिचय करून देऊन हकश्राव्य माध्यमांचे कार्य, उपयुक्तता, कार्यक्रमांसाठी लेखन तंत्र व दूरचित्रवाणीसाठी निवेदन कौशल्य विकसित करता येते.
१४ आधुनिक समाज माध्यमांचा परिचय करून घेता येतो त्याचबरोबर त्यांचे कार्य, उपयुक्तता आणि ईमेल, ब्लॉग फेसबुक, ट्विटर, व्हाटसअप, युट्युब यासाठी लेखन तंत्र व निवेदन कौशलय विकसित करता येते.
१५ निबंध लेखनाचे स्वरूप, घटक, प्रकार यांचा परिचय करून घेता येतो त्याचबरोबर निबंध लेखनाचा सराव करून घेऊन निबंध लेखनाचे कौशल्य विकसित करता येते.
१६ कथेची अभिरुची विकसित करून घेतो तसेच कथेच्या चिकित्सक अभ्यासाची क्षमता विकसित होते.
१७ यशस्वी उद्योजकांच्या चरित्राद्वारे विद्यार्थांमध्ये व्यावसायिक दृष्टीकोन निर्माण करता येतो.
१८ संवादाची क्षमता विकसित करता येते आणि भाषिक कौशलय विकसित करणे.
१९ उत्तम दर्जाची व्यावसायिकवृत्ती निर्माण करून यशस्वी उद्योगाची दिशा दाखविता येते.
२० कादंबरीची आस्वाद क्षमता विकसित होते.
२१ पौवार्त्य व पश्चिमात्य साहित्यशास्त्रातील विविध संकल्पना, साहित्याचे स्वरूप, साहित्याचे प्रयोजन आणि साहित्याची निर्मिती प्रक्रिया यांचा स्थूल परिचय करून घेता येतो.
२२ नाट्य अभिरुची विकसित करता येते तसेच नाट्य संकल्पना नाट्य आस्वादाची डोळस क्षमता विकसित करता येते.
२३ मराठी व्याकरणाची आस्वाद क्षमता विकसित करून आकलन क्षमता विकसित करणे.

Programme Specific Outcomes	 एकांकिका या नाट्य प्रकारचे स्वरूप, वाटचाल, लेखन स्वरूप व वैशिष्ठये जाणन घेणे.
	२. वाडमयीन अभिरुची विकसित करणे.
	 ललित गद्य वाड्मय प्रकारची संकल्पना ,स्वरूप, वैशिष्टये वाटचाल यांची माहिती करून घेणे व ललित गद्य लेखनातील विविध प्रकारांची , बदलत्या रूपांची ओळख करून घेणे.
	 संवादासाठीची विविध भाषिक कौशलय विकसित करणे.
	 मध्ययुगीन मराठी वाड्मयाचा इतिहास, निर्मितीमागील प्रेरणा, स्वरूप, वैशिष्टये यांचा परिचय करून घेणे.
	 मराठीच्या कालिक भेदांचे स्वरूप, प्रांतिक भेद, बोली भाषांची स्वरूप, वैशिष्टये, भाषेविषयक असलेले गैरसमज यांची ओळख करून घेणे.
	 ७. लोकरंगभूमीची संकल्पना, स्वरूप, वैशिष्टये , लोकसाहित्य व लोकरंगभूमी यांचा असलेला परस्पर संबंध समजून घेणे.
	 आधुनिक समाज माध्यमांचा परिचय, कार्य, उपयुक्तता, त्यासाठीचे लेखन कौशल्य आणि निवेदन कौशल्य यांचा परिचय करून घेणे.
	 निबंध लेखनाचे स्वरूप, घटक, प्रकार समजून घेणे व निबंध लेखनाचे कौशल्य आत्मसात करणे.
	१० उत्तम दर्जाची व्यावसायिकवृत्ती निर्माण करून यशस्वी उद्योगाची दिशा दाखविणे
	११ संवादासाठीची विविध भाषिक कौशलय विकसित करणे.
	१२ पौवार्त्य व पश्चिमात्य साहित्यशास्त्रातील विविध संकल्पना, साहित्याचे स्वरूप, साहित्याचे प्रयोजन आणि साहित्याची निर्मिती प्रक्रिया समजावून देणे.
	१३ नाटकातील सुखात्मिका-शोकात्मिका यांचे स्वरूप व वैशिष्टये

एफ.वाय.बीएस्सी.मराठी जनरल-कथा आणि संवाद कौशल्ये यांचा अभ्यास	 १) 'माणदेशी माणसं' कथासंग्रहातील कथांची कथानके, व्यक्तिचित्रण व प्रसंगवर्णन या अंगांनी जाणवणारी वैशिष्टय विद्यार्थ्यांना समजण्यास मदत होते. २) 'माणदेशी माणसं' कथासंग्रहातील कथांची संघर्ष,निवेदन व भाषा या अंगांनी जाणवणारी वैशिष्टय लक्षात येतात. ३) संवादाच्या औपचारिक व अनौपचारिक प्रकारांचा परिचय विद्यार्थ्यांना होतो. ४) भाषण,सादरीकरण, वादविवाद, सूत्रसंचालन, गटचर्चा या संवाद कौशल्यांचे स्वरूप विद्यार्थ्यांच्या लक्षात येण्यास मदत होते
	तसेच त्यांचे उपयोजन करण्यास विद्यार्थी शिकतात.

एस.वाय.बीएस्सी. मराठी जनरल –ललित वाड्मय कथा	 १) विज्ञान कथा व विनोदी कथा वाड्मयाची वाटचाल विद्यार्थ्यांना समजण्यास मदत होते. २) विज्ञान व विनोदी कथेच्या विविध घटकांची ओळख विद्यार्थ्यांना होते. ३) विज्ञान व विनोदी कथेचे वेगळेपण कोणते ते विद्यार्थ्यांना समजण्यास मदत होते. ४) मराठी विज्ञान व विनोदी कथेच्या योगदानाची ओळख
	विद्यार्थ्याना होते. ५) विज्ञान क्षेत्रातील विविध विषयांवर मराठीतून लेखन करण्यास विद्यार्थी प्रोत्साहित होतात. ६) विद्यान कोशासाठी नोंद लेखन करण्याचे तंत्र विद्यार्थी आत्मसात करतात. ७) विज्ञान क्षेत्रातील विविध विषयांवरील लोकोपयोगी लेखन करण्याचे कौशल्य विद्यार्थी आत्मसात करतात. ८) विद्यार्थ्यांचा वैज्ञानिक दृष्टीकोन विकसित करण्यास मदत होते.



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Compulsory English

Under Graduate (UG)

Department of English	After successful completion of three-year degree program in English student should be able to:
Programme Outcomes	 Understood how the developments in the field of Humanities have improves the quality of life and how they have satisfied the aspirations, intensions likes and dislikes and how they could modify them. Students should be familiar with representative literary and cultural texts within a significant number of historical, geographical, and cultural contexts. Students should be able to apply critical and theoretical approaches to the reading and analysis of literary and cultural texts in multiple genres. Students should be able to identify, analyze, interpret and describe the critical ideas, values, and themes that appear in literary and cultural texts and understand the way these ideas, values, and themes inform and impact culture and society, both now and in the past. Students should be able to ethically gather, understand, evaluate and synthesize information from a variety of written and electronic sources. Students should be able to ethically gather, understand, evaluate should be able to endically gather, and electronic sources.
Programs Specific Outcome	 Realized the importance of literature in creating aesthetic, mental, moral, intellectual development of an individual and maintaining a healthy society. Understand major and minor forms of literature. Have developed interest in literature and language. Understand the structure and function of grammatical units. Know the use of language at semantic and syntactic levels. The students could use English effectively in formal and informal situations. Attempt creative writings. Know phonological and morphological aspects of English. Be employable and ready to do jobs in industry, government, schools and offices. Have enriched confidence to appear for competitive examinations

Semester-I (F.Y.BSC ENGLISH)

After completion of these courses students should be able to;		
Course	Outcomes	
Compulsory English	1) Students will acquaint with various genres literature	
	prose, short stories and poetry.	
	2) Students will be familiar with various types of written	
	skills.	
	3) Students will acquaint with various language skills.	
	4) Students will get fluent in four basic skills of English	
	Language i.e. Listening, Speaking, Reading & Writing	
	(LSRW).	
	5) Student will practice various modes written skills.	
DSC-Discipline	1) Student will familiar with the basic forms of literature.	
Specific Course 1- ENG-A	2) Student will acquaint with the broader genres of literature	
Reading Literature-Short	in general.	
Stories	3) Student will develop understanding of literature, short	
	stories.	
	4) Student will develop reading skill and ability of	
	understanding through literature.	

Semester-II (F.Y.B.SC ENGLISH)

After completion of these courses students should be able to;		
Course	Outcomes	
Compulsory English	1) Students will acquaint with various genres literature	
	prose, short stories and poetry.	
	2) Students will be familiar with various types of written	
	skills.	
	3) Students will acquaint with various language skills.	
	4) Students will get fluent in four basic skills of English	
	Language i.e. Listening, Speaking, Reading & Writing	
	(LSRW).	
	5) Student will practice various modes written skills.	
DSC-Discipline	1) Student will familiar with the basic forms of literature.	
Specific Course 1- ENG-B	2) Student will acquaint with the broader genres of literature	
Reading Literature-Poems	in general.	
	3) Student will develop understanding of literature, poems.	
	4) Student will develop reading skill and ability of	
	understanding through literature.	

Semester-III (S.Y.BSC. ENGLISH)

After completion of these courses students should be able to;		
Course	Outcomes	
Compulsory English	 The Paper of Compulsory English is specifically framed from the viewpoint of value education which is 	
	the basis of quality life.	
	2) Selection of contents in all the courses will help the	
	students to comprehend the worldly wisdom and	
	to be successful and enjoy quality life.	
DSE-1-A (16 th Century English	1) To acquaint the students with the major literary trends	
Literature)	and tendencies and prominent writers of the 16th and	
	17th Century English Literature.	
	2) To make the students aware about the literary history,	
	salient features and sociocultural background of the	
	period.	
	3) To help the students to grasp the content and critically	
	appreciate the prescribed texts.	
	4) To inculcate amongst students a liking for the	
	Elizabethan and Post Shakespearean literature.	
DSE-2-A- (18 th Century English Literature)	1) Students will acquaint with basic ideas about the 18 th Century English Literature with special reference to poetry.	
	2) Students will be familiar about the literary history, salient features, socio-political and cultural background of the Romantic age.	
	3) Students will grasp the content and critically appreciate the prescribed poems and novel.	
	4) Students will acquaint with the various literary movements of the 18th and English Literature.	
	5) Students will take keen interest in 18 ^a Century English Literature.	
DSC-1-C Study of Novel	1) Student will be acquainted with novel as genres of	
	literature.	
	2) Students will take interest in reading novel.	
	3) Students will take interest in understanding novel.	
	4) Student will develop their competence to study,	
	5) Student will acquaint with the key terms useful in the	
	study of novel	
	6) Student will familiar with different types of novel.	

SEC-1 Eng. For Competitive	1) The students will be able to prepare for the competitiv
Examination	exams of various kinds especially meant for testir
	ability in English language.
	2) The students will be acquainted with the commo
	question types asked in competitive examination
	concerning English- grammar, vocabular
	comprehension, and other significant topics.
	3) This paper will encourage students to appear and prepar
	for the competitive exams.
	4) This will help the students to overcome the fear about
	English as a compulsory subject in various competitiv
	exams.

Semester-IV (S.Y.BSC. ENGLISH)

After completion of these courses students should be able to;		
Course	Outcomes	
Compulsory English	1) The Paper of Compulsory English is specifically framed	
	from the viewpoint of value education which is the	
	basis of quality life.	
	2) Selection of contents in all the courses will help the	
	students to comprehend the worldly wisdom and	
	commercial perception which will ultimately lead them	
	to be successful and enjoy quality life.	
DSE-1-B-(17 th Century English	1) To acquaint the students with the major literary trends	
Literature)	and tendencies and prominent writers of the 16th and	
	17th Century English Literature.	
	2) To make the students aware about the literary history,	
	salient features and sociocultural background of the	
	period.	
	3) To help the students to grasp the content and critically	
	appreciate the prescribed texts.	
	4) To inculcate amongst students a liking for the	
	Elizabethan and Post Shakespearean literature.	
DSE-2-B- (19th Century English	1) Students will acquaint with basic ideas about the 19 th Century	
Literature)	English Literature with special reference to poetry.	
	2) Students will be familiar about the literary history, salient	
	teatures, socio-political and cultural background of the	
	victorian age.	
	5) Students will grasp the content and chucany appreciate the	
	4) Students will acquaint with the various literary movements of	
	the 19 ^a century English Literature.	
	5) Students will take keen interest in 19 ^a Century English	
	Literature.	

DSC-1- D Study of Drama	1) Student will be acquainted with drama as genres of literature.
	2) Students will take interest in reading drama.
	3) Students will take interest in understanding drama.
	4) Student will develop their competence to study, understand, analyses and interpret drama.
	5) Student will acquaint with the key terms useful in the study of drama.
	6) Student will familiar with different types of drama.



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Department of Electronics

Under Graduation (UG)

After S	After Successful completion of three year degree programme in (B.Sc. Electronics) a student should be		
able to			
Sr.	Programme Outcomes(PO's)	Programme Specific Outcome(PSO's)	
No			
1	To make student capable of studying	To develop the ability to apply the knowledge of	
	Electronics in academic and Industrial	content of principle of Electronics.	
	courses.		
2	To promote understanding of basic facts	To develop ability and to acquire the knowledge of	
	and concept in Electronics while retaining	terms facts and concepts processes technique and	
	the excitement of Electronics.	principle of subject.	
3	To expose the student to various emerging	To enquire the new knowledge of Electronics and	
	new areas of Electronics	development therein.	
4	To develop problem solving skills in	To develop ability of students and motivate them to	
	students.	apply advanced concepts of Electronics to solve real	
		life problems.	
5	To expose the student to different	To prepare the students for successful career in	
	processes used in Industrial and their	industry and motivate them for higher education.	
	applications.		
6	To develop proper attitude towards the	To provide exposure to the students for analyzing	
	subject.	electronics problems.	
7	To develop software skills in students.	To provide necessary foundation on computational	
		platforms and software simulation tools.	

Semester-I (F.Y.B.Sc. Electronics)

After Successful completion of these courses student should be able to		
Sr.	Courses	Outcomes
No		
1		1. Know the characteristics of basic electronics
1		components
	ELE-101:- Network Analysis and Semiconductor Diode	2. Apply knowledge to develop circuits using
		electronic devices.
		3. Understand and analyze linear electronic circuits.
		1. Understand various codes used in data
2	ELE-102:- Digital Integrated Circuits	processing
		2. Use of logic gate and Boolean algebra for
		minimize the circuit.
		3. Understand the function and need of sequential
		circuits in digital design.
		1 Identify the of basic electronics components.
3	ELE-103:- ELECTRONICS LAB -I	2 Apply the concept and knowledge of electronics
-		devices to real life problems.
		3 Review, prepare and present technological
		developments.

Course Outcomes

Semester-II (F.Y.B.Sc. Electronics)

After Successful completion of these courses student should be able to		
Sr.	Courses	Outcomes
No		
1	ELE-201:- Analog Electronics	 Know the characteristics transistor Understand the function and need of Amplifiers. Understand the function and need of feedback in oscillators.
2	ELE-202:- Linear Integrated Circuits	 Understand function of operational amplifiers Use of operational amplifiers Understand the function digital and analog converters
3	ELE-203:- ELECTRONICS LAB -II	 Apply the concept and knowledge of integrated circuit chips to develop new systems. Model complex circuits and simulate them. Handle simulation software to analyze electronics circuits.

Semester-III (S.Y.B.Sc. Electronics)

After Successful completion of these courses student should be able to		
Sr.	Courses	Outcomes
No		
1	ELE-301:- Analog Communication	 Understand and identify the fundamental concepts and various components of analog communication systems.
		2. Apply knowledge to develop circuits of analog modulation and demodulation.
		3. Analyze modulation circuits and understand the behavior of the systems.
2	ELE-302:-Microprocessors and Applications	1. Understand and analyze 8085 microprocessor and its programming.
		2. Apply the concept and knowledge of microprocessors to real life problems.
		3. Develop interfacing to real world devices.
3	ELE-303:- ELECTRONICS LAB –III	1. Identify and describe different analog modulation techniques.
		2. Analyze AM radio receiver.
		3. Learn use of hardware & software tools.
4	ELE-304:- Electrical Circuits and Network Skills	1 Measurement of R,L,C, Voltage, Current, Power Factor, Power.
		2. Measure frequency, phase with Oscilloscope
		3. Use Digital voltmeters

Semester-IV (S.Y.B.Sc. Electronics)

After Successful completion of these courses student should be able to		
Sr.	Courses	Outcomes
No		
1	ELE-401:- Digital Communication	 Understand and identify the fundamental concepts and various components of digital Communication systems.
		2. Apply the concept and knowledge of digital communication to develop new systems.
		3. To understand Multiple Access and Spread Spectrum Techniques for mobile and cellular communication system.
2	ELE-402:-Microcontrollers and Applications	1. Learn importance of Microcontroller in designing real time applications
		2. Gain knowledge of microcontroller programming.
		3. Apply practical knowledge of microcontrollers to solve real life problems of the society.
3	ELE-403:- ELECTRONICS LAB -IV	1. Identify and describe different digital modulation techniques.
		2. Develop interfacing to real world devices using microcontroller.
		3. Learn use of hardware & software tools.
4	ELE-404:- Computational Techniques in Electronics	1. Evaluate the True roots using Bisection method.
		2. To understand the Gauss Elimination Method.
		3.Write numerical programs, such as C Language programs, to solve the problems;



(Prof. Dr

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