

**MAHATMA JYOTIBA FULE COMMERCE, SCIENCE & VITTHALRAO RAUT
ARTS COLLEGE, BHATKULI, DIST. AMRAVATI**

PROGRAM OUTCOMES (POs)

Sr. No	Name of Program	Program Outcomes (POs)
1	Bachelor of Art (BA)	<p>a. Exhibit a detailed knowledge and understanding of selected fields of study in core disciplines in the humanities, social sciences and languages. Programme provides an education in Variety of contexts.</p> <p>b. It appropriate critical and diagnostic skills and methods to the recognition and pledge of problems within complex changing social contexts.</p> <p>c. Communicate effectively are those students undertaking a language major, read, write, listen to and speak another social language and linguistic structures with fluency and appreciate, its social cultural context.</p> <p>d. Students will be familiar with the conventions of diverse textual genres including fiction, poetry, literature, history, etc.</p> <p>e. Its aims to offer education that is available to students with a spacious range of educational backgrounds and professional and personal circumstances.</p> <p>f. Outstanding to over language the students can discuss on various subjects.</p> <p>g. Students can build up his personality scrupulously expression skills can be developed in speech therapy.</p>
2	B. Com. (Bachelor of Commerce)	<p>a. Student can demonstrate knowledge of major theories and models in key areas of organizational behaviour.</p> <p>b. He can analyze organizational problems and generate realistic solutions based on current academic research in organizational behaviour.</p> <p>c. Demonstrate a knowledge of microeconomic macroeconomic theory as it relates to markets, firms, government policy, and resource allocation.</p> <p>d. Demonstrate a knowledge of key concepts underlying quantitative decision analysis.</p>

		<ul style="list-style-type: none">e. Apply basic mathematical and statistical skills necessary for analysis of a range of problems in economics, actuarial studies, accounting, marketing, management and finance.f. Demonstrate knowledge of the theories, concepts and findings of the Faculty specializationsg. Analyze commerce /business issues in the international contexts.h. Compare international contexts and issues through the lens of the commerce disciplines.i. Evaluate national and international debates and discussions on economic, commercial, and business issues.j. Demonstrate an understanding of the concepts, principles, theories and arguments of their selected areas of study outside the core disciplines of economics and business.
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3	B. Sc. (Bachelor of Science)	<p>a. The intensive knowledge gained during the program will enable students to apply the understanding and various methods to come up with the required solution.</p> <p>b. Well equipped with an understanding of the analytical methods involved, students will be able to identify, formulate and analyze scientific problems and reach concrete solutions using various principles.</p> <p>c. On the basis of gained knowledge and problem analysis, the trained learners will be able to create, select, and apply appropriate techniques, resources and tools in the analysis and synthesis of data in the assigned work during the program.</p> <p>d. The primary medium of instruction for Science stream is English. Proficiency in the language, in order to improve the writing and oral skills, will enable the learners to become effective and clear communicators in explaining complex issues to the scientific community.</p> <p>e. The achievement of previously mentioned POs will enable students to increase their employability through subject knowledge and gained skills.</p> <p>f. At the end of this programme, students will be able to identify and analyze economic and ecological problems which act as deterrents to environmental sustainability and provide creative solutions towards the same.</p>
4	M.A (Marathi)	<p>a. Theories and approaches to language studies and literature studies.</p> <p>b. Marathi literature study of improvement and beginning of literature.</p> <p>c. Study of various branches and types of earliest, medieval and early literature.</p> <p>d. Prose literature Ancient, medieval and modern .</p> <p>e. Genres in Marathi literature, Study of various trends in and influences on literary study.</p> <p>f. Literary history, Linguistics and applied linguistics of Marathi .</p> <p>g. The impact of Western literature on Marathi literature and the study of western literary theories</p> <p>h. New developments in literary studies, Literature for the media, Study of writing for films.</p>
5	M.Com	<p>a. To acquire a job as an Economist, Market Research Analyst, a banker, management consultant, stockbroker/trader, Actuary, Financial analyst, Financial advisors or Advisor to Tax Law Court etc.</p> <p>b. To acquire the process of managerial economics, demand analysis,</p>

		<p>production theory, price determination and pricing practices, etc.</p> <p>c. To acquire proficiency in the accounting concepts as well as tools and techniques used for taking managerial decisions.</p> <p>d. To master the knowledge of ratio analysis, cash flow and budgetary control.</p> <p>e. To achieve decision making abilities in the situation of uncertainty in dynamic business environment.</p> <p>f. To master the conceptual framework of Management and organizational behavior.</p> <p>g. To attain understanding of computer operating system and application of relevant softwares in managerial decision making. 8) To gain the knowledge of commercial banks and its transactions, nature and scope of insurance and its kinds.</p>
6	<p>M.Sc. (Chemistry)</p>	<p>a. Apply the subject knowledge to the solution of real-world problems.</p> <p>b. Apply ethical principles and commit to professional ethics and responsibilities and norms of the standard practices.</p> <p>c. Take informed actions after identifying the assumptions that frame our thinking and actions, checking out the degree to which these assumptions are accurate and valid, and looking at our ideas and decisions (intellectual, organizational, and personal) from different perspectives.</p> <p>d. Identify, formulate, review research literature, and analyze complex problems reaching substantiated and innovative conclusions. Design solutions for complex problems with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations. Use research-based knowledge and research methods to provide valid conclusions. Demonstrate the knowledge of, and need for sustainable development.</p> <p>e. Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings. Present/communicate research at national/international level, write effective articles, reports and design documentation, make effective presentations, and give and receive clear instructions. Communicate disciplinary knowledge to the community and broader public.</p> <p>f. Demonstrate personal accountability and effective work habits, e.g., punctuality, working productively with others, and time as well as</p>

		<p>workload management. Demonstrate integrity and ethical behavior, act responsibly with the interests of the larger community in mind, and to learn from his/her mistakes. Use the strengths of others to achieve common goals, and use interpersonal skills to coach and develop others. Assess and manage his/her emotions and those of others; use empathetic skills to guide and motivate; and organize, prioritize, and delegate work.</p> <p>g. Recognize the need for, and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological change.</p> <p>h. Prepare well for living, learning and working in a Digital Society; Create, select, and apply appropriate techniques, resources, and modern ICT tools to complex activities with an understanding of the limitations. Use existing digital technologies ethically and efficiently to solve problems, complete tasks, and accomplish goals. Demonstrate effective adaptability to new and emerging technologies.</p> <p>i. Act with an informed awareness of global issues. Engage in initiatives that encourage equity and growth for all.</p>
7	<p>M.Sc. (Mathematics)</p>	<p>a. Apply knowledge of Mathematics, in all the fields of learning including higher research and its extensions.</p> <p>b. Innovate, invent and solve complex mathematical problems using critical understanding, analysis and synthesis.</p> <p>c. Adjust themselves completely to the demands of the growing field of Mathematics by lifelong learning.</p> <p>d. 4. Effectively communicate about their field of expertise on their activities, with their peer and society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations Crack lectureship and fellowship exams approved by UGC like CSIR – NET and SET.</p>

PROGRAM SPECIFIC OUTCOMES (PSOs)

The outcomes of various specific programs (subject groups) run by college are as under:

Sr. No	Program	Name of Group or subject	PSO
1	B. A. (Bachelor of Arts)	Literature	<ul style="list-style-type: none"> a. Basic grammatical knowledge of the student is improved. b. Word power of the student is enriched. c. Communicative skills of the students are increased. d. Studying literature makes the students not only to learn the language but also improves their literary interest. e. Studying English literature improves thinking skills and visualizing ability. f. Students are acquainted with the different lifestyles of the people to adopt to suit to themselves. g. Studying colloquial language helps the students to interact with the society. h. The practical knowledge of the students is increased. i. Due to the command over language the students can discuss on various subjects. j. Learning Marathi Literature helps the students to lead a better life by developing language skills k. Studying literature helps the students to become a good orator, preacher, philosopher, writer, poet and literate. l. It enables the students to understand the ancient tradition and culture of Marathi People. m. Students can develop his personality comprehensively; expression skills can be developed in speech therapy. n. Transferable Skills – Students can work in the field of research and literature, communicate effectively and politely. o. Inculcation of Social values - Students become aware of environment and because of the principle of ‘vasudhaiv kutumbakam’ can inspire the society towards idealism.
2	B. A. (Bachelor of Arts)	Social Science	<ul style="list-style-type: none"> a. Understanding ability of the students is empowered. b. Analytical ability of the students is increased due to the enriched vocabulary and grammatical knowledge. c. Studying Marathi language helps in the personality development of the students d. Command over language also enhances the ability of oration and preaching of thoughts. e. Learning colloquial language helps the students communicate with the society in a better way. f. Constitutional awareness is developed among the students. g. Leadership qualities are inculcated among the students. h. Duty awareness is inculcated among the students. i. The students are made aware of the fundamental rights. j. .The students are motivated to preserve the ancient structures. k. Architectural awareness is improved among the students. l. .The students are also made acquainted with the

			<p>archaeological chemistry.</p> <p>m. Historic sense is imbibed among the students.</p> <p>n. Students are enabled to understand the basic concept of economics.</p> <p>o. It develops economic way of thinking.</p> <p>p. It also develops economic point of view.</p> <p>q. Students are exposed to alternative approaches to economic problems through exposure to course work in allied fields.</p> <p>r. Students are exposed to social problems.</p> <p>s. It enriches the social research ability of the student.</p> <p>t. It also inculcates social analytical ability.</p> <p>u. 21. Social counselling ability is imbibed among the students.</p>
3	B. Com. (Bachelor of Commerce)	Business Management and Accounting	<p>a. Student can demonstrate knowledge of major theories and models in key areas of organizational behaviour.</p> <p>b. He can analyze organizational problems and generate realistic solutions based on current academic research in organizational behaviour.</p> <p>c. Demonstrate a knowledge of microeconomic macroeconomic theory as it relates to markets, firms, government policy, and resource allocation</p> <p>d. Demonstrate a knowledge of key concepts underlying quantitative decision analysis</p> <p>e. Apply basic mathematical and statistical skills necessary for analysis of a range of problems in economics, actuarial studies, accounting, marketing, management and finance</p> <p>f. Demonstrate knowledge of the theories, concepts and findings of the Faculty specializations</p> <p>g. Analyze commerce /business issues in the international contexts</p> <p>h. Compare international contexts and issues through the lens of the commerce disciplines.</p> <p>i. Evaluate national and international debates and discussions on economic, commercial, and business issues.</p> <p>j. Demonstrate an understanding of the concepts, principles, theories and arguments of their selected areas of study outside the core disciplines of economics and business.</p>
4	B. Sc. (Bachelor of Science)	B.Sc. (Mathematics, Physics, Chemistry)	<p>a. Scientific attitude and rational thinking gets inculcated among the students.</p> <p>b. They can seek admission to higher education.</p> <p>c. They become eligible for applying UPSC, MPSC and other competitive examinations for joining civil and defence services.</p> <p>d. The students get acquainted with practical aspects to address various problems.</p> <p>e. The students can apply critical reasoning skills to solve problems in daily life.</p> <p>f. They can communicate scientific information in oral, written and graphical formats.</p> <p>g. Students can perform abstract mathematical reasoning.</p> <p>h. The students become environment conscious, sensitive towards energy saving and using natural resources</p>

			carefully.
5	B. Sc. (Bachelor of Science)	B.Sc. (Chemistry, Zoology, Botany)	<ul style="list-style-type: none"> a. Student becomes an outstanding graduate in the modern scientific world. b. Students become eligible for higher studies. c. They become competent in applying for MPSC, staff selection commission and other competitive examinations. d. Student gets acquainted with practical knowledge relation to pathological aspects of plants and animals. e. Student acquainted with the concept of gender equality and means and methods of birth control to overcome the problem of population explosion. f. Students become aware about conservation and preservation of natural resources which are available in a limited period of time. g. Student gets acquainted with aids, diabetes, cancer various genetic and congenital diseases related with microbes and parasites with their symptoms and control. h. The problems of ruthless killing of wild animal and plants which disturbs biodiversity and food chain are addressed to the students. i. Student stimulates to become entrepreneur by starting chemical industry, fisheries, prawn culture, horticulture, gardening, nursery, seed production, sericulture, Vermiculture, etc.
6	B. Sc. (Bachelor of Science)	B.Sc.(Electronics, ComputerScience, Mathematics	<ul style="list-style-type: none"> a. The students are stimulated to be entrepreneur to start small scale industry. b. They can use ICT tools more competently and can apply mathematical concepts and principles to perform computations. c. The students get to understand the various coding languages to become successful coder and can develop software. d. They become competent in applying for MPSC, staff selection commission and other competitive examinations. e. They can apply for career opportunities and can look for various scopes in foreign countries. f. They can be proven best suitable candidates in banking and IT sectors.
7	B. Sc. (Bachelor of Science)	B.Sc.(Phycics, Electronics, Mathematics	<ul style="list-style-type: none"> a. To analyse, design and develop solutions for the real time problems. b. the technical Knowledge for developing quality products for Electronics c. To adapt to emerging Information and Communication technologies and to develop innovative ideas. d. To develop, test and apply management principles, mathematical foundations in the development of computational solutions.

COURSE OUTCOMES (COs)

The outcomes of various subject groups run by college are as under:

Sr. No	Program	Course	Outcomes
1	B. A. (Bachelor of Arts)	Compulsory English	<ul style="list-style-type: none"> a. Basic grammatical knowledge is improved. b. Word power of the student is enriched. c. Understanding ability of the students is empowered. d. Analytical ability of the students is increased due to the enriched vocabulary and grammatical knowledge. e. Individual understanding of the students is improved. f. Psycho – analytical approach of the students is enhanced. g. Mutual understanding with the individuals is improved. h. Communicative skills of the students are increased.
2	B. A. (Bachelor of Arts)	Compulsory Marathi	<ul style="list-style-type: none"> a. Studying Marathi language helps in the personality development of the students. b. Studying colloquial language helps the students to interact with the society. c. The practical knowledge of the students is increased. d. Due to the command over language the students can discuss on various subjects. e. Command over language also enhances the ability of oration and preaching of thoughts. f. Learning colloquial language helps the students communicate with the society in a better way.
3	B. A. (Bachelor of Arts)	Marathi Literature	<ul style="list-style-type: none"> a. Studying Marathi Literature improves curiosity to learn Marathi Literature. b. Learning Marathi Literature helps the students to lead a better life by developing c. language skills d. Studying Marathi Literature helps the students to know their culture and tradition e. Studying literature helps the students to become a good orator, preacher, philosopher, writer, poet and literate. f. It enables the students to understand the ancient tradition and culture of Marathi people.
4	B. A. (Bachelor of Arts)	Political Science	<ul style="list-style-type: none"> a. By studying political science the students are acquainted with the political institutions. b. Constitutional awareness is developed among the students. c. Leadership qualities are inculcated among the students. d. Students are molded into responsible citizens of the country. e. Duty awareness is inculcated among the students. f. The students are made aware of the security and development of the SC, ST and OBC's. g. The government and the public relationship is inculcated among the students. h. The students are made aware of the fundamental rights. i. The students are inspired to develop an ideal state. j. The students are acquainted with the functioning of the

			government.
5	B. A. (Bachelor of Arts)	History	<ul style="list-style-type: none"> a. The students are motivated to preserve the ancient structures. b. The students are imparted the knowledge of social, Political, Religious and economic condition of over ancestors. c. Architectural awareness is improved among the students. d. The scriptural knowledge is imparted to the students. e. The students are also made acquainted with the archaeological chemistry. f. The awareness of comparative study of the manuscript is developed among the students. g. Historic sense is imbibed among the students.
6	B. A. (Bachelor of Arts)	Economics	<ul style="list-style-type: none"> a. Students are enabled to understand the basic concept of economics. b. Studying economics enables the students to analyze economic behaviour in practice. c. It develops economic way of thinking. d. It enriches the ability to analyze historical & current events from the economic perspective. e. It also develops economic point of view. f. Students are exposed to alternative approaches to economic problems through exposure to course work in allied fields.
7	B. A. (Bachelor of Arts)	Sociology	<ul style="list-style-type: none"> a. Studying sociology enhances the social awareness of the students. b. Students are exposed to social problems. c. It enriches the social research ability of the student. d. It also inculcates social analytical ability. e. Social counseling ability is imbibed among the students. f. It develops good understanding about the family system in India and abroad.
8	B. A. (Bachelor of Arts)	Home Economics	<ul style="list-style-type: none"> a. Students will acquire basic knowledge of principles involved in planning of residential house. b. Students will learn and apply various methods and techniques of work simplification. c. Course will prepare the students to understand the basics of food preparation and preservation. d. Course helps them to develop employability skills for 'Earning while Learning'. e. Course will inculcate the skills related to self-employment. f. Students will be empowered with the basic concepts of the nutrition for planning the diet for different illnesses. g. Course will introduce the students to the major concepts of human development. h. Studying the course will enable the students to learn the causes and methods of prevention of mother and child mortality. i. Students will gain the knowledge about the general caring ways of a baby.

9	B. Com. (Bachelor of Commerce)	Advanced Accounting	<ul style="list-style-type: none"> a. The students learn about - accounting techniques in dealing with specific accounting issues, such as investments, consolidated financial statements, financial assets. b. Students get stimulated for deeper thoughts about the accounting policy making, and firms' choices of accounting rules. Their international perspective gets widened. c. Their critical understanding of conceptual issues in financial accounting as well as technical and analytical skills gets developed. d. Students recognize commonly used financial statements, their components and how information from business transactions flows into these statements. e. Students learn relevant financial accounting career skills, applying both quantitative and qualitative knowledge to their future careers in business.
10	B. Com. (Bachelor of Commerce)	Business Economics	<ul style="list-style-type: none"> a. Students can apply economic reasoning to the analysis of selected contemporary economic problems. b. They understand how households (demand) and businesses (supply) interact in various market structures to determine price and quantity of goods and services produced and consumed. c. They can analyze the efficiency and equity implications of government interference in markets. d. They can recognize and identify situations leading to market failures and government failures. e. They can evaluate the intent and outcomes of government stabilization policies designed to correct macroeconomic problems.
11	B. Com. (Bachelor of Commerce)	Principles of Business Management	<ul style="list-style-type: none"> a. Students use business terms and concepts when communicating and analyzing the data to verify accuracy of conclusions. b. They select and use appropriate resources to collect business data which ultimately translate into information for decision-making. c. They use the marketing information management concepts, systems, and tools needed to obtain, evaluate, and disseminate information for use in making marketing decisions. They use effective communication skills to promote respect, trust and relationships. d. The students conduct research to identify and analyze client needs and desires and make marketing recommendations regarding business decisions and use appropriate leadership skills and styles to maximize employee productivity. e. They use quantitative measurements to solve business problems related to payroll, taxes, percentages, future value of money and to be able to make better business decisions.
12	B. Com. (Bachelor of Commerce)	Computer Fundamental & Operating	<ul style="list-style-type: none"> a. Students understand the meaning and basic components of a computer system, hardware and software components of computer system, b. Students understand and identify different computing machines during the evolution of computer system, gain knowledge about five generations of computer system.

		System	<p>c. They can identify and discuss the functional units of a computer system,</p> <p>d. Students understand how to operate operating system & its control.</p> <p>e. Students understand working in MS- OFFICE like MS- Word</p> <p>f. Students easily work in MS-Word like open, save, edit format & print documents, etc.</p>
13	B. Com. (Bachelor of Commerce)	Corporate Accounting	<p>a. The students make business or personal financial decisions, such as - taxpayer, investor or business owner.</p> <p>b. The students become aware about corporate accounting in conformity with the provisions of Companies Act.</p> <p>c. Students get knowledge about shares, debentures, preference shares and their importance in real situation & etc.</p> <p>d. They get knowledge about establishment & formation, run, liquidation of company,</p> <p>e. They can supervise and advise on the financial activities and documentation pertinent to a company's or individual's investment portfolio, which may include stocks, bonds, real estate and other financial products.</p>
14	B. Com. (Bachelor of Commerce)	Income Tax & Auditing	<p>a. The students get acquainted with the complicated world of tax policy, tax laws.</p> <p>b. They know about gross income, benefits, personal and charitable deductions, classes of income, the alternative minimum tax, second homes and non-statutory principles.</p> <p>c. Students learn about the administrative details which go into properly filing tax paperwork for both individuals and businesses. They also learn about regulatory agencies, tax appeals, penalties and responsibilities, assessment and litigation.</p> <p>d. Students learn about private business and governmental accounting practices. They also learn about career options, job growth and salary information for accounting.</p> <p>e. Accounting auditors can use their skills in several capacities, including working for government agencies or as internal auditors. Government auditors often closely examine the tax records of taxpayers to ensure proper payment has been made to a particular government agency.</p>
15	B. Com. (Bachelor of Commerce)	Money & Financial System	<p>a. Students trace the evolution of the term Bank, they understand the economic meaning of money.</p> <p>b. Student learns different definitions of money, functions of money and components of supply of money.</p> <p>c. They become aware of instruments of money supply, understand the meaning of high power money and its importance.</p>
16	B. Com. (Bachelor of Commerce)	Business Mathematics & Statistics	<p>a. The students of this course gets knowledge of Mathematics and Statistical techniques as are applicable to business and economic situations.</p> <p>b. The students are able to solve problems from the business in the world.</p> <p>c. The students are prepared for successful careers using their mathematical and statistical skills.</p> <p>d. The students are trained thoroughly in methods of analysis</p>

			<p>and algebra, including the computational skills appropriate for mathematicians to use when solving problems.</p> <p>e. Student gets developed in him the skills pertinent to the practice of mathematics, abilities to formulate problems, think creatively and synthesize information.</p> <p>f. Students use current mathematical concepts and data analysis techniques for problem solving & to develop oral and written communication skills.</p>
17	B. Com. (Bachelor of Commerce)	Information Technology & Business Data Processing	<p>a. Students learn data processing related to daily business and office operations.</p> <p>b. The students learn technical skills related to programming, software, and data processing, mathematics, basic information systems, business, systems management etc.</p> <p>c. Students learn about data processing which includes - inputting, formatting, editing and proofreading data in a computer system.</p>
18	B. Com. (Bachelor of Commerce)	Cost & Management Accounting	<p>a. The students of this course expose them to the basic concepts and tools used in</p> <p>b. Cost and Management Accounting and provide an understanding of the application of accounting techniques for management.</p> <p>c. They can have career in professional accountancy and as a home business.</p>
19	B. Com. (Bachelor of Commerce)	Business Environment	<p>a. The students enable the firm to identify opportunities and Getting first mover advantage.</p> <p>b. Students learn about tapping and assembling resources.</p> <p>c. Students know to adjust and adapt with the rapid changes.</p> <p>d. Students learn about planning and policy making.</p>
20	B. Com. (Bachelor of Commerce)	Business Regulatory Framework and Company Law	<p>a. The Business program offers a comprehensive overview and practical experience that can help future business leaders feel confident in their understanding of the laws that apply to their sectors.</p> <p>b. Legal studies guide business professionals in ethics and laws.</p> <p>c. Many law graduates are successful in various industries and more became world leaders who are highly respected.</p> <p>d. Studying law allows students to understand the reasons behind the regulations.</p> <p>e. Law students develop the ability to argue from a basis of evidence in a way which can be hard for others to do; this actively cultivates advanced communication skills, keen problem-solving abilities and the capacity for independent thinking. As a result, law graduates adapt very well in various situations or career transitions.</p>
21	B. Com. (Bachelor of Commerce)	Indian Banking System	<p>a. Students will gain insights into the various types of banks and their role in Indian economy.</p> <p>b. Students will also gain insights into the various types of non-banking institutions and their role in Indian economy.</p> <p>c. Students will understand the difference among the banking and non-banking sectors.</p>

			<p>d. Studying the course will help students to familiarize with the various functions of the retail banks and their associated procedural aspects.</p> <p>e. Students will understand the significance and application of online banking in changing scenario of finances.</p>
22	B. Com. (Bachelor of Commerce)	Fundamental of Insurance	<p>a. Students will be able to understand the functional aspects of the insurance sector.</p> <p>b. The course benefits the students by gaining knowledge of the various insurance schemes and their applicability.</p> <p>c. The course offers insights into the functional aspects of the insurance industries and the current scenario of the sector.</p> <p>d. Students will be empowered to get career opportunities in the insurance sector.</p>
23	B. Sc. (Bachelor of Science)	Physics	<p>a. The students of physics know about mechanics, ac-dc circuits, quantum mechanics, solid state physics, geo-physics, renewable energy, nuclear physics, superconductivity, nano-science, electromagnetism, optics, relativity, thermodynamics, electronics, etc.</p> <p>b. They get knowledge biomedical sciences and become health conscious since they know about ultrasonography, X-rays, radiation therapy, etc.</p> <p>c. Upon completion of the course student can go for master's degree in Physics with specialization in solid state physics, material science, condensed matter, electronics, optics, radiology, nuclear physics etc.</p> <p>d. Students can apply fundamental principles of Physics in real life.</p> <p>e. They become able to teach physics to secondary school pupils.</p> <p>f. The students of physics become competent to apply for MPSC and other recruitment board examinations.</p> <p>g. Students can plan, execute and report the results of a complex extended experiment.</p> <p>h. They can choose appropriate models to analyze data and draw conclusions.</p> <p>i. They can use appropriate software such as programming languages and packages in physics experimentation.</p> <p>j. They develop ability to perform any new experiment and to draw conclusions.</p> <p>k. Students of physics become sensitive towards energy saving, using natural resources carefully and environment conscious.</p> <p>l. The scientific attitude is inculcated among the students.</p> <p>m. They develop attitude of rational thinking by applying scientific principles and justifying the act accordingly. They can assess the superstitions/ blind faiths occurring in their surrounding and helps to eradicate the same.</p> <p>n. Both written and oral discussions challenge the students of physics to think more broadly about the laws of nature and its impact on humanity.</p>
24	B. Sc. (Bachelor	Chemistry	<p>a. Students become an outstanding graduate in the modern scientific world.</p>

	of Science)		<ul style="list-style-type: none"> b. They become eligible for higher studies. c. They become good teachers at middle and high school. d. They become competent to apply for MPSC, and other recruitment board examinations. e. Students secure a good job like lab chemist in chemistry oriented industries and manufacturers. f. They understand fundamental and basic concepts of organic, in-organic, physical and analytical chemistry. g. They get familiarized about mechanistic approach of various organic and inorganic reactions. h. They learn and apply practical aspects of chemistry by means of qualitative, quantitative and instrumental methods. i. They become good citizens by learning ethics of the society.
25	B. Sc. (Bachelor of Science)	Mathematics	<ul style="list-style-type: none"> a. Students demonstrate understanding of common body of knowledge in Mathematics. b. Student acquires the knowledge and understanding of all branches of Mathematics. c. Student maintains a core of Mathematical and technical knowledge which is adaptable to changing technologies and provides a solid foundation for future learning. d. Students can be able to perform basic computations in higher mathematics e. Student demonstrates the ability to apply analytical and theoretical skills to different model and solve mathematical problems. f. Student can apply critical thinking and communication skills to solve applied problems. g. Student can demonstrate the ability to analyze data and design appropriate statistical conclusions. h. Student can apply mathematical concepts and principles to perform computations of problems. i. Student becomes able to develop and maintain problem solving skills. j. Student demonstrates the ability to effectively utilize a variety of teaching techniques and classroom strategies to positively influence student learning. k. Student use their logic and are able to create, use and analyze graphical representations of mathematical relationships. l. Students become able to use logical reasoning and positive attitude to face the various competitive exams. m. Students can accumulate successful and positive problem solving experience through logical reasoning. n. Students understand the importance of logical reasoning and positive approach in doing and learning Mathematics. o. Students can aware the people about the importance of knowledge of mathematics in their daily life. p. As a part of ethical leadership students demonstrate the ability to think critically, research, and reason. q. Students are able to communicate mathematical ideas with others. r. As a part of cultural competence Students recognize and differentiate among diverse cultures through the history of

			mathematics.
26	B. Sc. (Bachelor of Science)	Electronics	<p>a. They get the knowledge of basic electrical and electronic components.</p> <p>b. They acquire the knowledge of active components like – diode, transistor, FET, MOSFET, UJT, SCR, photodiode, LED, LDR etc.</p> <p>c. They become able to explain about digital logic gates, flip flops, counters, registers, encoders, decoders, memories, etc.</p> <p>d. They get the knowledge of various amplifiers, oscillators, AD and DA converters.</p> <p>e. They get the knowledge of analog and digital communication, optical fiber communication.</p> <p>f. They acquire the knowledge of various microprocessors and microcontrollers.</p> <p>g. They become aware of basic instrumentation, various transducers, sensors, actuators, display, etc.</p> <p>h. They get the knowledge of bio-medical instruments like – ECG, EEG, EMG, X- ray machine etc.</p> <p>i. Students can identify basic electrical and electronic components.</p> <p>j. They become able to handle the measuring instruments,</p> <p>k. They can design and assemble simple dc power supply.</p> <p>l. Students can design and assemble low cost electronic circuits useful for society.</p> <p>m. Students can execute the programs and become able to prepare small projects using microprocessor and microcontrollers.</p> <p>n. They can operate various digital circuits like – logic gates, FF, counters, registers, memories, etc.</p> <p>o. They can observe the performance of various amplifiers and oscillators.</p> <p>p. Students can handle various bio-medical instruments.</p>
27	B. Sc. (Bachelor of Science)	Computer Science	<p>a. Students know about Computer hardware, software, networking, programming and mark-up languages and RDBMS.</p> <p>b. Student can observe and think about utility of computer and software in real world.</p> <p>c. Student learns how to solve their educational and daily life related work using computer.</p> <p>d. Student can select and use appropriate application software as per their nature of work.</p> <p>e. Student can perform and execute the computer program.</p> <p>f. Student can solve some mathematical problems using computer.</p> <p>g. Student can design and parse simple web pages.</p> <p>h. Students can apply their computer handling skill to solve their daily life relevant problems.</p> <p>i. They can search relevant information and present effectively.</p> <p>j. Student realize about paperless work, and about security of their different kinds of information.</p> <p>k. They think about the need of digitization.</p>
28	B. Sc.	Botany	a. Scientific attitude and science related values get inculcated

	(Bachelor of Science)		<p>among the students.</p> <p>b. Students are able to identify the major groups of organism with an emphasis on plants and be able to classify them within a phylogenetic framework.</p> <p>c. Students are able to compare and contrast the characteristics of plants, algae and fungi that differentiate them from each other and other forms of life.</p> <p>d. Students are able to use the evidence of comparative biology to explain the theory of evolution offers the only scientific explanation for the unity and diversity of life on earth.</p> <p>e. Student becomes able to use specific examples to explicate how descent with modification has shaped plant morphology, physiology and life history.</p> <p>f. Student can explain how organisms function at the level of the gene, genome, cell tissue, organ and organ system. They are able to give specific examples of the physiological adaptations, development, reproduction and behaviour of different forms of life.</p> <p>g. Student become able to explicate ecological interconnectedness of life on earth by tracing energy and nutrient flows through the environment. They become able to relate the physical features of environment to the structure of populations, communities and ecosystems.</p>
29	B. Sc. (Bachelor of Science)	Zoology	<p>a. Studies of environmental components & composition, natural resources, food chains, wild life & its managements, pollution makes students environment conscious & eco-friendly.</p> <p>b. Studies of chordates, non-chordates & their classification, type studies provides them knowledge of biodiversity & its preservation.</p> <p>c. Studies of various congenital, contagious & non contagious diseases, life cycles of parasites & their control measures teach them values & ethics of self & social hygiene.</p> <p>d. Anatomy & physiology studies provide students the basic knowledge of various body systems & their functioning.</p> <p>e. Studies of sex determining mechanisms of genetics teach them equal contribution of both parents in sex determination of child, embryological knowledge teaches them reproduction & various means & methods of birth control.</p> <p>f. Studies of apiculture, sericulture, fish culture & pathological, ecological experiments of their practical syllabi are helpful in generating employment & self-sufficiency.</p>