1.1 **List of courses offered across all programs during last five years**

Program code	Program Name	Course code	Course Name	Year of introduction	Programme Outcomes	Course Outcome
Under Garduate	B.SC.(Non-medical)	CXL 101	English-I (Language Skills)	2011	PSO1: This Programme enables the students to gain basic knowledge about various physical properties e.g. mechanical, electrical, magnetic, electronic & optical etc.. They also gain practical knowledge of applications of probability, statistical mechanics, solid state physics, quantum & nuclear physics. PSO2: Students acquire knowledge about fundamental theories of chemical and scientific phenomena and their applications in everyday life. PSO3: Students would become aware of the influence of chemistry on the environment and other areas beyond scientific field. PSO4: Basic knowledge of mathematics & practical application of computer Programming in FORTRAN & other scientific languages is gained so as to solve scientific problems. PSO5: This Programme also trains the learners to extract information, formulate and solve problems skilfully applying the analytical reasoning & critical thinking. PSO6: Students get hands on training of scientific experiments which enables them to record the measurements accurately and analyse the experimental results. PSO7: The qualities such as observation, precision, analytical & logical thinking, clarity of thought & expression,	CO 1: The students will achieve an increased fluency in reading and writing skills and are apprised about common errors they commit in their daily usage of words and sentences in the subject of English. CO 2: The student will demonstrates an increase in awareness of translations, sentence formations and structuring as well as various grammatical rules. CO 3: The poetry enhances the students understanding of various elements of poetry such as tone, diction, genre, figures of speech, symbolism and many more. CO 4: The conclusion of the course will enable the students to incorporate personal experiences that can be used for creative writing and composition.
Under Garduate	B.SC.(Non-medical)	CPL- 102	Mechanics-I	2011		CO 1: This course helps student to understand the basic and fundamental concepts of classical mechanics. CO 2: This course helps students to have a deep understanding of Newton's laws and get the knowledge about forces which help them in their daily life.The velocity and acceleration parameters give the knowledge about how the vehicles move. CO 3: This course helps students to understand the rolling concept and concept of inertia which helps them in their daily life. CO 4: This course helps students to understand the concept of Lagrangian which further helps them to solve problems related to simple physical systems.
Under Garduate	B.SC.(Non-medical)	CPL- 103	Electricity and Magnetism-I	2011		CO 1: Students would be able to apply a wonderful mathematical del operator on scalar and vector physical quantities to develop the quantities as mentioned in course objectives and also would be able to build up logical and analytical skill to work on new complex physical world by applying the same del operator on the physical quantities of their own choice. CO 2: Would be able to understand the effect of a charged particle/body in the form of electrostatic and electrodynamics fields. CO 3: Would be able to visualise the invisible world of accelerated charged particle in the form of electromagnetic field or electromagnetic waves which has socio anthropological settings across the world by connecting every human being through communication as outcome of electromagnetic waves. CO 4: Would be able to meet the course objectives in all respects by orienting teaching and other academic processes adopted by the faculty to facilitate the students to do what they are expected to do.
Under Garduate	B.SC.(Non-medical)	CCL- 104	Inorganic Chemistry-I(Atomic structure and Bonding)	2011		CO 1: Have a deep understanding of the structure of atom and the particles constituting it. CO 2: Will be familiar with the periodic table in which how different elements are placed according to their unique properties. CO 3: Understand the concept of bonding and how the theories of bonding govern the structures of different compounds. Further on the basis of basic information will develop skills to analyse compounds in unknown compounds. CO 4: Draw structure of ionic solids and understand its properties.
Under Garduate	B.SC.(Non-medical)	CCL- 105	Organic Chemistry-I(General Organic Chemistry and Aliphatic Hydrocarbons)	2011		CO 1: Understand the different kinds of bonds existing in organic compounds. CO 2: Learn how to name different compounds according to IUPAC nomenclature. CO 3: Be able to visualize the 3D-structures of organic compounds. CO 4: Recognize and draw constitutional isomers, stereoisomers, including enantiomers and diasteromers, racemic mixture and meso compounds. CO 5: Perceive different kind of reactions occurring amongst the organic compounds. CO 6: Be able to differentiate between reactant and reagents. CO 7: Be able to differentiate between cyclic and acyclic compounds and study their specific reactions.
Under Garduate	B.SC.(Non-medical)	CML- 106	Algebra	2011		CO 1: Algebra provides the foundation for high school mathematics, critical thinking and problem solving, Algebra helps students transfer their mathematical knowledge to more algebraic generalizations. CO 2: Students will solve problems using equations, graphs and tables to investigate linear relationships. Technology will be used to introduce and expand upon the areas of study listed above. CO 3: Students will learn how to find roots of quadratic, biquadrate and cubic equations.

Under Garduate	B.SC.(Non-medical)	CML- 107	Calculus	2011	systemic approach, qualitative and quantitative decision making are enhanced. PSO8: Students gain confidence in presenting the scientific results publically before subject experts. PSO9: The present subject area of science will increase the capability of students in exploring interdisciplinary scientific research areas. PSO10: This Programme acts as a launching pad to go for masters degree in physics/ chemistry/ maths/ computer science and pursuing research in science & technology. It also enables the graduate to appear for various competitive exams in diverse fields such as Defence, Banking, Industries & other Public Services to serve the nation. PSO11: Students will have overall development with respect to moral and social values which benefits them at personal as well as society level leading them to become a better civilized citizen.	CO 1: learn the general concept of function and its applications to real-world situations and work with exponential, logarithmic and trigonometric function and their applications in applied problems. CO 2: learn the concepts of the derivative and its underlying concepts such as limits and continuity and to calculate derivative for various type of functions suing definition and rules. CO 3: learn the various concept of derivative to completely analyze graph of a function. And learn about various applications of the derivative in applied problems. CO 4: learn about anti-derivative and the Fundamental Theorem of Calculus and its applications and to use concept of integration to evaluate geometric area and solve other applied problems.
Under Garduate	B.SC.(Non-medical)	CYL- 111	Environmental Studies	2011		CO1: Students learn about the basics of environment, what are renewable and non-renewable resources and how to make their optimised use. CO2: Students get knowledge of the various types of ecosystems and also an insight ito factors, types and ways of controlling environmental pollution. CO3: Students learn various social issues and their relation with environment like sustainable development, urban problems related to energy, water conservation, rain water harvesting, and watershed management CO4: Students learn about the various legislative mechanisms to prevent environmental pollution like Environment Protection Act, Air (prevention and control of pollution) Act, Water (prevention and control of pollution) Act, Wildlife Protection Act etc.
Under Garduate	B.SC.(Non-medical)	CPP- 108*	Physics Lab-I	2011		CO 1: The set of experiments is framed so as to understand the meaning of minute observations and measurements. These experiments are first lesson to the learners that how imperative is the role of measurement in the practical world. CO 2: All the experiments are based on the theory course of the students in the same year. Therefore these laboratory experiments are ingredient part of the curriculum and helps in comprehensive learning to the students. CO 3: Experiments based on moment of inertia provide a technical hand to the students and opens a pathway to the industrial world related to machinery and vehicles. CO 4: Experiments related to the measurement of acceleration due to gravity and elastic constants would put up a clear picture of universal constants to the mind of students. Therefore besides increasing the conceptual clarity, these experiments would further raise the imagination power of the learner.
Under Garduate	B.SC.(Non-medical)	CCP- 109*	Chemistry Lab-I	2011		CO 1: Will be able to apply the theoretical concepts while performing experiments. CO 2: Will be able to design, carry out, record and analyze the results of chemical experiments. CO 3: Will be able to titrate different mixtures. CO 4: Will acquire the habit of working safely with the chemicals and handling of equipments. CO 5: Will learn, how to make solutions of different concentrations generalizing the concept of normality, molarity and molality. CO 6: Design experiments that can be applied in everyday life based on the parameters of viscosity, surface tension and specific refractivity. CO 7: Learn the basics of precipitation. CO 8: Acknowledge experimental errors and their possible sources. CO 9: Learn statistical approach for evaluating data.
Under Garduate	B.SC.(Non-medical)	CMP- 110*	Mathematics Lab-I	2011		CO-1 Students will be able to understand basc syntax flow charts and algorithms . CO-2 Genrral progams based on If else Co- Looping and iterations programs
Under Garduate	B.SC.(Non-medical)	CXL- 201	English-II	2011		CO 1: The syllabi of the course enables the students to develop a critical thinking and conceptual understanding of the same. CO2: The essays in the course enables the students in the development of multi-dimensional approach and helps them to look at the sensitive issues of the society with a rational mindset. CO 3: The understanding of writing letters enables the students to prepare for future professional correspondence as well as enhance their creative writing skills. CO 4: The conclusion of the course will enable the students to incorporate personal experiences that will eventually help them to emerge as mature, responsible persons.

Under Garduate	B.SC.(Non-medical)	CPL- 202	Mechanics-II	2011	CO 1: This course helps student to understand the basic and fundamental concepts of classical mechanics. CO 2: This course helps students to have a deep understanding of Newton's laws and get the knowledge about forces which help them in their daily life.The velocity and acceleration parameters give the knowledge about how the vehicles move. CO 3: This course helps students to understand the rolling concept and concept of inertia which helps them in their daily life. CO 4: This course helps students to understand the concept of Lagrangian which further helps them to solve problems related to simple physical systems.
Under Garduate	B.SC.(Non-medical)	CPL- 203	Electricity, Magnetism and EMT-II	2011	CO 1: Students would be able to apply a wonderful mathematical del operator on scalar and vector physical quantities to develop the quantities as mentioned in course objectives and also would be able to build up logical and analytical skill to work on new complex physical world by applying the same del operator on the physical quantities of their own choice. CO 2: Would be able to understand the effect of a charged particle/body in the form of electrostatic and electrodynamics fields. CO 3: Would be able to visualise the invisible world of accelerated charged particle in the form of electromagnetic field or electromagnetic waves which has socio anthropological settings across the world by connecting every human being through communication as outcome of electromagnetic waves. CO 4: Would be able to meet the course objectives in all respects by orienting teaching and other academic processes adopted by the faculty to facilitate the students to do what they are expected to do.
Under Garduate	B.SC.(Non-medical)	CCL- 204	Physical Chemistry- I (Chemical Energetics and Equilibria)	2011	CO 1: Differentiate between the states of matter based on the interactions existing amongst their particulates. CO 2: Understand the simultaneous relationship between pressure, temperature and volume persuading amongst different states of matter. CO 3: Inculcate the numerical ability. CO 4: Amalgamate the theoretical knowledge into the practical world by understanding the basic concepts of matter. CO 5: Learn why different substances display a characteristic melting or boiling points.
Under Garduate	B.SC.(Non-medical)	CCL- 205	Organic Chemistry- II (Functional Group Organic Chemistry)	2011	CO 1: Students will be able to analyse the route of formation of certain products. CO 2: Students will be able to differentiate between the aromatic, antiaromatic and non aromatic compounds and how Huckel rules govern the phenomenon of aromaticity amongst different organic compounds. CO 3: Students will be able to clearly access the basic difference between alkyl and aryl compounds. CO 4: Students will be able to relate the concept of stability of compounds with the phenomenon of conjugation and conditions necessary for a system to be a conjugating system. CO 5: Students will be able to clearly identify the role of hybridization and how the physical and chemical reactivity of these compounds are affected because of different hybridization.
Under Garduate	B.SC.(Non-medical)	CML- 206	Vector Calculus and Geometry	2011	CO 1: Vector Calculus helps us to understand how to mathematically describe physical & abstract quantities that have both magnitude & direction, increases knowledge of properties of functions whose domain consists of real no's & range consists of vectors including differential & integration. CO 2: Students will be able to find length of a vector, the unit vector i direction of a given vector & the cosine of the angle between two vectors in 3-space. CO 3: Calculate scalar product, vector product of two vectors & scalar triple product of three vectors; write vector equation & symmetric equation for a line & vector equation & scalar equation of a plane.
Under Garduate	B.SC.(Non-medical)	CML- 207	Ordinary Differential Equations and Laplace Transformations	2011	CO 1: Show an awareness of initial and boundary conditions to obtain particular values of constants in the general solution of second-order differential equations. CO 2: Identify a general method for constructing solutions to inhomogeneous linear constantcoefficient second-order equations. CO 3: Recognize the proper technique and solve initial value problem for first order equations. Solving of initial value problems for higher order linear homogeneous and non homogeneous equations

Under Garduate	B.SC.(Non-medical)	CPP- 208	Physics Lab-II	2011	CO 1: The experiments of this course are framed so as to understand comprehensively the meaning of minute observations and measurements. These experiments are primary lesson to the learners that how essential is the role of measurement in the practical world. CO 2: These experiments have foundation in the theory course of the students in the same year. Therefore, these laboratory experiments are elemental part of the curriculum and helps in improving the widespread knowledge to the students. CO 3: Experiments based on special type of diode provide scientific temperament and an industrial hand to the students and opens a pathway to the manufacturing world related to machinery and vehicles. CO 4: The students by performing the experiments based on current and electricity, learner could realize the many theoretical concepts solenoid, magnetism, frequency of A.C. mains. These experiments provide answer to many queries of the students which is the part of their thoughts so far.
Under Garduate	B.SC.(Non-medical)	CPP-209	Chemistry Lab-II	2011	CO 1: Design, carry out, record and analyze the results of chemical experiments. CO 2: Understand the principle and applications of chromatography. CO 3: Skillfully perform synthesis of organic compounds. CO 4: Perform different methods and learn the importance of purification.
Under Garduate	B.SC.(Non-medical)	CMP-210	Mathematics Lab-II	2011	Co-1 Students will be able to understand Arrays CO-2 Genrral progams based onarrays and pointers and branching. Switch and break statements
Under Garduate	B.SC.(Non-medical)	CXL-301(i)	HINDI	2012	http://www.gjust.ac.in/uacolleges/2019/Syllabus%20B.Sc.%20Hindi%20&%20B.Sc.%20Sanskrit%20[2nd%20Year]%20(3rd%20and%204th
Under Garduate	B.SC.(Non-medical)	CXL-401(i)	HINDI	2012	http://www.gjust.ac.in/uacolleges/2019/Syllabus%20B.Sc.%20Hindi%20&%20B.Sc.%20Sanskrit%20[2nd%20Year]%20(3rd%20and%204th
Under Garduate	B.SC.(Non-medical)	CXL-301(ii)	SANSKRIT	2012	1. संस्कृत चयनिका पद्य एंव गद्य भाग - 1 से 5 2. संस्कृत व्याकरण - शब्द रूप (राम, देव लता, फल, आदि) 3. अच संधि (गुण वृद्धि, यण अयादी संधि)
Under Garduate	B.SC.(Non-medical)	CXL-401(ii)	SANSKRIT	2012	1. संस्कृत चयनिका पद्य एंव गद्य भाग - 6 से 10 2. संस्कृत व्याकरण - धातु रूप (भू, अस, कृ, गम आदि) 3. अच संधि (दीर्घ, पूर्व रूप , पर रूप, प्रकृति भाव)
Under Garduate	B.SC.(Non-medical)	CPL-302	Heat and Thermodynamics	2012	CO 1: This course will help to understand the concept of heat and its conversion from one form to another. Thermodynamics can be used in our daily life Laws of thermodynamics are used in refrigerators, air-conditioners, heat pumps etc. CO 2: One of the important fields of thermodynamics is heat transfer, which relates to transfer of heat between two media. The concept of heat transfer is used in wide range of devices like heat exchangers, evaporators, condensers, radiators, coolers, heaters, etc. CO 3: The laws of thermodynamics dictate energy behavior, for example, how and why heat, which is a form of energy, transfers between different objects. CO 4: The Maxwell relations allow us to relate changes in one set of thermodynamic variable to other variables. CO 5: Programming is important to create software and applications that help computer and mobile users in daily life. Due to all these reasons, it's really important to learn how to use programming languages in our daily life. CO 6: Programming is important to automate, collect, manage, calculate, analyze processing of data and information accurately.
Under Garduate	B.SC.(Non-medical)	CPL-303	Semiconductor Devices	2012	CO 1: Students would be able to apply and check the results theoretically and experimentally when passive elements are connected to Alternating and Constant source of electromotive force (emf) CO 2: Would be able to understand the role of a semiconductor elements in controlling the applied source of voltage and current and how these elements have brought up a big change after the discovery of transistor as a semiconductor device. CO 3: Would be able to see the effect of positive feedback in generating the oscillations without any prerequisite input and the effect of negative feedback in generating the amplification of input signal as this law of physics is explicitly a consequence of law of nature. CO 4: would be able to meet the course objectives in all respects by orienting teaching and other academic processes adopted by the faculty to facilitate the students to do what they are expected to do.

Under Garduate	B.SC.(Non-medical)	CPP- 308	Physics Lab--III	2012	CO 1: The experiments of this course are framed so as to understand comprehensively the meaning of minute observations and measurements. These experiments are primary lesson to the learners that how essential is the role of measurement in the practical world. CO 2: These experiments have foundation in the theory course of the students in the same year. Therefore, these laboratory experiments are elemental part of the curriculum and helps in improving the widespread knowledge to the students. CO 3: Experiments based on special type of diode provide scientific temperament and an industrial hand to the students and opens a pathway to the manufacturing world related to machinery and vehicles. CO 4: The students by performing the experiments based on current and electricity, learner could realize the many theoretical concepts solenoid, magnetism, frequency of A.C. mains. These experiments provide answer to many queries of the students which is the part of their thoughts so far.
Under Garduate	B.SC.(Non-medical)	CPL-402	Statistical Mechanics	2012	CO 1: This course helps the students to understand the methods of statistical mechanics used to develop the statistics for Bose-Einstein, Fermi-Dirac and photon gases. CO 2: This course helps the students to understand the concept of microstates and macrostates and how the particles are distributed in the system in different states. CO 3: This course helps the students to understand the macroscopic and microscopic description of temperature, entropy and free energy and their descriptions in terms of probabilities. CO 4: This course helps the students to understand the concept of canonical and microcanonical ensemble.
Under Garduate	B.SC.(Non-medical)	CPL-403	Waves and Optics	2012	CO 1: The Students are able to understand and correlate various optical phenomena related to light with practical problems/applications in day-to-day life. CO 2: Analytical treatment of Fourier analysis would establish a bridge that link mathematical equations with their physical aspects and comprehensive recognition with conceptual clarity. CO 3: A different dimension of laws of reflection, refraction and other equations based on them is shown in Matrix methods. These methods results in simplification/alternate of complicated and lengthy equations studied in twelfth class. CO 4: Wave nature of light is described by interference of light and it answers many observations in our daily life. For e.g. : coloration in the soap bubble, fringe patterns observed somewhere and laser phenomena based on coherence of light. Thus, students are able to observe and analyze various naturally occurring phenomena.
Under Garduate	B.SC.(Non-medical)	CPP- 408	Physics Lab--IV	2012	CO 1: The experiments of the Optics branch would assist students to understand and verify the various laws related to the light and optical event which is just a part of theory for them till now. CO 2: By performing the experiments based on current and electricity, learner could realize the many theoretical concepts solenoid, magnetism, frequency of A.C. mains. These experiments provide answer to many queries of the students which is the part of their thoughts so far. CO 3: Use and handling of the sophisticated instruments of the optical phenomena such as telescope and microscope would provide make learner an expert in the field on measurements. CO 4: Besides realizing the fundamental concepts of theory, the laboratory experiments could provide learner a potential to be absorbed in the industrial world.
Under Garduate	B.SC.(Non-medical)	CCL-304	PHYSICAL CHEMISTRY-II: (SOLUTIONS, PHASE EQUILIBRIUM, CONDUCTANCE & ELECTROCHEMISTRY)	2012	CO 1: Understand that every reaction has a unique time of occurrence due to the involvement of different chemical species and with effect of various parameters under observation. CO 2: Apply the kinetic concept in the interdisciplinary field of science and also in the real world. CO 3: Relate to the concept about half-life. CO 4: Enhance their numerical ability by solving numerical from different parameters of these two branches. CO 5: Differentiate between conductance and resistance and how both the terms are related to each other. CO 6: Correlate the factors of acidity and basicity with pH and pKa and apply this knowledge with daily edible products. CO 7: Realize the importance of buffer solutions and which all buffer solutions are used by them on daily basis.

Under Garduate	B.SC.(Non-medical)	CCL-305	ORGANIC CHEMISTRY-III: (FUNCTIONAL GROUP ORGANIC CHEMISTRY-II)	2012	CO 1: Students will understand the need for introducing IUPAC nomenclature for organic compounds and will also be able to write IUPAC nomenclature for different functional groups. CO 2: Students will be able to differentiate between different chemical and physical reactivity amongst organic compounds based on presence of different functional groups. CO 3: Students will be able to learn how alcohols and phenols are two different classes. CO 4: Student will get a thorough learning of the basic concept of UV spectroscopy and how it can be used in organic chemistry to identify the type of electronic transitions, cause for the colour of compounds and their stability.
Under Garduate	B.SC.(Non-medical)	CCP-309	CHEMISTRY LAB-III: (SOLUTIONS, PHASE EQUILIBRIUM, CONDUCTANCE, ELECTROCHEMISTRY & FUNCTIONAL GROUP ORGANIC CHEMISTRY)	2012	CO 1: Experimentation enhances the skills of managing the resources, time and team work. CO 2: Students will be able to function as a member of an interdisciplinary problem solving team. CO 3: Students will be skilled enough to perform gravimetric analysis. CO 4: Students will be forced to think in an inclined manner via performing chemistry experiments. CO 5: Students will be able to detect the presence of extra elements in any given unknown sample, thereby inculcating the concept of logical thinking.
Under Garduate	B.SC.(Non-medical)	CCL-404	INORGANIC CHEMISTRY-II: TRANSITION METALS & COORDINATION CHEMISTRY	2012	CO 1: Knowledge enhancement to understand the geometry of molecules. CO 2: Understanding of the classification of periodic table. CO 3: Recognition of various factors on which the elements are categorized in the periodic table. CO 4: Analysis of the formation and structure of various compounds by varying the chemical composition thereby enhancing their skillfull growth.
Under Garduate	B.SC.(Non-medical)	CCL-405	PHYSICAL CHEMISTRY-III: STATES OF MATTER & CHEMICAL KINETICS	2012	CO 1: Students will be able to relate the basic concept of thermodynamics with their every day world and will understand that how the stability of whole universe is effected with different laws of thermodynamics. CO 2: Students will cater the basic difference between path and state functions. CO 3: Students will understand the concept of entropy and how the whole universe is related to it. CO 4: Students will inculcate the importance of equilibria and how different forms of equilibrium are different from each other and are affected by various external parameters CO 5: Students will be able to calculate thermal efficiency of heat energies and solve problems based on laws of thermodynamics. CO 6: Students will be able to determine the Nernst distribution law and can relate to various factors causing its deviation.
Under Garduate	B.SC.(Non-medical)	CCP-409	CHEMISTRY LAB IV: (TRANSITION METAL & COORDINATION CHEMISTRY, STATES OF MATTER & CHEMICAL KINETICS)	2012	CO 1: Enables to determine the methods for calibration to quantitative analysis. CO 2: Enables to perform graphical analysis for determining experimental results in the laboratory. CO 3: Enables to analyse that how the colour of solution varies its absorption properties. CO 4: Enables to expertly handle the apparatus used in calorimetric experiments.
Under Garduate	B.SC.(Non-medical)	CML 306	Advanced Calculus	2012	CO 1: The students are expected to learn about the basic principles of multi variable calculus with proof. Advanced Calculus is a bridge between Calculus and more advanced real analysis. CO 2: Student will learn Completeness axiom, Archimedean property, Triangle inequality, Convergence of sequence, Sum product and Quotient of convergence sequence. CO 3: Monotonic sequence, Bolzano Weierstrass Theorem, Monotone convergence Theorem, Uniform continuity on a closed and bounded interval, limits of function, Derivative of polynomial, Derivative of inverse function, Chain rule, Mean value theorem, Rolle's theorem.
Under Garduate	B.SC.(Non-medical)	CML 307	Numerical Analysis	2012	CO 1: To provide suitable and effective methods called Numerical Methods, for obtaining approximate representative numerical results of the problems. To solve problems in the field of Applied Mathematics, Theoretical Physics and Engineering this requires computing of numerical results using certain raw data CO 2: To solve complex mathematical problems using only simple arithmetic operations. The approach involves formulation of mathematical models of physical situations that can be solved with arithmetic operations CO 3: To deal with various topics like finding roots of equations, solving systems of linear algebraic equations, interpolation and regression analysis, numerical integration & differentiation, solution of differential equation, boundary value problems, solution of matrix problems.
Under Garduate	B.SC.(Non-medical)	CMP 310	Mathematics Lab-III	2012	Students will be able to make programs based on numerical methodsCo-1 Use of functions Co user defined functions, declarration , calling etc

Under Garduate	B.SC.(Non-medical)	CML 406	Partial Differential Equations & Special Functions	2012	CO 1: PDE describes relations between continuously changing quantities which depends on two or more variables. The main goal of this course is that student should be able to solve Boundary value problem for Laplace equation, Heat equation, wave equation by separation of variables in Cartesian, polar spherical & cylindrical coordinates. CO 2: Students will be able to expand one variable function in series along basis of orthogonal function, for example Fourier series, Bessel's series, Legendre's series. CO 3: They will be able to find weight function, Eigen values and Orthogonal function system (Eigen function for a given strum-Liouville problem and used the Fourier and Laplace Transform as part of solving a Boundary Value Problem.
Under Garduate	B.SC.(Non-medical)	CML-407	Mechanics-I	2012	Students will be able to understand CO-1 forces in 3 dimensions CO2: questions based on power, work and energy CO3: centre of gravity, capler's law, central orbit
Under Garduate	B.SC.(Non-medical)	CML-408	Mathematics Lab IV	2012	Programs based on Numerical methods and finding the errors and order of convergence and developing logics
Under Garduate	B.SC.(Non-medical)	CH 301	Inroganic Chemistry	2013	CO 1: Students will understand the limitations of Valence bond theory (VBT) and how the structures of different compounds were not satisfied with the help of VBT. CO 2: Students will have an idea why crystal field theory (CFT) was introduced. CO 3: Students will know the difference in CFT of octahedral and tetrahedral complexes. CO 4: Students will have a detailed knowledge on magnetic and electronic properties of transition metal complexes. CO 5: Students will have a thorough understanding of stability in metal complexes governed by kinetic and thermodynamic parameter.
Under Garduate	B.SC.(Non-medical)	CH 302	Physical Chemistry	2013	CO 1: Students understand the need of quantum mechanics and shortcomings of classical mechanics. CO 2: Students acquire quantitative knowledge of operators in quantum mechanics corresponding to classical observables. CO 3: Students acquire adhere descriptive attitude for probabilities, postulates, wave functions and expectation values. CO 4: Students acquire extensive knowledge about spectral information. CO 5: Students acquire skills of understanding molecular spectroscopy, qualitative and quantitative description of vibrational, rotational and Raman spectra that plays key role in research.
Under Garduate	B.SC.(Non-medical)	CH 303	Organic Chemistry	2013	CO 1: Students will have the knowledge of principles of spectroscopy. CO 2: Will have hands on training on structure determination of organic compounds using spectroscopic techniques. CO 3: Will be able to understand that how NMR spectroscopy can be used to identify unknown compounds CO 4: Will be able to classify different carbohydrates based on their structural and positional composition. CO 5: Will understand the nature of metal-carbon bond present in organic compounds. CO 6: Will understand the mode of action of different organic reagents because of the presence of different metals in them. CO 7: Will understand the nature of action of reagents depend on the nature of metal-carbon bond. CO 8: Will be able to acknowledge the use of organometallc compounds in biological systems and chemical reactions.
Under Garduate	B.SC.(Non-medical)	CH 304	Inorganic Chemistry	2013	CO 1: Students will be able to relate the basic difference between acids and bases. CO 2: Students will be able to cater this theoretical knowledge of acid-bases into practical world. CO 3: Students will have an insight idea of the composition of biomolecules. CO 4: Students will learn about the roles of metal ions in different physiological processes. CO 5: Students will be able to relate to the compounds of silicon and phosphorous and applications of these compounds specially in greases.

Under Garduate	B.SC.(Non-medical)	CH 305	Physical Chemistry	2013	CO 1: Students will be familiarized with the electronic spectral properties of different compounds and how these properties affect the nature of compounds. CO 2: Students will have a detailed idea of interaction of electromagnetic radiations with matter. CO 3: Students will have a thorough knowledge of different types of solutions, on what factors the miscibility of different solutions depend, how colligative properties are related to different solutions, difference between ideal and non-ideal solutions. CO 4: Will learn about the concept of phase equilibria and how phase equilibrias of two components are related. CO 5: Will possess the skills to solve problems within broader context related to field of photochemistry. CO 6: Will be capable of analyzing the impact of photochemistry in sustainable development to help society.
Under Garduate	B.SC.(Non-medical)	CH 306	Organic Chemistry	2013	CO 1: Students will be introduced about heterocyclic compounds in organic chemistry. CO 2: Will be explained that how introduction of heteroatom amongst cyclic hydrocarbons change the properties of entire compounds. CO 3: Will be given an idea of the application part of organic chemistry i.e. how they can use their theoretical knowledge into the real world. CO 4: Will be taught about proteins, how they are formed from their smallest monomers amino acids and how arrangement of different amino acids changes the basic composition of proteins and peptides. CO 5: Will be able to differentiate between primary and secondary structure of proteins. CO 6: Will be able to describe the advantages of heterocyclic compounds in materials and pharmaceutical chemistry. CO 7: Will be able to explain the synthesis and applications of industrially important polymers that find use in everyday life.
Under Garduate	B.SC.(Non-medical)	CH 307	Chemistry (Practicals)	2013	CO 1: Students will have a comparative knowledge of different types of chromatography. CO 2: Students can relate that how Rf values determine separation. CO 3: Students will have a vast idea of different types of salts and the factors on which they are categorized into different groups. CO 4: Students will be able to categorize and maintain a detailed record differentiating different radicals on the basis of different factors. CO 5: Students will be able to apply the theory of common ion effect in the precipitation of compounds.
Under Garduate	B.SC.(Non-medical)	PH 501	Quantum and Laser Physics	2013	CO 1: This course helps student to understand the basic and fundamental concepts of quantum mechanics in terms of its evolution and its applications CO 2: It helps student to differentiate between the two states of electrons i.e. free and bound and the outcome when a radiation of suitable wavelength falls on it CO 3: It also throws light on the co-existence of particle and wave nature of matter particles and their applications in photoelectric effect and Compton effect (particle nature) and interference, diffraction, polarisation (wave nature) CO 4: It also explains the meaning of uncertainty in Physics and how it can be applied to explain various phenomenon of nuclear physics i.e. existence of protons and neutrons and non-existence of electrons in nucleus, how to find the radius of Hydrogen atom CO 5: This course also explains the behaviour of a free and bound particle in terms of Schrodinger equation and explains the role of potential by way of its applications such as potential barrier, particle in a box. It makes student to understand the concept ot tunnelling, reflection and transmission probabilities at different energies of the particle.

Under Garduate	B.SC.(Non-medical)	PH 502	Nuclear Physics	2013	CO 1: Nuclear Physics is a wonderful course having a great relevance to current scenario in terms of research, be it the material science or nuclear science or polymer or nuclear energy etc. all around the world, because this course helps students to have a deep understanding of basic and fundamental concepts of nucleus in terms of its composition (i.e. mass, charge and size), its stability (i.e. binding energy) and various properties (nuclear spin, parity, magnetic and electric dipole moment etc.) and various nuclear reactions. CO 2: This course enables the students to study the various experimental methods for the acceleration of charged particles (LINAC, Cyclotron, Betatron, etc.), interaction of charged particles (such as Alpha and Beta particles) and Gamma radiations with matter and their detection (G.M. Counter, semi-conductor detector, etc.) and understand the energy loss mechanism of various particles which is most useful when the student goes for higher studies and opt for research. CO 3: It also helps student to understand the concept of energy emission during a nuclear chain reaction (fission or fusion reaction) and the management of this energy for either the useful purpose (i.e. nuclear reactors) or the destructive purpose (i.e. nuclear bomb).
Under Garduate	B.SC.(Non-medical)	PH 601	Solid State and Nano Physics	2013	CO 1: This course (solid state physics) gives an extended knowledge of the principles and techniques of solid state physics. The course covers the physical understanding of matter from an atomic view point. CO 2: It helps us in determining the structures by diffraction (X-rays method) CO 3: Graduates may pursue careers in applied research or education and work in a variety of industries such as aerospace, engineering and in government laboratories.
Under Garduate	B.SC.(Non-medical)	PH 602	Atomic and Molecular Spectroscopy	2013	CO 1: After studying this course students are able to analysis different spectrums of alkali atoms. CO 2: The effect of electric and magnetic fields on alkali atoms spectrums is also analyzed and studied. CO 3: Students are also able to analyze the Raman Effect which gives insight into irrational and rotational energies. CO 4: The students get in-depth knowledge of He-Ne and RUBY laser, different type of coherence. They can design simple lasers after studying this course.
Under Graduate	B.SC.(Non-medical)	PH 602 (P)	Physics Lab	2013	CO 1: The computer programming would help students to get familiar with software skills. It not only develops a skill in the students but also opens up another way to the students after completing their graduation course. CO 2: The experiments of electricity such as Transistor, Amplifier, Oscillator would assist students to recognize and verify the various laws related to the electricity which is just a part of their imagination till now. CO 3: To make use of and handling of the sophisticated optical instruments such as G M Counter would provide learner an expertise in the field of measurements. CO 4: In addition to realize the fundamental concepts of theory, the laboratory experiments could make available learner a potential candidate to be absorbed in the industrial world.
Under Graduate	B.SC.(Non-medical)	BM 351	Mathematics (Real Analysis)	2013	CO 1: Student will be able to define and recognize the basic properties of real numbers and improve an outline logical thinking. CO 2: They will be able to define and understand the series of real numbers and their convergence. Students will be able to use the Bolzano Weistrass Theorem. CO 3: Recognition and knowledge of basic topological properties of real numbers. Understanding of real functions and its limits. CO 4: Understanding of continuity of real functions and differentiability of real functions with its related theorems.
Under Graduate	B.SC.(Non-medical)	BM 352	Mathematics (Groups and Rings)	2013	CO 1: Students will be able to learn the meaning and properties of Groups, Subgroups, Lagrange's theorem, Cauchy's theorem, Cyclic Groups. CO 2: Students will have understanding of Cosets, Quotient groups, Homomorphisms, Isomorphism, Automorphism, inner automorphism of cyclic groups, Cayleys theorem, centre of a group and derived subgroup of a group. CO 3: Recognition of Rings, Sub rings, Integral domain and fields, characteristics of a ring, ring of homomorphism, ideals and quotient rings. CO 4: Understanding Euclidean rings, Polynomial rings, Polynomial over rational field, Eisenstein's criteria.

Under Graduate	B.SC.(Non-medical)	BM 353	Mathematics (Numerical Analysis)	2013		CO 1: Application of numerical methods (such as Bisection, False position, Newton-Raphson) to solve nonlinear equations. Computation of the errors and the rates of convergence CO 2: Recognize Iterative methods (Jacobi –Gauss Seidel). Analyze the Finite difference-Forward and backward difference table. Construct numerical methods to solve ordinary differential equations CO 3: Apply the Interpolation methods (Newton forward and backward difference interpolation formula-Lagrange interpolation formula) for solving the problems numerically. CO 4: The student should be shown the ability of working independently and with groups.
Under Graduate	B.SC.(Non-medical)	BM 361	Mathematics (Real & Complex Analysis)	2013		CO 1: Develop an in-depth mathematical understanding of the theory of calculus. Read mathematical results and proofs as well as formulate her own proofs to various problems. CO 2: Use and explain the importance of the axioms of real numbers the definition of convergent and divergent sequences the definition of the limit of a function at a point the definition of continuity the definition of the derivative the definition of the Riemann integral. CO 3: Perform basic mathematical operations (arithmetic, powers, roots) with complex numbers in Cartesian and polar forms. Determine continuity/differentiability/analyticity of a function and find the derivative of a function. Work with functions (polynomials, reciprocals, exponential, trigonometric, hyperbolic, etc) of single complex variable and describe mappings in the complex plane.
Under Graduate	B.SC.(Non-medical)	BM 362	Mathematics (Linear Algebra)	2013		CO 1: To understand model and systematically solve systems of linear equations using matrix notation. Demonstrate factual knowledge of the fundamental concepts of spanning, linear independence, and linear transformations CO 2: Use of matrix algebra to analyze and solve equations arising in many applications that require a background in linear algebra. Utilize vector space terminology and describe how closely other vector spaces resemble R^n CO 3: Dissect the action of a linear transformation into elements that are easily visualized using the basic concepts of eigenvectors and eigen values.
Under Garduate	B.SC.(Non-medical)	BM 363	Mathematics (Dynamics)	2013		CO 1: Students will be able to draw the free-body diagram for a particle or for a rigid body in plane motion. Students will be able to understand the basic concepts of force, mass and acceleration, of work and energy, and of impulse and momentum. CO 2: Students will be able to apply these three basic methods and to understand their respective advantages. Students will be able to explain the geometry of the motion of particles and plane motion of rigid bodies. CO 3: Students learn to apply the principles of static equilibrium to particles and rigid bodies. Students learn to analyze truss and frame structures. Students apply the principles of equilibrium for analyzing beams. Students analyze problems involving frictional forces. Students learn to draw shear force and bending moment diagram CO 4: Students analyze planar rigid body kinematics and kinetics. Students learn to write technical laboratory reports. Students apply measurement techniques and formulate experiments based on laboratory handouts.
Under Graduate	B.COM.	BC 101	Financial Accounting-I	2003	After completing 3 years for Bachelor in Commerce, students would gain a thorough grounding in the fundamentals of Commerce and Finance and the outcome will be PO1: Building a strong foundation of knowledge in different areas of Commerce. PO2: Developing the skill of applying concepts and techniques used in Commerce PO3: Inculcating an attitude for working effectively and efficiently in a business environment PO4: Integrating knowledge, skill and	CO 1: Enables the students to recognize and understand ethical issues related to accounting profession. CO 2: Provide knowledge of the accounting cycle and various accounting principles to students. CO 3: Develop the ability to evaluate financial results through examination of relevant data. CO 4: Impart knowledge of the role of accounting profession in society and participation in accounting society
Under Graduate	B.COM.	BC 102	Micro Economics	2003		CO1. Develop ideas of the basic characteristics of Indian economy, its potential on natural resources. CO2. Understand the importance, causes and impact of population growth and its distribution, translate and relate them with economic development. CO3. Grasp the importance of planning undertaken by the government of India, have knowledge on the various objectives, failures and achievements as the foundation of the ongoing planning and economic reforms taken by the government. CO4. Understand agriculture as the foundation of economic growth and development, analyse the progress and changing nature of agricultural sector and its contribution to the economy as a whole. CO5. Not only be aware of the economy as a whole, they would understand the basic features of Mizoram's economy, sources of revenue, how the state government finance its program and projects

Under Graduate	B.COM.	BC 103	Principles of Business Management	2003	attitude that will sustain an environment of learning and creativity among the students	CO 1: Helps the students to apply conceptual learning skills in today's business Environment. CO 2: Enables the student to understand the concept of management and its functions. CO 3: Develop the ability to perform managerial functions effectively. CO 4: Encourage students to seek career in management.
Under Graduate	B.COM.	BC 104	Computer applications in business	2003	PO5: Enabling graduates to be capable of making decisions at personal and professional level PO6: Making them capable of managing the office activities with the help of information technology PO7: Preparing them understanding the impact of the various accounting procedures and solutions in societal and business-environment contexts, and their sustainable development	CO1: Demonstrate a basic understanding of computer hardware and software, how to assess hardware, solve problems using computer software, doing business online, and the inner workings of the Internet. CO2: Describe the features and functions of the major categories of applications software (word processing, database, spreadsheet, presentation) CO3: Create and format text in various communication forms, to create presentation, application of excel in business and how to work with databases. CO4: Demonstrate the concepts of Tally ERP.9 Software, to create company, journal entries, and financial statement.
Under Graduate	B.COM.	BC 105	Business Mathematics-I	2003		CO1: Helps the students in understanding and use of Sets in daily life problems. CO2: Enable the students to solve complicated arithmetic expressions using log tables. CO3: Enable the students to arrangement & selection of the data regarding the Permutation and combination, Arithmetic and Geometric Progression in daily life problems. CO4: Helps the students to collect & interpret the data
Under Graduate	B.COM.	BC 106	Business Communication	2003		CO1: Students grab highly effective communication skills and a sense of confidence. CO2: They learn about listening, speaking, writing and reading skills CO3: They also learn to draft various forms of business letters and how to prepare a report, notice, memos and minutes of a meeting CO4: They learn about presentation skills; how to be more effective while communicating with others either formally or informally
Under Graduate	B.COM.	BC 201	Financial Accounting-II	2003		CO 1: Provides increased exposure to fraud and define preventive internal control measures. CO 2: Impart critical thinking skills to analyze financial data as well as the effects of different financial accounting methods on the financial statement. CO 3: Enable the students to experience real world learning and application of skills via their internship. CO 4: Demonstrate an understanding of current auditing standards and acceptable practices.
Under Graduate	B.COM.	BC 202	Macro Economics	2003		CO1. Define and explain the process of calculating national income, identify its components, demonstrate circular flow of income, analyse the various income identities with government and international trade, define the concept of green accounting. CO2. Understand Say's law of market, classical theory of employment and Keynes objection to the classical theory, demonstrate the principle of effective demand and income determination. CO3. Explain the meaning of consumption function, relationship between APC and MPC, consumption and income, concept of multiplier and analyse the theories of absolute and relative income hypotheses. CO4. Understand the relationship between investment and savings, demonstrate investment multiplier, and understand the meaning of MEC and MEI. CO5. Illustrate the meaning of interest, analyse the various theories of interest
Under Graduate	B.COM.	BC 203	Fundamentals of marketing	2003		CO1: Students gain knowledge about the concepts of Marketing and understand Modern Marketing Concept in detail. They get an insight into the Marketing Environment, Consumer Behaviour and how market segmentation is done. CO2: They learn to know about the development of product, various stages of product life cycle, various strategies of branding and packaging and why do new products fail? CO3: Students gain complete knowledge about the various Methods of Pricing and Price and Non-Price war and various elements of Marketing Research and Marketing Information System. C04: Students can acquire knowledge about various concepts of place and sales force decisionchannel mix, alternative channel, sales organization etc and about various tools of sales promotion and its importance-Advertisement, personnel selling, publicity. CO5: They acquire an understanding of the new concepts of marketing: CRM and Supply Chain Management.

Under Graduate	B.COM.	BC 204	E-Commerce	2003	CO1: Demonstrate an understanding of the foundations and importance of E-commerce CO2: Demonstrate an understanding of retailing in E-commerce. CO3: Analyze the impact of E-commerce on business models and strategy CO4: Recognize and discuss global E-commerce issues CO5: Demonstrate the application of appropriate e-commerce technologies. CO6: Communicate effectively and ethically using electronic media
Under Graduate	B.COM.	BC 205	Business Mathematics-II	2003	CO 1: Enable students to analyze real world scenarios to recognize when simple and compound interest, annuities, payroll preparation, pricing and depreciation are appropriate, formulate problems about the scenarios, creatively model these scenarios. CO 2: Enable students to demonstrate the ability to think critically, research, and reason. CO 3: Will help students to gain the ability to analyze data and draw appropriate statistical conclusions. CO 4: Will demonstrate an understanding of the common body of knowledge in mathematics.
Under Graduate	B.COM.	BC 206	Business Environment of Haryana	2003	On completion of this course, learners will be able to: 1. Familiarize with the nature of business environment and its components specially focussed to haryana. 2. The students will be able to demonstrate and develop conceptual framework of business environment and generate interest in businesses of Haryana. 3. Understand the definition of ethics and the importance and role of ethical behavior in the business world today.
Under Graduate	B.COM.	BC 207	Environmental studies	2003	CO1: Students learn about the basics of environment, what are renewable and non-renewable resources and how to make their optimised use. CO2: Students get knowledge of the various types of ecosystems and also an insight ito factors, types and ways of controlling environmental pollution. CO3: Students learn various social issues and their relation with environment like sustainable development, urban problems related to energy, water conservation, rain water harvesting, and watershed management CO4: Students learn about the various legislative mechanisms to prevent environmental pollution like Environment Protection Act, Air (prevention and control of pollution) Act, Water (prevention and control of pollution) Act, Wildlife Protection Act etc.
Under Graduate	B.COM.	BC 301	Corporate Accounting-I	2004	CO 1: Enables student to understand the accounting treatment of issue of shares and issue of bonus shares. CO 2: Help the students in understanding the regulatory environment in which the Companies are formed and operate in India. CO 3: Encourage the students to account for a range of advanced financial accounting issues. CO 4: Develop the ability to analyze complex issues related to profit or loss before and after incorporation.
Under Graduate	B.COM.	BC 302	Business Statistics-I	2004	CO 1: Enable students to make use of diagram like histogram, bar diagrams, ogive curve in the business field . CO 2: Develop student's ability to analyze the problem like age groups , based on marks of students . CO 3: Encourage students to analyze data and draw appropriate statistical conclusions. Students are able to analyze the problems based on two different groups by using moments, kurtosis. CO 4: Enable students to describe the problems based on assumptions by using probability
Under Graduate	B.COM.	BC 303	Business Laws-I	2004	CCO 1: Provide a brief idea about the framework of Indian Business Law and the essential provisions of Indian Contract Act 1872. CO 2: Will understand the meaning and the importance of contingent contracts and the consequences of breach of contract. CO 3: Impart knowledge of the consumer protection act 1982. CO 4: Demonstrate recognition of the requirements of the contract agreement.
Under Graduate	B.COM.	BC 304	Company law-I	2004	CO 1: Enable students to describe the basic rules and concepts of Corporate Law. CO 2: Help students evaluate corporate problems, identifying appropriate legal obligations Duties, rights and remedies. CO 3: Develop an awareness of the socio-legal and economic dimensions of modern corporate law. CO 4: Encourage students to critically appreciate the important role of corporations and corporate law in modern society

Under Graduate	B.COM.	BC 305	Indian Financial System	2004	CO1: Demonstrate knowledge and understanding of the Indian Financial System. CO2: Develop an understanding of the meaning and characteristics of money market. CO3: Gain knowledge of the Capital market and the secondary market. CO4: Comprehend and categorise the relevance of various banking institutions. CO5: Develop communication and presentation skills for analysis of IFS
Under Graduate	B.COM.	BC 306 (i)	Rural Marketing	2004	CO1: Identify the challenges and opportunities in the field of rural marketing for the promising managers and also expose the students to the rural market environment and the emerging challenges in the globalization of the economies. CO2: To acquaint the students with the appropriate concepts and techniques in the area of rural marketing. CO3: Apply adaptations to the rural marketing mix (4 A's) to meet the needs of rural consumers. CO4: Understand the concept and methodology for conducting the research in rural market.
Under Graduate	B.COM.	BC 401	Corporate Accounting-II	2005	CO1: Helps in understanding the regulatory environment in which the companies are formed and operate in India. CO2: Enable the students to prepare the financial statements of a company. CO3: Encourage the Students to account for a range of advanced financial accounting issues. CO4: Enable the students to analyze complex issues related issue of shares, debentures and redemption of shares and debentures, to formulate well reasoned and coherent arguments and to reach well considered conclusions.
Under Graduate	B.COM.	BC 402	Business statistics -II	2005	CO 1: Enable students to make use of diagram like histogram, bar diagrams, ogive curve in the business field . CO 2: Will be able to use the mean , median and mode in the field of business. CO 3: Help students in analyzing data and drawing appropriate statistical conclusions. CO 4: Encourage students to seek career opportunities in the field of Statistics.
Under Graduate	B.COM.	BC 403	Business Laws-II	2005	CO 1: This course will help the students to demonstrate the relationship between law and Economic activity by developing in the student an awareness of legal principles. CO 2: Enable the students to develop acceptable attitudes and view points with respect to business ethics and social responsibility. CO 3: Enable the students to come in contract according to Sale of Goods act 1930. CO 4: Helps the students to aware from the unfair trade practices by the seller and also provide the information regarding the customer support services.
Under Graduate	B.COM.	BC 404	Company law-II	2005	CO 1: Will help the students to know about the basic structure of the company. CO 2: Enable the students to understand legal process regarding company establishment. CO 3: Enhancing the knowledge about the various investment plan opportunities. CO 4: Provide helps to know about the corporate constitution.
Under Graduate	B.COM.	BC 405	Computerized Accounting System	2005	CO1: students will be able to know the basics of Outsourcing. CO2:students will be able to differntiate Manual Accounting System and Computerised Accounting System CO3: to know the benefits of Computerised Accounting System. CO4:to well verse with the Accounting Software i.e Tally9.
Under Graduate	B.COM.	BC 406 (i)	Advertising	2005	CO1: Demonstrate an understanding of the overall role advertising plays in the business world. CO2: Demonstrate an understanding of advertising strategies and budgets. CO3: Identify and understand the various advertising media. CO4: Demonstrate an understanding of how an advertising agency operates.
Under Graduate	B.COM.	BC 501	Cost Accounting	2006	CO1: Will helps the students in understanding the concepts of cost and cost accounting. CO2: Enrich the knowledge of the students regarding the cost determination. CO3: Encourage the students to pursue accounting in the field of cost. CO4: Enable the students to calculate the costs of goods as well as services.
Under Graduate	B.COM.	BC 502	Financial Management	2006	CO 1: Will help the students to develop the ability to analyze complicated financial problems. CO 2: Enable the students to work in the field of finance successfully. CO 3: Will help the students to demonstrate ability of financial management and forecast. CO 4: Encourage students to acquire research skills, innovation and course in financial management. This course will help the students to increase their added value in the changing environment of global economy.

Under Graduate	B.COM.	BC 503	Goods and Services Tax	2006	CO1: To enable the students to learn the concepts indirect tax and GST from the pre-GST period to post- GST period. CO2: To understand the importance of indirect taxes (GST) in the Indian and global economy and its contribution to the economic development. CO3: To comprehend the principles of taxations, objectives of taxes and its impact, shifting and incidence process of indirect taxes in the market orientated economy. CO4: To understand the implications of GST on the taxable capacity consumers, dealers and of the society at large and its changes. CO5: To make them to be a tax consultant in preparing the tax planning, tax management. CO6: Payment of tax and filing of tax returns.
Under Graduate	B.COM.	BC 504	Income Tax-I	2006	CO1: to understand the meaning of tax and its types. CO2: to understand the meaning of tax management and tax planning. CO3: Will help the students to know about various basic concepts used in Income tax Act. CO4: Enable the students to know that how to calculate the income tax under the various heads. CO5: Familiarize the students about deductions under section 80C TO 80U. CO6: Enable the students to calculate the individual tax liability and company's tax liability. CO7: Enable the students to file Income Tax Return.
Under Graduate	B.COM.	BC 505	Auditing	2006	CO1: Demonstrate knowledge and understanding of the concepts of Auditing - the statutory, technical, standards and ethical standards. CO2: Demonstrate knowledge and understanding of the concepts of Corporate Governance, the reformations required, the codes and standards for good governance. CO3: Have the skill to make analysis and applications of the legal implications to everyday living and business activities. CO4: Cause awareness and practice highest level of professional ethics and integrity in Auditing, Corporate Social Responsibility and Corporate Governance. CO5: Communicate effectively on all matters related to the particular subject.
Under Graduate	B.COM.	BC 506 (i)	Supply Chain Management	2006	CO1; Students will be versed with Means of Transport CO2: Students will be able to analyse the factors affecting the choice of transport. CO3: Students will be able to undersatnd the Information technologies used in supply chain management. CO4: Students will be able to understand the various design options in supply chain CO5; Students will be able to locate the hindrances and suggest remedy in supply chain.
Under Graduate	B.COM.	BC 601	Management Accounting	2006	CO 1: Encourage students to acquire knowledge and skills relating to the application of Management Accounting concepts and techniques. CO 2: Provides students with an understanding of management accounting concepts related to the management functions. CO 3: Enable students to apply management accounting tools for pricing, budgetary Control, Cost Allocation, and performance evaluation. CO 4: Will learn to co-operate with team members to assume leadership and manage Differences and conflicts.
Under Graduate	B.COM.	BC 602	Fundamentals of Insurance	2006	CO1: Apply the basic insurance knowledge and skills to his/her workplace. CO2: Operate as lower level officers with insurance firms or run an insurance agency. CO3: Acquire technical and practical skills needed in building careers in the insurance industry CO4: Acquire knowledge selling, investigating and underwriting insurance business functions in the workplace. CO5: Gain the necessary business ethics with special reference to the insurance industry.
Under Graduate	B.COM.	BC 603	Human Resources Management	2006	CO1: Students get introduced to Concept and vitality of HRM. CO2: They learn details about basic process under HRM. CO3: Students learnt about wages and salary administration. CO4: Students know about importance of health and safety of employees at work. CO5: Students come to know about different method of settling industrial disputes.
Under Graduate	B.COM.	BC 604	Income Tax-II	2006	CO1: to verse with the provisions relating to set-off, carry forward of losses and clubbing of income. CO2: to know the powers of income tax authorities. CO3: Provide helps in addressing tax situations for a variety of taxpayers, such as wage earners, salespersons etc. CO4: Enable the students to calculate the individual tax liability and company's tax liability. CO5: to acquaint with the concept of advance tax, TDS and TCS etc.

Under Graduate	B.COM.	BC 605	Business Environment	2006		CO1: Students gain knowledge about the concepts Business Environment and its components and an insight into the Economic Reforms since 1991 and growth of Public and Private Sector. CO2: Learn to know about the Development and Patterns of Industrial Growth since 1991 and trends in Globalization, Privatization and Liberalization. CO3: Students gain complete knowledge about the various types of Development Banks and role of SEBI in regulation of Stock Exchanges; various challenges faced by Public Sector Banks and growth of NBFCs. C04: Students acquire knowledge about Trends and Patterns in Foreign Trade and India's Overseas Investments; role of MNCs, WTO, IMF etc. on Indian Business Environment.
Under Graduate	B.COM.	BC 606 (i)	Retail Management	2006		CO1: Explain the design, implementation and assessment of retailing strategies based on consumer needs based on consumer's needs and market changes. CO2: To be able to know the factors affecting Retailing. CO3: To know the importance of retailing Strategies.
Under Graduate	B.A.	HPE 101	Health & Physical Education	2015	PO 1. The students acquire knowledge in the field of social sciences, literature and humanities which make them sensitive and sensible enough. PO 2. The B.A. graduates will be acquainted with the social, economical, historical, geographical, political, ideological and philosophical tradition and thinking. PO 3. The program also empowers the graduates to appear for various competitive examinations or choose the post graduate programme of their choice. PO 4.The B. A. program enables the students to aquire the knowledge with human values framing the base to deal with various problems in life with courage and humanity. PO 5. The students will be ignited enough to think and act over for the solution of various issues prevailed in the human life to make this world better than ever. PO 6. Programme provides the base to be the responsible citizen.	1. Meaning, Definition and Scope of Physical Education. 2. Relationship of Physical Education with General Education. 3. Aim, Objectives and Importance of Physical Education in Modern Society. 4. Misconceptions regarding Physical Education. 5. Meaning, Definition and Importance of Health. 6. Factors Influencing Health. 7. Meaning and Importance of Personal Hygiene. 8. Hygiene of various Body Parts and Factors Influencing Personal Hygiene. 9. Yoga - Meaning, Concept & Historical Development. 10. Types of Yoga. 11. Importance of Yoga in Healthy Living. 12. Pranayam – Meaning, Types and their Benefits. 1 Meaning and Definition of Human Anatomy and Physiology 13 Importance of Human Anatomy and Physiology in Physical Education. 14 Definition of Cell, Tissue, Organ and System. 15 Structure and Properties of Cell.
Under Graduate	B.A.	HPE(P) 102	Health & Physical Education (Practical)	2015		. Assans : Any three out of following six asanas : 10 Marks 1. Padmasana 2. Vajrasana 3. Tadasana 4. Padahastasana 5. Sarvangasana 6. Bhujangasana Ground Specifications, General Rules & General Skills of following games : 1. Kho-Kho 2. Badminton 3. Kabaddi 2. Athletic Track - Marki
Under Graduate	B.A.	HPE 103	Health & Physical Education	2015		CO1. Definition, Aim, Objectives and Scope of Health Education. CO2. Importance of Health Education in Modern Society. CO3. First Aid: Meaning, Aim, Objectives and General Principles of First Aid.CO 4. First Aid for Common injuries – Bleeding, Burns, Electric Shock, Drowning and Snake Bite. Historical Prospects of Physical Education CO5. Pre-independence and Post – Independence Historical Development of Physical Education in India.. CO 6 Role of IOA, SAI, NSNIS and YMCA in the Development of Physical Education and Sports in India. 3. Sports Policy of Haryana State. CO7. National Sports Policy CO8: Introduction to Physical Fitness 1. Meaning, Definition and Importance Physical Fitness.. CO9. Components and Principles of Physical Fitness. 3. Factors Influencing of Physical Fitness. CO10. Meaning of Isometric, Isotonic and Isokinetic Exercises. Introduction to Human Anatomy and Physiology 1. Anatomy of Human Bone 2. Types and Function of Bones in Human Body 3. Meaning and Types of Joints in Human Body 4. Types of Synovial Joints in Human Body.
Under Graduate	B.A.	HPE(P) 104	Health & Physical Education (Practical)	2015		1. Name and Identification of Bones in Human Body : 2. Athletics: Measurements & Basic Techniques of all Throwing Events and Basic Technique of all types of starts, with marking of Athletic Track.
Under Graduate	B.A.	HPE 201	Health & Physical Education	2016		CO 1 Concept of Safety Education 1. Meaning, need and importance of Safety Education 2. Sports Injuries: Types and causes 3. Principles for prevention of sports Injuries. 4. General treatment for common sports injuries i.e Abrasion, Contusion, Sprain , Strain, Fracture and Dislocation of jointsCO5 Common Diseases 1. Meaning of Communicable and Non – Communicable diseasesCO6. Modes of transmission, prevention and control of communicable diseases. CO7Common diseases: HIV/ AIDS, Hepatitis, Dengue, Typhoid, Malaria and InfluenzaCO8. Allergy related diseases: Asthma and SinusesCO9 Concept of Balanced Diet 1. Balanced Diet: Meaning and importance 2. Components of balanced diet and their sources 3. Factors affecting balanced diet 4. Harmful effects of Junk Food CO10Anatomy and Physiology of Body System 1. Circulatory System: Structure of Heart 2. Functioning of Heart 3. Types of Circulation: Systemic and Pulmonary 4. Effects of exercise on Circulatory System.
Under Graduate	B.A.	HPE(P) 202	Health & Physical Education (Practical)	2016		CO1 Measurement of Body Mass Index (Normal Range of B.M.I for Children, Women and Men)

Under Graduate	B.A.	HPE 203	Health & Physical Education	2016
Under Graduate	B.A.	HPE(P) 204	Health & Physical Education (Practical)	2016
Under Graduate	B.A.	HPE 301	Health & Physical Education	2017
Under Graduate	B.A.	HPE(P) 302	Health & Physical Education (Practical)	2017
Under Graduate	B.A.	HPE 303	Health & Physical Education	2017
Under Graduate	B.A.	HPE(P) 304	Health & Physical Education (Practical)	2017
Under Graduate	B.A.	HIS 101	Histroy : Ancient India (From Earliest Times to Gupta Age)	2003
Under Graduate	B.A.	HIS 103	Histroy :History of India (600-1526 A.D.)	2003

CO1 Warming Up and Cooling Down: 1. Meaning, types and significance of warming up 2. Meaning, types and significance of cooling down. 3. Methods of warming up and cooling down. 4. Physiological aspects of warming up and cooling down CO2Psychological aspects of Physical Education: 1. Meaning of Psychology and sports Psychology 2. Need and importance of sports psychology 3. Learning: meaning and laws 4. Learning curve CO3 Major Sports Events 1. Ancient Olympic Games 2. Modern Olympic Games 3. Asian Games 4. Common Wealth Games CO4 IV Anatomy and Physiology of Human Body System 1. Structure of Respiratory Organs. 2. Physiology of respiratory System. 3. Effect of exercise on respiratory System 4. Terminology of respiration: Tidal Volume, Residual Volume and Total Lung Capacity.
1CO1 (With ground specifications, general rules and general skills) 1. Basketball 2. Foot ball 3. Kabaddi 3. Athletics: (10 + 10) Marks Discus throw and Long Jump (Specifications, general rules and general skills)
Unit -I Growth & Development 1. Meaning and definition of Growth and Development 2. Stages of Growth and Development. 3. Principles and factors influencing growth and development 4. Age and sex difference in relation to physical activities and sports Unit – II Concept of Sports Organization and Administration 1. Meaning and importance of organization and administration in Physical Education and Sports 2. Principles of sports organization and administration 3. Organization and administration of Intramural and Extramural activities 4. Tournaments and their types (League and Knock out) Unit – III Concept of Posture 1. Meaning of posture and importance of good posture 2. Causes of poor posture 3. Symptoms and causes of Postural Deformities: Lordosis, Kyphosis, Scoliosis, Flat Feet, Knock Knee and Blow Legs. 4. Precautions and Remedies for postural deformities Unit-IV Anatomy and Physiology 1. Gross Anatomy of muscle, Types of Muscles in human body 2. Effects of exercise on Muscular System 3. Composition of Human Blood 4. Functions of Blood
1. Pranayam: 10 Marks a) Bhramari b) Anulom Vilom c) Kapal Bhati 2. Any one Game of the following 10 Marks
Unit-1 Concept of Motivation and Socialization 1. Meaning and definition of motivation. 2. Types of motivation and importance of motivation in sports. 3. Meaning of Socialization and Socialization through sports. 4. Effect of social behavior on performance of sports person. Unit- II Concept of Sports Training and Doping 1. Meaning and definition of sports training 2. Factors affecting sports training 3. Types of sports training: Circuit training, Interval Training and Continuous Training 4. Doping: Meaning, types and its effects on health. Unit – III Concept of Sports Biomechanics 1. Meaning and definition of sports biomechanics 2. Importance of Biomechanics in Sports 3. Newton's Laws of motion and their application in sports 4. Levers: Meaning, types and their application in Sports Unit – IV Anatomy and Physiology 1. Organs of Digestive System 2. Structure of Digestive System 3. Mechanism of food digestion 4. Effects of exercise on Digestive System.
(Ground Specifications, General rules and General Skill) a) Volleyball b) Hockey c) Judo/Boxing/Wrestling/Self-defense tactics 3. Tying of different types of Bandages and Arm Slings. 10 Marks 4. First Aid 10 Marks (First aid for different injuries and circumstances, items of First aid box and their uses)
CO 1: The students will identify and describe the emergence of the earliest civilizations in India: the Harappan and Aryan societies in the Indian sub-continent. CO 2: They will Identify and analyze the Buddhist and Vedic (Hindu) faiths. CO 3: They would be able to analyze the emergence of the Mauryan and Gupta empires during the —classical age in India. CO 4: Will enable students understand the maps of important sites of Harappan Civilization, extent of Ashoka's Empire and Pillars Edicts, Ports, Trade routes of Ancient India, Extent of Kanishka' Empire & Extent of Harshavardhana's Empire
The course enlightens the students on the social developments in India from the Gupta to the early medieval periods. • It teaches the analyzation of • the economic conditions of India during the said period. • The course inculcates to the students, the political and cultural development of the said period. • The course introduced to the students, the elements of change and continuity over time and space, particularly from the period of Gupta to Sultanate. • The course introduced the method of historiographical studies to the students

Under Graduate	B.A.	HIST 201	Histroy :Political History of India (1526 – 1857 A.D.)	2004	• The course provides an overview of the main trends and developments in India during the Mughal period (1526-1757). • The course gathered, organized and reinterprets the existing sources, both primary and secondary. • The course acquainted the students the knowledge of socioeconomic and political history, focusing on the continuity and change from the Hindu to the Muslim period. • It also enlightened the students on the cultural patterns, the change and continuity of the over time. • The course brought an understanding of the socio-economic and cultural patterns in understanding the polity and society as they took shape in the periods under study.
Under Graduate	B.A.	HIST 204	Histroy :Modern Indian History (1858 - 1947)	2004	• The course acquainted the students with the major developments in India during the rise and growth of British power in India • The course inculcates in the students, the emergence of national movements to inculcate nationalist feelings among the students • The course makes light to the students the anti-colonial movements. • The course inculcated the important persons and their ideas and teachings, and its effects in Modern India. • The course acquainted the students the knowledge of national leaders to create a memory of the national heroes • It also imparted knowledge on the history of historical development of nationalist's movements. • It inculcated the knowledge about India's fought for independence and the roles of the different sections of the society to the students. • The course acquainted the students with the British policy, stressing on the positive and negative effects. • The course introduced the concept of historiographical readings and writings to the students
Under Graduate	B.A.	HIST 302	Histroy :Rise of Modern World	2005	With an emphasis on Europe, the course imparted knowledge on the students, the political transformations of the modern world that took place from the nineteenth century till the end of the Second World War. • The course also inculcated knowledge on the economic developments of the said period. • It also imparts knowledge on the social developments of the period. • The course also imparts knowledge on the students, the cultural change and developments during the said period. • The course inculcates knowledge on the first and the Second World War and led the students to understand the changes and continuity of the world
Under Graduate	B.A.	HIST 303	Histroy :Modern World	2005	• The course imparted knowledge to the students about the political history of the world since the end of the Second World War focusing on the change and continuity over time and space. • The course imparted knowledge on the economic developments of the said period in an analytic way. • It also imparted knowledge on the social developments of the period. • The course imparted knowledge on the students, the cultural change and developments during the said period. • The course inculcated the knowledge of Globalization to the students and its impact over the world

Under Graduate	B.A.	ENG 101	English Compulsory Part I	2003	CO 1: The course offered in BA 1 aims to shape the delicate minds of the newcomers towards being sensitive, sensible with critical bent of mind and acquiring the basics of language through the book —English Literature and Language I . CO 2: This course provides an opportunity to the students to improve their pronunciation through an elaborated chapter on speech symbols and sounds. They are then reinforced thorough practice words of their phonetic transcription at the end of all the chapters. CO 3: Empower the students to improve the vocabulary which in turn helps to improve the comprehension of the students. CO 4: A brief analysis of the essays in the texts would help the students in comprehending the historical, political, religious, intellectual, scientific, emotional and cultural aspects of one's societal life on the whole. CO 5: The essays included in the texts help to develop the emotional quotient of the students towards plants, animals and fellow human beings.
Under Graduate	B.A.	ENG 102	English Compulsory Part I	2003	CO 1: Students get a glimpse of famous writers and authors whose brief bionote is provided at the end of the chapter so as to apprise the students of their life achievements, innovations and discoveries of these eminent persons of letters. They act as role models for these students to emulate. CO 2: The students get a detailed knowledge and practice into formation and structuring of sentences, voices and various facets of grammar. CO 3: Stories included in the text help to develop the emotional quotient of the students towards animals and fellow human beings. CO 4: The inclusion of stories and short narratives in this semester aids the students to navigate through the complexities of life as well as enhance their imagination\ CO 5: The conclusion of this semester will help the beneficiaries to develop oratory and writing skills along with good vocabulary understanding.
Under Graduate	B.A.	ENG 201	English Compulsory Part II	2004	CO 1: The student demonstrates an increase in awareness of word knowledge, vocabulary, sentence formations, grammatical rules. CO 2: The poetry enhances the students understanding of various elements of poetry such as tone, diction, genre, figures of speech, symbolism and many more. CO 3: They are able to demonstrate text structuring and organization of the same into paragraphs. CO 4: The conclusion of the course enables them to enhance their creative skills and writings in a systematic and refined way as they are expected to write paragraphs on specific topics. CO 5: They are able to identify main ideas in reading and paraphrase the same systematically.
Under Graduate	B.A.	ENG 202	English Compulsory Part II	2004	CO 1: The end of the course will enable the students to interpret, analyze, discuss several plays & reading material with ease. CO 2: The conclusion of the course will enable the students to incorporate personal experiences that can be used for creative writings. CO 3: The course also increases their oral as well as reading fluency. CO 4: They are able to demonstrate text structuring and organization of the same into paragraphs. CO 5: The end of the course will enable the students to use the grammatical structures, translations from Hindi to English and English to Hindi accurately and systematically in a proper manner.
Under Graduate	B.A.	ENG 301	English Compulsory Part III	2005	CO1: Raja Rao's novel Kanthapura will help the students to understand the social, political, cultural, historical aspects of Indian freedom movement in 1930s. CO2: It will provide better understanding of various age-old social evils that still plague the society and need an urgent redressal. CO3: Dramatic and vivid description of the events depicting real issues at the heart of freedom movement will provide better understanding and also inculcate patriotic feelings and gratitude for the sacrifice and contribution of common man. CO4: It will familiarize the students with various literary forms. CO5: It will help students in their critical thinking process and enhance their reading and writing skills.

Under Graduate	B.A.	ENG 302	English Compulsory Part III	2005	CO1: William Shakespeare's The Merchant of Venice will familiarize the students with various nuances of plays of Shakespeare. CO2: It will help them to have better understanding of the text and its themes. It will encourage them to appreciate and understand wider human issues that are still relevant in today's world. CO3: It will familiarize them with cultural and historical context of the Shakespeare's play. CO4: It will improve their comprehension and communication skills. CO5: It will help the students in their critical thinking process and enhance their reading and writing skills.
Under Graduate	B.A.	BAMH 111	Mathematics (Algebra)	2003	CO 1: Algebra provides the foundation for high school mathematics, critical thinking and problem solving, Algebra helps students transfer their mathematical knowledge to more algebraic generalizations. CO 2: Students will solve problems using equations, graphs and tables to investigate linear relationships. Technology will be used to introduce and expand upon the areas of study listed above. CO 3: Students will learn how to find roots of quadratic, biquadrate and cubic equations.
Under Graduate	B.A.	BAMH 112	Mathematics (Calculus)	2003	CO 1: learn the general concept of function and its applications to real-world situations and work with exponential, logarithmic and trigonometric function and their applications in applied problems. CO 2: learn the concepts of the derivative and its underlying concepts such as limits and continuity and to calculate derivative for various type of functions suing definition and rules. CO 3: learn the various concept of derivative to completely analyze graph of a function. And learn about various applications of the derivative in applied problems. CO 4: learn about anti-derivative and the Fundamental Theorem of Calculus and its applications and to use concept of integration to evaluate geometric area and solve other applied problems.
Under Graduate	B.A.	BAMH 113	Mathematics Lab I	2003	CO-1 Students will be able to understand basc syntax flow charts and algorithms . CO-2 Genrral progams based on If else Co- Looping and iterations programs
Under Graduate	B.A.	BAMH 121	Mathematics (Ordinary Differential Equations and Laplace Transforms)	2003	CO 1: Show an awareness of initial and boundary conditions to obtain particular values of constants in the general solution of second-order differential equations. CO 2: Identify a general method for constructing solutions to inhomogeneous linear constantcoefficient second-order equations. CO 3: Recognize the proper technique and solve initial value problem for first order equations. Solving of initial value problems for higher order linear homogeneous and non homogeneous equations
Under Graduate	B.A.	BAMH 122	Mathematics (Vector Calculus and Geometry)	2003	CO 1: Vector Calculus helps us to understand how to mathematically describe physical & abstract quantities that have both magnitude & direction, increases knowledge of properties of functions whose domain consists of real no's & range consists of vectors including differential & integration. CO 2: Students will be able to find length of a vector, the unit vector i direction of a given vector & the cosine of the angle between two vectors in 3-space. CO 3: Calculate scalar product, vector product of two vectors & scalar triple product of three vectors; write vector equation & symmetric equation for a line & vector equation & scalar equation of a plane.
Under Graduate	B.A.	BAMH 123	Mathematics Lab II	2003	Co-1 Students will be able to understand Arrays CO-2 Genrral progams based onarrays and pointers and branching. Switch and break statements
Under Graduate	B.A.	BAMH 201	Mathematics (Advanced Calculus)	2004	CO 1: The students are expected to learn about the basic principles of multi variable calculus with proof. Advanced Calculus is a bridge between Calculus and more advanced real analysis. CO 2: Student will learn Completeness axiom, Archimedean property, Triangle inequality, Convergence of sequence, Sum product and Quotient of convergence sequence. CO 3: Monotonic sequence, Bolzano Weierstrass Theorem, Monotone convergence Theorem, Uniform continuity on a closed and bounded interval, limits of function, Derivative of polynomial, Derivative of inverse function, Chain rule, Mean value theorem, Rolle's theorem.

Under Graduate	B.A.	BAMH 202	Mathematics (Numerical Analysis)	2004
Under Graduate	B.A.	BAMH 203	Mathematics Lab III	2004
Under Graduate	B.A.	BAMH 204	Mathematics (Partial Differential Equation and Special Functions)	2004
Under Graduate	B.A.	BAMH 205	Mathematics (Mechanics I)	2004
Under Graduate	B.A.	BAMH 206	Mathematics Lab IV	2004
Under Graduate	B.A.	BM 351	Mathematics (Real Analysis)	2005
Under Graduate	B.A.	BM 352	Mathematics (Groups and Rings)	2005
Under Graduate	B.A.	BM 353	Mathematics (Numerical Analysis)	2005

CO 1: To provide suitable and effective methods called Numerical Methods, for obtaining approximate representative numerical results of the problems. To solve problems in the field of Applied Mathematics, Theoretical Physics and Engineering this requires computing of numerical results using certain raw data CO 2: To solve complex mathematical problems using only simple arithmetic operations. The approach involves formulation of mathematical models of physical situations that can be solved with arithmetic operations CO 3: To deal with various topics like finding roots of equations, solving systems of linear algebraic equations, interpolation and regression analysis, numerical integration & differentiation, solution of differential equation, boundary value problems, solution of matrix problems.
Students will be able to make programs based on numerical methodsCo-1 Use of functions Co user defined functions, declarration , calling etc
CO 1: PDE describes relations between continuously changing quantities which depends on two or more variables. The main goal of this course is that student should be able to solve Boundary value problem for Laplace equation, Heat equation, wave equation by separation of variables in Cartesian, polar spherical & cylindrical coordinates. CO 2: Students will be able to expand one variable function in series along basis of orthogonal function, for example Fourier series, Bessel's series, Legendre's series. CO 3: They will be able to find weight function, Eigen values and Orthogonal function system (Eigen function for a given strum-Liouville problem and used the Fourier and Laplace Transform as part of solving a Boundary Value Problem.
Students will be able to understand CO-1 forces in 3 dimensions CO2: questions based on power, work and energy CO3: centre of gravity, capler's law, central orbit
Programs based on Numerical methods and finding the errors and order of convergence and developing logics
CO 1: Student will be able to define and recognize the basic properties of real numbers and improve an outline logical thinking. CO 2: They will be able to define and understand the series of real numbers and their convergence. Students will be able to use the Bolzano Weistrass Theorem. CO 3: Recognition and knowledge of basic topological properties of real numbers. Understanding of real functions and its limits. CO 4: Understanding of continuity of real functions and differentiability of real functions with its related theorems.
CO 1: Students will be able to learn the meaning and properties of Groups, Subgroups, Lagrange's theorem, Cauchy's theorem, Cyclic Groups. CO 2: Students will have understanding of Cosets, Quotient groups, Homomorphisms, Isomorphism, Automorphism, inner automorphism of cyclic groups, Cayleys theorem, centre of a group and derived subgroup of a group. CO 3: Recognition of Rings, Sub rings, Integral domain and fields, characteristics of a ring, ring of homomorphism, ideals and quotient rings. CO 4: Understanding Euclidean rings, Polynomial rings, Polynomial over rational field, Eisenstein's criteria.
CO 1: Application of numerical methods (such as Bisection, False position, Newton-Raphson) to solve nonlinear equations. Computation of the errors and the rates of convergence CO 2: Recognize Iterative methods (Jacobi –Gauss Seidel). Analyze the Finite difference-Forward and backward difference table. Construct numerical methods to solve ordinary differential equations CO 3: Apply the Interpolation methods (Newton forward and backward difference interpolation formula-Lagrange interpolation formula) for solving the problems numerically. CO 4: The student should be shown the ability of working independently and with groups.

Under Graduate	B.A.	BM 361	Mathematics (Real & Complex Analysis)	2005	CO 1: Develop an in-depth mathematical understanding of the theory of calculus. Read mathematical results and proofs as well as formulate her own proofs to various problems. CO 2: Use and explain the importance of the axioms of real numbers the definition of convergent and divergent sequences the definition of the limit of a function at a point the definition of continuity the definition of the derivative the definition of the Riemann integral. CO 3: Perform basic mathematical operations (arithmetic, powers, roots) with complex numbers in Cartesian and polar forms. Determine continuity/differentiability/analyticity of a function and find the derivative of a function. Work with functions (polynomials, reciprocals, exponential, trigonometric, hyperbolic, etc) of single complex variable and describe mappings in the complex plane.
Under Graduate	B.A.	BM 362	Mathematics (Linear Algebra)	2005	CO 1: To understand model and systematically solve systems of linear equations using matrix notation. Demonstrate factual knowledge of the fundamental concepts of spanning, linear independence, and linear transformations CO 2: Use of matrix algebra to analyze and solve equations arising in many applications that require a background in linear algebra. Utilize vector space terminology and describe how closely other vector spaces resemble R^n CO 3: Dissect the action of a linear transformation into elements that are easily visualized using the basic concepts of eigenvectors and eigen values.
Under Graduate	B.A.	BM 363	Mathematics (Dynamics)	2005	CO 1: Students will be able to draw the free-body diagram for a particle or for a rigid body in plane motion. Students will be able to understand the basic concepts of force, mass and acceleration, of work and energy, and of impulse and momentum. CO 2: Students will be able to apply these three basic methods and to understand their respective advantages. Students will be able to explain the geometry of the motion of particles and plane motion of rigid bodies. CO 3: Students learn to apply the principles of static equilibrium to particles and rigid bodies. Students learn to analyze truss and frame structures. Students apply the principles of equilibrium for analyzing beams. Students analyze problems involving frictional forces. Students learn to draw shear force and bending moment diagram CO 4: Students analyze planar rigid body kinematics and kinetics. Students learn to write technical laboratory reports. Students apply measurement techniques and formulate experiments based on laboratory handouts.
Under Graduate	B.A.	HIC101	Hindi Compulsory	2003	1. मध्य कालीन काव्य कुञ्ज - सूरदास , कबीरदास, मीराबाई , रसखान, बिहारी आदि 2. हिंदी साहित्य का आदिकाल - परिस्थितिया, विशेषताएं, नामकरण 3. काव्य शास्त्र के तत्त्व - रस , अलंकार, छंद
Under Graduate	B.A.	HIC102	Hindi Compulsory	2003	1. नाटक - ध्रुवस्वामिनी 2. भक्ति काल - विशेषताएं, परिस्थितीया 3. भक्तिकाल - स्वर्ण युग 4. व्यव्हारिक हिंदी - बोली , भाषा , राजभाषा
Under Graduate	B.A.	HIC201	Hindi Compulsory	2004	1. आधुनिक हिंदी कविता 2. हिंदी साहित्य का रीतिकाल - बिहारी, बोधा, भिखारी दास 3. प्रयोजनमूलक हिंदी - हिंदी कंप्यूटिंग अनुवाद
Under Graduate	B.A.	HIC202	Hindi Compulsory	2004	1. कथाक्रम - कहानिया (ईदगाह, पच्चीस चौका डेढ़ सौ आदि) 2. हिंदी साहित्य का आधुनिक काल - प्रयोग वाद, प्रगति वाद, छाया वाद , नई कविता आदि) 3. पारिभाषिक शब्दावली का अर्थ एंव महत्व
Under Graduate	B.A.	HIC301	Hindi Compulsory	2005	1. समकालीन हिंदी कविता 2. हिंदी सहित्य का आधुनिक काल - कविता 3. प्रयोजन मूलक हिंदी - पत्र लेखन, संक्षेपण , पल्लवन
Under Graduate	B.A.	HIC302	Hindi Compulsory	2005	1. नव्यतर गद्य - गौरव 2. हरियाणवी भाषा और साहित्य का इतिहास 3. प्रयोजन मूलक हिंदी - पत्रकारिता

Under Graduate	B.A.	BECO 101	Economics (Principles of Microeconomics -I)	2003	CO1. Develop ideas of the basic characteristics of Indian economy, its potential on natural resources. CO2. Understand the importance, causes and impact of population growth and its distribution, translate and relate them with economic development. CO3. Grasp the importance of planning undertaken by the government of India, have knowledge on the various objectives, failures and achievements as the foundation of the ongoing planning and economic reforms taken by the government. CO4. Understand agriculture as the foundation of economic growth and development, analyse the progress and changing nature of agricultural sector and its contribution to the economy as a whole. CO5. Not only be aware of the economy as a whole, they would understand the basic features of Mizoram's economy, sources of revenue, how the state government finance its program and projects
Under Graduate	B.A.	BECO 201	Economics (Principles of Microeconomics -II)	2003	CO1. Demonstrate marginal productivity theory of distribution, theory of wages, identify different types of rent, illustrate different theories of interest and profits. CO2. Understand how factor market works, identify the various determinants of firm's demand for factor services, bilateral monopoly, demonstrate monopsony in factor market and factor market equilibrium. CO3. Understand how factor market works, illustrate basic tools in welfare economics, and illustrate the concept of social welfare functions and compensation principles. CO4. Identify the various types of investment function analysis and understand the elements of social cost benefit analysis. CO5. Understand international and inter regional trade, identify and understand various trade theories, analyze the various types of restrictions of international trade
Under Graduate	B.A.	BECO 301	Economics (Principles of Macroeconomics -I)	2004	CO1. Define and explain the process of calculating national income, identify its components, demonstrate circular flow of income, analyse the various income identities with government and international trade, define the concept of green accounting. CO2. Understand Say's law of market, classical theory of employment and Keynes objection to the classical theory, demonstrate the principle of effective demand and income determination. CO3. Explain the meaning of consumption function, relationship between APC and MPC, consumption and income, concept of multiplier and analyse the theories of absolute and relative income hypotheses. CO4. Understand the relationship between investment and savings, demonstrate investment multiplier, and understand the meaning of MEC and MEI. CO5. Illustrate the meaning of interest, analyse the various theories of interest

Under Graduate	B.A.	BECO 401	Economics (Principles of Macroeconomics -II)	2005
Under Graduate	B.A.	EC-05	Indian economics	2005
Under Graduate	B.A.	EC-06	Indian economics	2005
Under Graduate	B.A.	PY01	Introduction to Psychology	2006
Under Graduate	B.A.	PY01(P)	Psychology (Practical)	2006
Under Graduate	B.A.	PY02	Introduction to Psychology	2006

CO1. Demonstrate the meaning and function of money, high powered money, monetary and paper system, illustrate various version of quantity theory of money. CO2. Identify types of banks, explain the meaning and function of commercial banks, illustrate how banks create credit, and suggest the instruments to control credit. CO3. Analyze different phases of trade cycle, demonstrate various trade cycle theories, understand the impact of cyclical fluctuation on the growth of business, and lay policies to control trade cycle. CO4. Illustrate the meaning of inflation, deflation, stagflation and reflation, identify different kinds of inflation, causes and effects of inflation on different sectors of the economy, describe different measures to control inflation. CO5. Explain economic growth and development, illustrate HarrodDomar and Solow's growth model, distinguish between economic growth and technical progress
CO1. Develop ideas of the basic characteristics of Indian economy, its potential on natural resources. CO2. Understand the importance, causes and impact of population growth and its distribution, translate and relate them with economic development. CO3. Grasp the importance of planning undertaken by the government of India, have knowledge on the various objectives, failures and achievements as the foundation of the ongoing planning and economic reforms taken by the government. CO4. Understand agriculture as the foundation of economic growth and development, analyse the progress and changing nature of agricultural sector and its contribution to the economy as a whole. CO5. Not only be aware of the economy as a whole, they would understand the basic features of Mizoram's economy, sources of revenue, how the state government finance its programmes and projects
Students will be able to understand CO1 Developing Economy 1.1 Capitalist, Socialist & Mixed economy. 1.2 Developed and Developing Economy –Concepts 1.3 Basic Characteristics of Indian Economy as a Developing Economy. 1.4 Comparison of Indian Economy with Developed Economies 1.5 Major Issues of Development in India CO2 Population 2.1. Theory of Demographic Transition. 2.2. Size and Growth of Population. 2.3. Features of Indian Population 2.4. Causes of Growing Population.- High Birth Rate and Decreasing Death Rate. 2.5. Problems of Over Population 2.6. Measures for Population Control. 2.7. Population Policy 2005 onward 11 CO3 Poverty and Unemployment 1.1.Meaning and Concepts of Poverty. 1.2.Poverty line- Need of Redefining. 1.3.Measurement of Poverty. 1.4.Causes of Poverty. 1.5.Measures of Eradication of Poverty. 1.6.Unemployment – Nature, Types, Causes & Measures CO4 Agriculture 4.1.Place of Agriculture in Indian economy. 4.2.Agricultural Productivity – Causes of Low Productivity & Measures. 4.3.Green Revolution- Achievements & Failures. 4.4.Sources of Agricultural Finance. 4.5.Agricultural Marketing – Defects & Measures. 4.6.Special Economic Zone- Concept, Features, Problems.
1.Explain the meaning of Psychology, the role of Psychologists in a society, and
1. EPQ/EPI 2. Retinal color zones/Color Blindness 3. Sound Localization 4. Study of emotions. 5. Simple reaction time 6. Verbal Test of Intelligence. 7. Performance Test of Intelligence/RPM. 8. Observation (Speed & accuracy) 9. Experiment on form perception/Depth Perception 10. Test of Motivation
1. Discuss the basic cognitive processes like thinking, reasoning and problem solving. 2. Identify the theories behind organism's motivation and emotion and their physiological basis, the different types of motivation and how emotions are expressed. 3. Explain the different sensory and perceptual processes like types of senses, concepts of threshold, and attention, gestalt laws of organization, different process of perception, factors of perception, perceptual illusion

Under Graduate	B.A.	PY02(P)	Psychology (Practical)	2006
Under Graduate	B.A.	PY03	Social Psychology	2007
Under Graduate	B.A.	PY03(P)	Psychology (Practical)	2007
Under Graduate	B.A.	PY04	Developmental Psychology	2007
Under Graduate	B.A.	PY04(P)	Psychology (Practical)	2007
Under Graduate	B.A.	PY05	Psychopathology	2008
Under Graduate	B.A.	PY05(P)	Psychology (Practical)	2008

1. Serial Position Effect. 2. Experiment on STM 3. Experiment on LTM 4. Retroactive Inhibition 5. AL by method of contstant stimuli 6. DL by method of limits. 7. Muller-Lyre Illusion 8. Problem Solving 9. Bilateral Transfer of Training/ Maze Learning 10. Span of Attention.
1. Identify and define the basic terms and concepts of social psychology, how the different research methods are employed in social psychology. 2. Describe different areas of social perception as well as meaning, function and types of leadership. 3. Explain and use positive social relationships and identify the internal and external determinants of interpersonal attraction based on interaction like similarity and mutual liking.
1. Sociometry 2. Measurement of Attitude 3. Altruism Scale 4. Stereotypes 5. Anger Expression/Aggression Scale 6. Prejudice Scale 7. Leadership Styles 8. Social Facilitation
1. Describe the concept of life span development, different research methods employed in studying life span development and the different theoretical perspectives of life span development. 2. Outline the different stages of Human Development from conception to death. 3. Understand development in terms of the physical, motor, cognitive, language, social and personality.
1. Cognitive Development 2. Emotional Maturity Scale 3. Parent-Child Relationship 4. Self Concept 5. Youth Problem Inventory 6. Self Esteem Inventory 7. Study of values 8. Family Environment Inventory 9. Impulsiveness Scale 10. Case Study
1.Define and explain neuroplasticity and the different methods of studying Human physiology (e.g., ablation, anatomical, recording, electrical & chemical stimulation, and clinical method). 2.Understand the structure and function of a single cell, structure and types of neuron, communication within neuron (membrane potential, resting potential, action potential), communication between neurons (synaptic transmission); the different neurotransmitters such as dopamine, serotonin, acetylcholine, norepinephrine and GABA.
1. Clinical Interview 2. CAQ 3. TAT 4. WAT 5. Depression Inventory 6. Anxiety Scale 7. WAIS 8. Emotional Intelligence 9. PGI Memory Scale

Under Graduate	B.A.	PY06	Applied Psychology	2008
Under Graduate	B.A.	PY06(P)	Psychology (Practical)	2008
Under Graduate	B.A.	GEOG 101	Geography of India	2003
Under Graduate	B.A.	GEOG 102	Geography (Maps, Scales)	2003
Under Graduate	B.A.	GEOG 103	Physical Geography -Geomorphology	2003
Under Graduate	B.A.	GEOG 104	Geography (Representation of Physical features)	2003
Under Graduate	B.A.	GEOG 201	Physical Geography - II	2004
Under Graduate	B.A.	GEOG 202	Geography (Representation of Climatic Data)	2004
Under Graduate	B.A.	GEOG 203	Human Geography	2004

1. Explain the meaning of applied Psychology (e.g., fields, history and scope) and career opportunity in Applied Psychology. The student should also gain knowledge about industrial or organizational psychology. 2. Outline the Concepts of Military Psychology (e.g., role of Military Psychologist and Psychology of Terrorism) and Forensic Psychology (e.g., role and uses of Psychological assessment). 3. Understand the application and role of Psychology in I.T, mass media,
1. Stress Scale 2. Coping Styles/Wellbeing Scale 3. General Health Questionnaire 4. Life Style Schedule 5. Aptitude Scale 6. Interest Inventory 7. Job Satisfaction
CO1. Identify natural regions of India based on physical environment and understand the regional variation due to differences in physical environment. CO2. Understand population of India in terms of their quality and spatial distribution pattern and the prospect and problems of
Students will be able to understand 1. cartography 2. methods of expressing a scale 3. conversion of statement of scales in RF and vice versa 4. plane comparative and diagonal scale 5. measurement of distances and areas on maps
CO1. Demonstrate the knowledge of basic concepts in the Physical Geography. CO2. Explain the changes in landforms through the understanding of the geomorphic processes operating on the earth. CO3. Describe the dynamics of the atmosphere giving importance to temperature, humidity, atmospheric pressure as the driving force of climatic condition which varies from place to place and season to season.
1. Introduction to topography sheets- india and adjacent countries, degree, half degree, quarter degree sheets 2. methods of representing relief 3. representation of topographical features by contours 4. drawing of profiles- cross profiles and longtitudinal profiles
CO1. Explain the cyclic role of water in the atmosphere, lithosphere, hydrosphere and biosphere and the importance of water in supporting life on earth. CO2. Acquaint themselves with allied concepts in the field of geomorphology, climatology and oceanography with special Reference to human activities
1. Measurement of temprature, rainfall, pressure and humidity 2. Climograph, distribution of pressure, weather map interpretation- change and tape survey
CO1. Demonstrate the knowledge of man-environment relationship in the light of the role of man as active and passive agent. CO2. Understand population in terms of their quality and spatial distribution pattern and the prospect and problems of population growth. CO3. Explain how human activity is changing the cultural and physical landscape through the understanding of settlement patterns. CO4. Describe human capability to respond to his environment and how man adapts and modifies the environment under its varied condition. CO5. Understand how spatial variation arises due to variation in space and how human population reacts differently to the environment

Under Graduate	B.A.	GEOG 204	Geography (Maps Projections)	2004
Under Graduate	B.A.	GEOG 301	Economic Geography	2005
Under Graduate	B.A.	GEOG 302	Geography (Distribution Maps and Diagrams)	2005
Under Graduate	B.A.	GEOG 303	Introduction to Remote Sensing, GIS and Quantitative Methods	2005
Under Graduate	B.A.	GEOG 304	Geography (Introduction to Remote Sensing and Field Survey Report)	2005
Under Graduate	B.A.	SANE 101	Sanskrit (Elective)	2003
Under Graduate	B.A.	SANE 102	Sanskrit (Elective)	2003
Under Graduate	B.A.	SANE 201	Sanskrit (Elective)	2004
Under Graduate	B.A.	SANE 202	Sanskrit (Elective)	2004
Under Graduate	B.A.	SANE 301	Sanskrit (Elective)	2005
Under Graduate	B.A.	SANE 302	Sanskrit (Elective)	2005
Under Graduate	B.A.	HIE 101	Hindi Elective	2003

1. Introduction to map projection- meaning classification and importance 2. cylinderical projections- characterstics, application and drawings 3. conical projections- characterstics, applications and drawings 4. Zenithal projections- characterstics, applications and drawings 5. Sinosoidal projections- characterstics, applications and drawings
CO1. Demonstrate an understanding of the concept, principles and theories in the field of economic geography. CO2. Explain the relationship between the environment and human activities in primary sector of the economy. CO3. Acquaint themselves with the factors that led to the establishment and development of Secondary Activities. CO4. Evaluate the level of interactions between man and his environment in Tertiary sector. CO5: Distribution and classification of world natural resource. CO6.Special distribution of Food and plantation crops ,clasifcation of mineral resource, industries ,
CO1: Distribution maps-Qualitative and Quantitative Distribution Maps CO2: Prismetic compass survey
CO1. students will be able to learn the aerial photographs and their interpretations CO2: students will be able to understand principles of remote sensing and satelite image interpretation. CO3: to enable the students to verse with the fundamental of geographical information system and analysis of spatial data distribution.
CO1: students will be able to study the scale and geometry of aerial photographs. CO2: Interpretation of aerial photograph and satellite imagery. CO3: Socio- Economic Survey of a particular region or area.
इस विषय को पढने के बाद विद्यार्थी यह जान पाएंगे 1. हितोपदेश - मित्र लाभ , पाठ्यांश 2. निति शतक श्लोक 3. संस्कृत व्याकरण - शब्द रूप (राम, कवि, भानु, आदि), धातु रूप (भू, हस., नम, गम आदि) 4. संधि - अच संधि, हल संधि, विसर्ग संधि आदि)
इस विषय को पढने के बाद विद्यार्थी यह जान पाएंगे 1. भगवद गीता - द्वितीय अध्याय 2. निति शतक श्लोक 3. संस्कृत व्याकरण - शब्द रूप (मति, नदी, धेनु, माता आदि), धातु रूप (पठ , नश आदि) 4. छंद - अनुष्टप , आर्य , इंद्रवज्र, वंशस्थ आदि
इस विषय को पढने के बाद विद्यार्थी यह जान पाएंगे 1. भाष पंचात्रम नाटक - पारिभाषिक शब्द 2. संस्कृत गद्य साहित्य का इतिहास - बाण भट्ट , दंडी विष्णु शर्मा आदि 3. संस्कृत व्याकरण - समास, अव्ययी भाव , बहुब्रिही, द्वन्द आदि 4. प्रत्यय - कत्वा तुमुन श्त्री शानच आदि 5. वरद राज - लघुसिद्धांतकौमुदी, पत्र लेखनम
इस विषय को पढने के बाद विद्यार्थी यह जान पाएंगे 1. कालिदास रघुवंश - द्वितीय सर्ग 2. अम्बिकादत्त व्यास - शिवराज विजय प्रथम निश्वाश 3. संस्कृत व्याकरण - वाच्य प्रत्यय धातु 4. वरद राज लघुसिद्धंत कौमुदी संज्ञा प्रकरण
इस विषय को पढने के बाद विद्यार्थी यह जान पाएंगे 1. कालिदास अभिज्ञान शाकुंतलम 2. कालिदास जीवन परिचय 3. संस्कृत साहित्य का इतिहास 4. वरद राज लघुसिद्धंत कौमुदी विभक्ति प्रकरण 5. अलंकार - अनुप्रास, श्लेष, यमक, उपमा, उत्प्रेक्षा, रूपक आदि
इस विषय को पढने के बाद विद्यार्थी यह जान पाएंगे 1. कालिदास अभिज्ञान शाकुंतलम 2. कालिदास जीवन परिचय 3. संस्कृत साहित्य का इतिहास 4. वरद राज लघुसिद्धंत कौमुदी विभक्ति प्रकरण 5. संस्कृत निबंध
1. कुरुक्षेत्र : रामधारी सिंह दिनकर 2. हानूश : भीषम साहनी 3. हिंदी साहित्य का आदिकाल : विशेषताएं, परिस्थितिया, नामकरण आदि

Under Graduate	B.A.	HIE 102	Hindi Elective	2003		1. प्राचीन एंव मध्य कालीन काव्य 2. निर्मला उपन्यास 3. हिंदी साहित्य का भक्तिकाल
Under Graduate	B.A.	HIE 201	Hindi Elective	2004		1. आधुनिक काव्य - मंजूषा 2. कहानी - एकादशी(दशरथ ओझा) 3. हिंदी साहित्य का रीति काल - परिस्थितियां, नामकरण, विशेषताए
Under Graduate	B.A.	HIE 202	Hindi Elective	2004		1. सुदामा चरित- नरोत्तम दास 2. श्रेष्ठ निबंध - डा. आलोक गुप्त 3. हिंदी साहित्य का आधुनिक काल -कविता -छायावाद, प्रगतिवाद, प्रयोगवाद, नई कविता
Under Graduate	B.A.	EVS-201L	Environmental Studies	2007		CO1: Students learn about the basics of environment, what are renewable and non-renewable resources and how to make their optimised use. CO2: Students get knowledge of the various types of ecosystems and also an insight ito factors, types and ways of controlling environmental pollution. CO3: Students learn various social issues and their relation with environment like sustainable development, urban problems related to energy, water conservation, rain water harvesting, and watershed management CO4: Students learn about the various legislative mechanisms to prevent environmental pollution like Environment Protection Act, Air (prevention and control of pollution) Act, Water (prevention and control of pollution) Act, Wildlife Protection Act etc.
Under Graduate	B.A.	L1-(I)	Computer Awareness (Level I) (Basic Computer Education)	2010		Students will be able to discover the uses and implementation of: 1. Fundamentals of Computer and its uses. 2. MS- Office 3. Word Processor using MS Word 4. Spreadsheets using MS Excel 5. Presentation tools using MS Powerpoint
Under Graduate	B.A.	L1-(II)	Computer Awareness (Level I) (Software Lab -I)	2010		Students will be able to hands on training on the following: 1. Fundamentals of Computer and its uses. 2. MS- Office 3. Word Processor using MS Word 4. Spreadsheets using MS Excel 5. Presentation tools using MS Powerpoint
Under Graduate	B.A.	SANC 101	Sanskrit (Compulsory)	2003		इस विषय को पढने के बाद विद्यार्थी यह जान पाएंगे 1. संस्कृत चयनिका 2. संस्कृत व्याकरण - शब्द रूप धातु रूप, स्वर संधि 3. भगवदगीता श्लोक
Under Graduate	B.A.	SANC 102	Sanskrit (Compulsory)	2003		इस विषय को पढने के बाद विद्यार्थी यह जान पाएंगे 1. संस्कृत चयनिका 2. संस्कृत व्याकरण - शब्द रूप धातु रूप, व्यंजन संधि एंव विसर्ग संधि 3. कारक विभक्ति एंव उप पद विभक्ति पर आधारित अनुवाद
Under Graduate	B.A.	SANC 201	Sanskrit (Compulsory)	2004		इस विषय को पढने के बाद विद्यार्थी यह जान पाएंगे 1. भास् चारुदत्तं - प्रथम एंव द्वितीय अंक 2. कृदंत प्रकरण - श्त्री, शानच, तव्यत, यत 3. समास - अव्ययी भाव एंव तत्पुरुष
Under Graduate	B.A.	SANC 202	Sanskrit (Compulsory)	2004		इस विषय को पढने के बाद विद्यार्थी यह जान पाएंगे 1. भास् चारुदत्तं - तृतीय एंव चतुर्थ अंक 2. णइजंत तथा संनंत धातु - भू पठ पा गम लिख श्रु आदि 3. समास - दवंद एंव बहव्रीहि समास
Under Graduate	B.A.	SANC 301	Sanskrit (Compulsory)	2005		इस विषय को पढने के बाद विद्यार्थी यह जान पाएंगे 1. नीतिशतक - श्लोक एंव सूक्ति 2. संस्कृत साहित्य का इतिहास- रामायण अश्वघोष कालिदास भवभूति हितोपदेशः 3. विभक्ति प्रकरण - कारक विभक्ति , सामान्य परिचय , अशुद्धि संशोधन, वाक्य प्रयोग
Under Graduate	B.A.	SANC 302	Sanskrit (Compulsory)	2005		इस विषय को पढने के बाद विद्यार्थी यह जान पाएंगे 1. शिवराज विजय - प्रथम निश्वाश 2. संस्कृत साहित्य का इतिहास - महाभारत बाणभट्ट जयदेव भर्तहरि पंचतंत्र 3. संस्कृत व्याकरण - उप्पदविभक्ति .,
Under Graduate	BA	PUBA 101	Elements of Public administration	2003	Attaining the knowledge of the basic elements, theories and principles of Public Administration as a discipline.	Understanding about the evolution and growth of the discipline of Public Administration Learning of basic principles and approaches of Public Administration Theoretical clarity of basic concepts and dynamics (both ecological and others) relating to Public organizations.

Under Graduate	BA	PUBA 102	Basics of Public ADMINISTRATION	2003	Ability to appraise and update about the developments taking place in the discipline of Public Administration. Capacity to understand the dynamics and role of the bureaucracy and administration	Attaining the knowledge of the basic elements, theories and principles of Public Administration as a discipline. Ability to appraise and update about the developments taking place in the discipline of Public Administration. Capacity to understand the dynamics and role of the bureaucracy and administration
Under Graduate	BA	PUBA 201	Public Financial administration	2004		Conceptual clarity of public administration regarding various aspects of financial administration, particularly budgeting and its processes, financial institutions and resource mobilization strategies with special reference to India. Critical acquaintance of various mechanisms of financial control over government. Comprehension of the system and dynamics of Indian fiscal management.
Under Graduate	BA	PUBA 202	Public Personnel ADMINISTRATION	2004		Procreate an understanding among students about the concept of public personnel administration, career systems and various processes/activities of personnel administration in India. Critical acquaintance of the various issues in civil service such as ethics, code of conduct and disciplinary negotiation machinery and reforms Reasonable level of understanding about various facets the human resource development in the government.
Under Graduate	BA	PUBA 301	OPTION- I INDIAN ADMINISTRATIVE SYSTEM	2005		Knowledge about the evolution and growth of Indian Administration Familiarity with the constitutional framework on which Indian Administration is based Grasping the role of Executive, Legislature and Judiciary at Union level Awareness about state administration and district administration
Under Graduate	BA	PUBA 301	OPTION -II Rural Local GOVERNANCE	2005		Acquiring the theoretical knowledge and understanding of the evolution and growth of rural local governance with special reference to Panchayati raj institutions Gaining insights about composition, role and functions, resources of Panchayati raj institutions Connecting the role and relationships of rural local democratic decentralized institutions (PRIs) with other related issues and institutions
Under Graduate	BA	PUBA 301	OPTION - III Urban Local GOVERNANCE	2005		
Under Graduate	BA	PUBA 302	OPTION- I ADMINISTRATIVE ETHICS & GOVERNANCE	2005		
Under Graduate	BA	PUBA 303	OPTION -II CITIZEN CENTRIC GOVERNANCE	2005		Knowledge of the evolution and growth of urban local bodies in India Understanding about the composition, role, functions, and resources of urban local bodies Understanding of the structure and working of urban development programmes
Under Graduate	BA	PUBA 304	OPTION - III DEVELOPMENT ADMINISTRATION	2005		
Under Graduate	BA	HOMS 101	Home Science FRM Theory	2003	Introduction to home management, interiror decoration, money management , enregy mgmt, time mgmt, work simplification, food and nutrition, clohthing and textile concepts.	Introduction to home management, interiror decoration, money management , enregy mgmt, time mgmt, work simplification
Under Graduate	BA	HOMS (P) 102	Family Resource mgmt practical	2003		practical aspects of theory
Under Graduate	BA	HOMS 103	health and hygine	2003		importance of hygine, common diseases, symptoms and prvenetion, types of infections, types of disinfectants
Under Graduate	BA	HOMS(P0 104	health and hygine PRACTICAL	2003		practical aspects of theory
Under Graduate	BA	HOMS 201	Human Physiology	2004		Introduction to cells, skelton system, digestion, nervous sytem, respiratory system and glands,
Under Graduate	BA	HOMS(P) 202	Practical	2004		practical aspects of theory
Under Graduate	BA	HOMS 203	Clothing & Textile	2004		different types of fabrics and fibres, drafting pattern, property uses care of fabrics, embroidery designing, textile material, soap and dete
Under Graduate	BA	HOMS (P) 204	PRACTICAL	2004		drafting of dresses, sarees, blouses, aprens , embroidery designs etc.
Under Graduate	BA	HOMS 301	Food and nutrition	2005		importance of food and different types of nutrients, functions of defficiencies , preservatives, meal planning, therpatic nutrition.
Under Graduate	BA	HOMS (P) 302	PRACTICAL	2005		practical aspects of theory
Under Graduate	BA	HOMS 303	HUMAN DEVELOPMENT	2005		child psychology, learning interlligence, different developmental stages of child care, personlaity development
Under Graduate	BA	HOMS P 304	PRACTICAL	2005		practical aspects of theory
Under Graduate	BA	MUSV 101	Music Vocal -theory	2003	Nationality. Discipline. Emotional development. Cultural importance. Sociability. Intellectual development. Aesthetic sense. Creativity. Spiritualism. Imagination. Career in teaching. Career in singing.	**Th.** Information about Music theory. Arouse interest in music. Importance of music. Getting acquainted with musician.
Under Graduate	BA	MUSV (P)102	Music Vocal -Practical	2003		**Pr.**Swar, Taal,Rhythm knowledge. Development the habit of Riyaz.
Under Graduate	BA	MUSV 103	Music Vocal -theory	2003		**Th.**. Information about Music theory. Arouse interest in music. Importance of music. Getting acquainted with musician.
Under Graduate	BA	MUSV (P) 104	Music Vocal -Practical	2003		**Pr.**Swar, Taal,Rhythm knowledge. Development the habit of Riyaz. Increase practical music. Raag knowledge
Under Graduate	BA	MUSV 201	Fundamental Study of indian music vocal	2004		**Th.** . Information about Music theory. Arouse interest in music. Getting acquainted with musician.
Under Graduate	BA	MUSV (P) 202	Stage Performance viva	2004		**Pr.**Swar, Taal,Rhythm knowledge. Development the habit of Riyaz. Increase practical music.Raag knowledge. Link to classical music.
Under Graduate	BA	MUSV 203	fundamental study of Indian music vocal	2004		**Th.** . Information about Music theory. Arouse interest in music. Getting acquainted with musician.Knowledge of singing styles.
Under Graduate	BA	MUSV (P) 204	Stage Performance viva	2004		**Pr.**Swar, Taal,Rhythm knowledge. Development the habit of Riyaz. Increase practical music.Raag knowledge. Link to classical music. Knowledge of singing styles. Vocalize with tanpura.
Under Graduate	BA	MUSV 301	Music Vocal	2005		**Th.** . Information about Music theory. Getting acquainted with musician. Knowledge of singing styles.

Under Graduate	BA	MUSV (P) 302	PRACTICAL	2005		**Pr.**Swar, Taal,Rhythm knowledge. Development the habit of Riyaz. Increase practical music. Raag knowledge. Link to classical music. Knowledge of singing styles. Vocalize with tanpura. Development of ability to perform expression. Developing ability to perform on stage.
Under Graduate	BA	MUSV 303	MUSIC V	2005		**Th.** . Information about Music theory. Getting acquainted with musician. Knowledge of singing styles.
Under Graduate	BA	MUSV 304 (P)	Practical	2005		**Pr.**Swar, Taal,Rhythm knowledge. Development the habit of Riyaz. Increase practical music. Raag knowledge. Link to classical music. Kno
Under Graduate	BA	SOCL 101	Sociology: basic concepts in sociology	2003	THIS COURSE WILL HELP STUDENTS TO GAIN KNOWLEDGE ABOUT BASIC SOCIOLOGY, SOCIETY AND ITS TYPES, SOCIAL RESEARCH , SOCIAL PROBLEMS, RURAL SOCIOLOGY AND ECONOMIC SOCIOLOGY	C01- IT WILL ENABLE THE STUDENTS TO KNOW ANBUT THE SOCIOLOGY C02- IT WILL ENABLE THE STUDENTS TO UNDERSTAND THE BASIC CONCEPTS IN SOCIOLOGY C03- IT WILL ENABLE THE STUDENTS TO UNDERSTAND THE SOCIAL GROUPSENT PROCESS. C04- IT WILL ENABLE THE STUDENTS TO KNOW ANBUT THE BASIC SOCIAL INSTITUTIONS.
Under Graduate	BA	SOCL 102	Society, Culture and SOCIAL CHANGE	2003		C01- IT WILL ENABLE THE STUDENTS TO KNOW ANBUT THE DIFFERENT TYPES OF SOCIETIES C02- IT WILL ENABLE THE STUDENTS TO UNDERSTAND THE CULTURE, SOCILAIZATION AND SOCIAL CONTROL C03- IT WILL ENABLE THE STUDENTS TO UNDERSTAND THE PROCESS OF SOCIAL CHANGE C04- IT WILL ENABLE THE STUDENTS TO KNOW ANBUT THE BASIC SOCIAL STRATIFICATION.
Under Graduate	BA	SOCL 201	Methods in Social research	2004		C01- IT WILL ENABLE THE STUDENTS TO KNOW ANBUT THE MEANING OF SOCIAL RESEARCH C02- IT WILL ENABLE THE STUDENTS TO UNDERSTAND THE METHODS OF SOCIAL RESEARCH AND TECHNIQUES OF DATA COLLECTION. C03- IT WILL ENABLE THE STUDENTS TO UNDERSTAND THE STASTICAL METHODS- MEAN , NODE, MEDIAN
Under Graduate	BA	SOCL 202	OPTION -I INDIAN SOCIETY	2004		C01- IT WILL ENABLE THE STUDENTS TO KNOW ANBUT THE SOCIAL PROBLEMS C02- IT WILL ENABLE THE STUDENTS TO UNDERSTAND THE STRUCTURAL ISSUES, AS WELL AS SOCIAL PROBLEMS C03- IT WILL ENABLE THE STUDENTS TO UNDERSTAND THE PROCESS OF SOCIAL DISORGANISATION
Under Graduate	BA	SOCL 301	FUNDAMENTALS OF SOCIAL THOGHTS	2005		C01- IT WILL ENABLE THE STUDENTS TO KNOW ANBUT THE SOCIAL THOUGHTS, POSITINISM,FUNCTIONALISM C02- IT WILL ENABLE THE STUDENTS TO UNDERSTAND THE SOCIETY IN BETTER WAY
Under Graduate	BA	SOCL 302	Option-I POPULATION STUDIES	2005		C01- IT WILL ENABLE THE STUDENTS TO KNOW ANBUT THE SOCIAL PROBLEMS C02- IT WILL ENABLE THE STUDENTS TO UNDERSTAND THE STRUCTURAL ISSUES, AS WELL AS SOCIAL PROBLEMS C03- IT WILL ENABLE THE STUDENTS TO UNDERSTAND THE PROCESS OF SOCIAL DISORGANISATION
Under Graduate	BA	SOCL 302	OPTION- II Environment and Society	2005		C01- IT WILL ENABLE THE STUDENTS TO KNOW ANBUT THE RURAL SOCIOLOGY C02- IT WILL ENABLE THE STUDENTS TO UNDERSTAND THE RURAL SOCIAL STRUCTURE, RURAL ECONOM
Under Graduate	BA	SOCL 302	OPTION- III Rural Society: Structure AND CHANGE	2005		C01- IT WILL ENABLE THE STUDENTS TO KNOW ANBUT THE RURAL SOCIOLOGY C02- IT WILL ENABLE THE STUDENTS TO UNDERSTAND THE RURAL SOCIAL STRUCTURE, RURAL ECONOM
Post Graduate	MA English Prev.	COURSE-I	LITERATURE IN ENGLISH 1550-1660	2016	It will enable the students to know about the English Literature	Understand the essence, central idea and writing style of Philip Sidney's Poems.Understand the realism in 'Doctor Faustus', John Milton's 'Paradise Lost' and Shakespeare's 'Twelfth Night'
Post Graduate	MA English Prev.	COURSE-II	Literature in English(1660-1798)	2016		Understand the Famous allegory 'Absalom and Achitophel' Analyze the social satire through Alexander's 'The Rape of the Lock',Congreve's 'The Way of the World' and Sheridan's 'The School for Scandal'.
Post Graduate	MA English Prev.	COURSE-III	Literature in English(1798-1914)	2016		To Perceive the nature aspect in Wordsworth's and Keats's selected poetries.Explore the struggle between good versus evil in Dickens's 'Oliver Twist'.To find out the main essence of women's role and social pressure through Eliot's 'The Mill on the Floss'
Post Graduate	MA English Prev.	COURSE-IV	Literature in English(1914-2000)	2016		To Perceive the disillusionment and sterility of the modern man in Eliot's 'The Waste Land'.To find out the struggle between Race and Culture in 'Passage to India'.Understand. Explore the struggle between society versus class in 'lucky Jim' the essence, central idea and writing style of Philip Larkin's Poems.
Post Graduate	MA English Prev.	COURSE-V	Study of Genre (Drama)	2016		Explore the Individual Identity of Women in 'Abhijnanashakuntalam', 'A Doll's House'.Analyze the Epic theatre and Wisdom or Bravery in 'Oedipus Rex', and 'Mother Courage and Her Children'
Post Graduate	MA English Prev.	COURSE-I Part-II	LITERATURE IN ENGLISH 1550-1660	2016		Understand the essence of selected poems of John Donne's and Francis Bacon's.Understand the realism in 'Hamlet', and Religion and sin in 'The Duchess of Malfi'
Post Graduate	MA English Prev.	COURSE-II Part-II	Literature in English(1660-1798)	2016		Understand the Society , Individuality and isolation in 'Robinson Crusoe',Analyze the social satire through 'Joseph Andrews',To Find out Morality and wit in Addison's and Steele's selected essays,Analyze The Futility of Human striving in 'The Vanity of Human Wishes', 'London'
Post Graduate	MA English Prev.	COURSE-III Part-II	Literature in English(1798-1914)	2016		To Perceive the dramatic monologue in Robert Browning's selected poetries.Explore the social criticism in 'Tess of the d'Urbervilles'.To find out the psychological nuance through character in 'Madam Bovary'.Explore the idea of class division, romanticism and heroism in 'Arms and the Man'
Post Graduate	MA English Prev.	COURSE-IV Part-II	Literature in English(1914-2000)	2016		To Perceive the concept of Patriotism in Nissim Ezekiel's selected poetry. To find out the Greed Materialism 'The Guide'.Understand the essence of lost identity and a man's , To find out the concept of absurdity in 'The Outsider'inability to accept change in 'Death of a Salesman.'
Post Graduate	MA English Prev.	COURSE-V Part-II	Study of Genre (Drama)	2016		Explore the idea of filial piety and gender roll in 'The Glass Menagerie'.Analyze the aesthetic sensibility and sublime beauty in 'Cherry Orchard'.Understand the absurdities and existentialism in 'The Waiting for the Godot' Explore the causes of religious conflict in 'Final Solutions'

Post Graduate	MA English Final	COURSE -XI	Critical Theory (Part -I)	2017		Understand the purification through eliciting emotions in Aristotle's 'Poetics', and central idea of politics, love, philosophy and ethics in 'Horace' Understand the realism in 'Preface to Shakespeare'.Understand the earliest literature on music and drama through 'Natyashastra'
Post Graduate	MA English Final	COURSE- XII	American Literature (Part - I)	2017		To Perceive the natural aspect of Walt Whitman and Emily Dickinson's selected poetries.Explore the confictual relationship between natural and cultural lifestyle in 'Huckleberry Finn'.To find out the main essence of women's role and social Identity in 'The Portrait of a Lady'
Post Graduate	MA English Final	COURSE -XIII	Indian Writing in English (Part-I)	2017		To find out the transcendence of man as the consummation of terrestrial evolution in 'Savitri'.To Perceive the natural aspect of Kamala Dass and Jayant Mahapatra's selected poetries.Analyze the exploitation and lack of recognition in capitalist system in 'Coolie'
Post Graduate	MA English Final	COURSE -XIV	Opt.(I) Colonial and Post Colonial Studies (Part-I)	2017		Understand the wide range of post colonial literature through 'The Empire Writes Back'To Find out the struggle between loyality and Racism in 'Kim'.To Perceive the rooted tradition system which is defined as 'action' and 'activity' in 'Karambhumi'Understand how literature has reflected and bolstered British, French and U.S. imperialisms
Post Graduate	MA English Final	COURSE -XV	Opt. (I) Literature and Gender (Part-I)	2017		To find out Love versus Autonomy in 'Jane Eyre',Understand the memory and passing of time in 'The Light House'To find out the Individual Identity in 'A Room of One's Own'To Explore the idea of mental and societal breakdown in 'The Golden NoteBook
Post Graduate	MA English Final	COURSE -XVI	Critical Theory (Part -II)	2017		Understand the key aspect of writing poetry through 'Preface to Lyrical Ballads',To understand the criticism in the selected essays of Mathew Arnold.Understand the teachings of how to write essays through the work of Virginia Woolf, I.A.Richards, T.S.Eliot.To understand the Language through the writers Saussure, Elaine Showalter, and M.H.Abrams
Post Graduate	MA English Final	COURSE -XVII	American Literature (Part - II)	2017		To understand nature and real life through easiest way of selected poetries of Robert Frost's.Analyze the modern living and their disillusioned expatriates' way of attitude in 'The Sun Also Rises'.To analyze the effect of industrialization and technological progress between lower and upper class in 'The Hairy Ape'.It helps to explore the idea of modern America with ambiguous nature and betrayal of faith.
Post Graduate	MA English Final	COURSE -XVIII	Indian Writing in English (Part-II)	2017		To perceive the idea of religious warfare and struggle between power and corruption in the work of 'Train to Pakistan'. Explore the idea of freedom in life through 'Voices in the Cities'.Find out the struggle between guilt and innocence in 'Silence! The Court is in Session'.It helps to understand the main essence of Hinduism in the work of 'The Hindu View of Find out the struggle between guilt and innocence in 'Silence! The Court is in Session'.It helps to understand the main essence of Hinduism in the work of 'The Hindu View of Life'.
Post Graduate	MA English Final	COURSE -XIX	Opt.(I) Colonial and Post Colonial Studies (Part-II)	2017		Analyze the way in which society is organized according to hierarchies in 'The Grass is Singing'.Perceive the idea of desire for singularity or purity in 'Midnight's Children'.To Great Indian Novel'. understand the struggle between change and tradition in 'Things Fall Apart'.Analyze the nascent Indian democracy as a struggle between groups and individuals in 'The GReat Indian Novel".
Post Graduate	MA English Final	COURSE -XX	Opt. (I) Literature and Gender (Part-II)	2017		To understand the struggle between other and self, transcendence toward being in 'The Second Sex'. Analyze the physical and emotional devastation by slavery in 'Beloved'.Perceive the individual identity being a female in 'The Color Purple'.It helps to understand the pathetic condition of Indian woman through the work of Shashi Deshpande's 'That Long Silence'

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wledge of singing styles. Vocalize with tanpura. Development of ability to perform expression. Developing ability to perform on stage