List of courses offered across all programs during last five years- Course Outcomes

Program code	Program Name	Course cod	Course Name	Year of introductio n	Programme Outcomes	Course Outcome
Post Graduate	M.COM.	MC 101	Management Process and Organization Behaviour	2012		CO1: Students will gain a comprehensive understanding of the concept of Organisational Behaviour and Relationship to other fields and Learning. CO2: Students will understand about the Attitude, changing of attitude and aspects of personality. CO3: Students will learn about the Perception, factors influencing perception, Group Dynamics and Team Development. CO4: Will enable the students to learn about Organisational Conflict, its Dynamics, Traditional and modern approaches to conflict and Organisational development
Post Graduate	M.COM.	MC 102	Business Environment	2012		CO1: Systematically explores the external environment-legal & regulatory, macroeconomic, cultural, political, technological and natural. CO2: Analyze the environment of a business from the legal & regulatory, Macroeconomic, cultural, political, technological and natural perspectives. CO3: Discuss the supply and demand theory and its impact on insurance. CO4: Explain the effects of government policy on the economic environment and insurance industry. CO5: Outline how an entity operates in a business environment.
Post Graduate	M.COM.	MC 103	Managerial Economics	2012		CO1: Will enable the students understand the meaning and nature of managerial economics and also theories of consumer choice C02: Will acquaint the students with production and cost functions CO3: Will help students to understand meaning and nature of macro economics and the concept of inflation CO4: Will enable the students understand the various macro economic indicators.
Post Graduate	M.COM.	MC 104	Financial Accounting and Reporting	2012		CO1: This subject provides detailed insight into accounting regulations and accounting aspects of Companies. CO2: To know about Stages and Process of Standards settings by ICAI in India along with Compliance and Applicability of Accounting Standards in India. CO3: To understand the difference between Accounting Standard, IFRS, IASB and FASB and also gain knowledge on Convergence of Indian Accounting Standards with IFRS CO4: To learn about the IFRS current status and Challenge and also understand the concept of harmonization in Accounting and Reporting. CO5: It also covers contemporary issues in accounting i.e. Human Resource Accounting, Corporate Social Reporting, Forensic Accounting and Reporting. Environmental Reporting.
Post Graduate	M.COM.	MC 105	Business Statistics	2012		CO1: Will enable the students to understand the Correlation and Regression Analysis, Probability Distribution: Binomial, Poisson and Normal Distribution C02: Will learn the Hypotheses testing, Sampling tests – Large and small Sample tests – Z- Test, T-Test. CO3: Will help students to understand Parametric and Non-Parametric tests. CO4: Will enable the students understand the Association of Attributes, Chi-Square test etc.

Post Graduate	M.COM.	MC 106	Computer Application in Business and Cyber Security	2012	PSO1: Students will be able to understand the role of business-men, entrepreneurs, managers, consultants, and the same is required for critical decision making. PSO2: This course provides a learning environment to the students through students can understand the global and national perspective of the economy. PSO3: The course will provide the skills required for effective communication, decision making techniques which are useful for day to day routine business problems.	CO1: To know the basics of Computer System, Computer Software & Hardware and Information processing system. CO2: To understand the differences of types of computer systems, input-output devices, storage devices, communication devices, configuration of hardware devices and their applications. CO3: To learn about the personal computers, its components, hardware configuration, RAM, factors influencing PC performance, Types of E-Commerce System: B2B,B2C,C2C,C2B,B2Gand G2C, electronic Payment Systems. CO4: To be familiar with Modern network Technologies i.e. LAN, WAN, MAN, E-mail, Internet technologies, World Wide Web and Internet browsing. CO5: To get practical learning on M.S.Word, Excel, Power Point, Internet Technology – Applications, manager., control panel, paintbrush, calculator, desk top, my computer, settings, find, run etc.
Post Graduate	M.COM.	MC 201	International Business	2012		CO1: Will enable the students understand the meaning ,nature and importance of international International Business and Environment CO2: Will acquaint the students with the International Economic Cooperation and Agreements, SAARC, SAPTA, Indo-Lanka Free Trade Agreements, NAFTA. CO3: Will help students to gain understanding pertaining to IMF, WB, ADB, UNCTAD, IMODO and WTO. CO4: Will enable the students to acquaint with various international capital and money market instruments
Post Graduate	M.COM.	MC 202	Financial Management	2012		CO1: Will enable the students understand the meaning and nature of financial management and also the concept of cost of capital CO2: Will acquaint the students with the leverages, capital structure and dividend decisions C03: Will help students to understand the detailed concept of capital budgeting decisions with its various methods and risk analysis pertaining to capital budgeting decisons CO4: Will enable the students understand the concept of corporate and financial restructuring
Post Graduate	M.COM.	MC 203	Marketing Management	2012		CO1: To know the concept of Marketing, problems in marketing and ways to be . CO2: To understand the external marketing environment and different market entry strategies. CO3: To be familiar with different techniques of foreign market selection, their segmentation, positioning. CO4: How to make successful Marketing Plan, Organising and controlling, evaluating the Impact of globalisation. CO5: To learn the New Product planning & development, branding, Packaging and labelling, Pricing Decisions and strategies
Post Graduate	M.COM.	MC 204	Human Resource Management	2012		CO1: This subject prepares the student for the most critical ingredient of the business i.e. HRM. CO2: To be able to understand the Importance, Objective and Scope of Human Resource Management (HRM). CO3: To learn about the steps, Techniques/methods of Recruitment, Selection, Training and Management Development. CO4: To gain an insight about the Wage and Salary Administration and Wage Incentives CO5: To be able to develop strategic action plans by about Human Resources Development, Industrial Relationship and Industrial Unrest

Post Graduate	M.COM.	MC 205	Management and Cost Accounting	2012	PSO4: The course provides a platform for the researchers to get new dimensions for the economy. Through this programme the students will involve in various co-curricular activities; and demonstrate their practical and theoretical knowledge; and gain practical exposure in corporate world. PSO5: Students can also acquire practical skills to work as tax consultant, audit assistant and other financial supporting services. PSO6: Students will be able to do higher education and advance research in the field of commerce and finance. PSO7: Students are able to understand and develop ethical, logical and professional behavior. PSO8: It helps the students to demonstrate adequate skills, knowledge and ability to nurture	CO1: To communicate the major management accounting concepts related to functions of planning, directing, controlling and decision making. CO2: To make the students able to use management accounting tools for pricing, budgetary control, cost allocation, and performance evaluation as well as the new developments in management accounting knowledge and technique and how to access cost-benefit analysis. CO3: To evaluate the costs and benefits of different conventional and contemporary costing systems. CO4: To understand the principles, types, centres, and problems of responsibility accounting and the role of a manager in the process of responsibility accounting. CO5: To develop the ability among the students to collect, analyse and communicate quantitative and qualitative information to assist management in making effective planning and controlling.
Post Graduate	M.COM.	MC 206	Research Methodology	2012		CO1: Understand a general definition of research design. CO2: Be able to identify the overall process of designing a research study from its inception to its report. CO3: Students should be familiar with ethical issues in educational research, including those issues that arise in using quantitative and qualitative research. CO4: Students should be familiar with how to write a good introduction to an educational research study and the components that comprise such an introduction. CO5: Students should know the various types of quantitative sampling and which ones present the most rigorous approach to use.
Post Graduate	M.COM.	MC 207	Seminar on Indian Ethos and Contemporary Issues in Business (Internal)	2012		CO1: to be able to understand the current trends in business. CO2: to enable the students for good presentation skill. CO3: to make understand them a brief revision of the syllabus. CO4: to enhance the communication skills. CO5: to enable the students the practicality of the issues in business.
Post Graduate	M.COM.	MC 301	E Commerce	2013		CO1:Demonstrate an understanding of the foundations and importance of E-commerce CO2:Analyze the impact of E-commerce on business models and strategy. CO3:Describe Internet trading relationships including Business to Consumer, Business-to-Business, Intra-organizational. CO4:Describe the infrastructure for E-commerce. CO5:Describe the key features of Internet, Intranets and Extranets and explain how they relate to each other. CO6:Discuss legal issues and privacy in E-Commerce. CO7:Assess electronic payment systems. CO8:Recognize and discuss global E-commerce issues.
Post Graduate	M.COM.	OE 304	Application of Marketing	2013		CO1: To know the concept of Marketing, and problems in marketing. CO2: To understand the basis for market segmentation, Branding, trade-mark and product life cycle. CO3: To be familiar with Pricing & Distribution channel factors affecting choice of a distribution channel. CO4: To learn the New Product planning & development, branding, Packaging and labelling, Pricing Decisions and strategies. CO5: Understanding the product Promotion, their Complexities and issues and advertising
Post Graduate	M.COM.	MCM-322	Consumer Behaviour	2013		CO1: To provide an in-depth understanding of the consumer and industrial buying processes and their determinants as relevant for marketing decision making.

Post Graduate	M.COM.	MCM 324	Sales & Dsitribution Management	2013	them for tackling the different situations of the life for their overall development.	CO1: To acquaint students with the concepts which are helpful in developing and managing sales force and marketing channels so as to gain competitive advantage. CO2: To familiarize students with the concepts, techniques and the practical aspects of the key decision making variables in distributionchannel management. CO3: Students should be able to understand & appreciate the diverse variables affecting the sales & distribution function. CO4: Students should be able to develop sales and distribution plans.
Post Graduate	M.COM.	MCH 331	Human Resources Planning	2013		CO1- Basic understanding of Human Resource Planning CO2- Understanding of HR Functions from Strategic perspective CO3- Learning strategy implementation concerning HR CO4- Broader understanding of HRM and its links with corporate strategy CO5- Learning new developments in the field of Human Redsource
Post Graduate	M.COM.	MCH 332	Labour Laws	2013		CO1: To know the development and the judicial setup of Labour Laws. CO2: To learn the salient features of welfare and wage Legislations. CO3: To learn the laws relating to Industrial Relations, Social Security and Working conditions. CO4: To understand the laws related to working conditions in different settings.
Post Graduate	M.COM.	MC 401	Corporate Governance and Business Ethics	2013		CO1: To develop a broad understanding of Corporate Governance, its terminology, models and theories. CO2: To familiarize students with the legal and regulatory framework of Corporate Governance in India CO3: Compare the legislative frameworks in different countries CO4: Analyze the causes of corporate failures CO5: Understanding the concepts, typology and legal requirements of Whistle Blowing CO6: Appreciate the importance and benefit of Corporate Social Responsibility and Sustainable Development
Post Graduate	M.COM.	MC 402	Business Legislation	2013		CO1:Demonstrate an understanding of the Legal Environment of Business. CO2:Apply basic legal knowledge to business transactions. CO3:Communicate effectively using standard business and legal terminology.
Post Graduate	M.COM.	MC 403	Comprehensice Viva Voce (External)	2013		CO1: to prepare students for the corporate sector. CO2: to enable students for good communication skills. CO3: Overall development of the students.
Post Graduate	M.COM.	MCM-421	Retail Management	2013		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.
Post Graduate	M.COM.	MCM-422	Rural Marketing	2013		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.
Post Graduate	M.COM.	MCH-431	Performance Management	2013		CO1: To understand the nature of performance management and the core objectives of performance management system. It will create awareness about the evolution of PMS. CO2: Students will be able to differentiate between performance management and performance appraisal. CO3: It will develop an understanding of legal and ethical aspects of performance management system.

Post Graduate	M.COM.	MCH-436	Global Human Resource Management	2013	CO1: to enable the student for the meaning and concept of GlobalHRM. CO2: To be able to understand the Importance, Objective and Scope of Global Human Resource Management (HRM). CO3: To learn about the steps, Techniques/methods of Recruitment, Selection, Training and Management Development while dealing Internationally. CO4: To gain an insight about the Wage and Salary Administration and Wage Incentives in Globally accepted manner. CO5: To differentiate the HRM with Global HRM Practices.
Under Garduate	B.SC.(Non-medi	CXL 101	English-I (Language Skills)	2011	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-medi	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-medi	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-medi	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-medi	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-medi	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-medi	CML- 107	Calculus	2011	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-medi	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-medi	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-medi	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-medi	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-medi	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-medi	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-medi	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-medi	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-medi	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-medi	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-medi	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-medi	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-medi	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-medi	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-medi	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%20an
Under Garduate	B.SC.(Non-medi	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%20an
Under Garduate	B.SC.(Non-medi	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-medi	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-medi	CPL-302	Heat and Thermodynamics	2012	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	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-medi	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-medi	CPP- 308	Physics Lab--III	2012	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	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-medi	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-medi	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-medi	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-medi	CCL-304	PHYSICAL CHEMISTRY-II: (SOLUTIONS, PHASE EQUILIBRIUM, CONDUCTANCE & ELECTROCHEMISTRY)	2012	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, 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	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-medi	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-medi	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-medi	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-medi	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-medi	CCP-409	CHEMISTRY LAB IV: (TRANSITION METAL & COORDINATION CHEMISTRY, STATES OF MATTER & CHEMICAL KINETICS)	2012	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: 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-medi	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-medi	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-medi	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-medi	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-medi	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-medi	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-medi	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-medi	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-medi	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-medi	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-medi	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-medi	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-medi	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-medi	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-medi	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-medi	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-medi	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-medi	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-medi	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-medi	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-medi	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-medi	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-medi	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-medi	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 Garduate	B.C.A.	BCA-111	Computer & Programming Fundamentals	2009		CO1: Students will understand the fundamental concepts of computer like basic components of computer, classifications of computers, generation of computer. CO 2: Students will learn to demonstrate different types of Operating systems and their applications in real world. Identify and analyze computer hardware, software. CO 3: Students will be able to understand different types of computer languages and how write a simple assembly language, CO 4: Make students understand the concepts of protocols, network interfaces and design .Performance issues in local area networks and wide area networks, and familiar with wireless networking concepts and its applications.
Under Garduate	B.C.A.	BCA-112	PC Software	2009		CO 1: Students will understand the fundamental concepts of computer like basic components of computer, basics of windows, managing files and folders, how to use the control panel. CO 2: Students will get introduced to word processing interface, creating and editing documents, advance features of ms-word. CO 3: Students will be able to understand electronic spreadsheet using ms-excel, basics of msexcel, formulas and functions, advanced features of ms-excel like pivot table, pivot chart, database management using excel. CO 4: Students will understand the concepts of Presentation in MS-Power Point, creating manipulating and enhancing the slides.
Under Garduate	B.C.A.	BCA-113	Computer-Oriented Numerical Methods	2009		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.C.A.	BCA-114	Logical Organization of Computer-I	2009		CO 1: This course will teach the students decimal, binary, octal and hexadecimal number systems including computer arithmetic. Students will also expertise in different types of codes like BCD code, Error Detection and Correction Code, ASCII and Unicode. CO 2: Students will know about Boolean algebra. Boolean Theorems and Postulates. They will know about the Venn diagrams and K- MAP method to simplify the Boolean Expression and use it in daily life also. CO 3: This course introduces the topic of logic gates including Universal Gates, XOR gate, XNOR Gate etc. Students will also know about combinational logic, their characteristics their design and multilevel NAND and NOR implementation. Use Boolean algebra as related to designing computer logic, through simple combinational and sequential logic circuits. CO 4: After the completion of this topic, students will learn about the combinational circuits like adders, subtractions, Encoder, Decoder, Multiplexer, De-multiplexer, Comparators and Code Convertors and their real life application.

Under Garduate	B.C.A.	BCA-115	Mathematical Foundations-I	2009	CO 1: Students are able to apply set theory in real life scenarios CO 2: They are able to solve equations with the help of matrices and determinants. Further with help of this they have gained knowledge about input output model CO 3: With the help of differentiation they are able to model out average revenues, marginal revenue, Maximization and minimization cost. CO 4: Students will gain knowledge about higher order derivatives and constrained optimization
Under Garduate	B.C.A.	BCA-116	Communication Skills	2009	CO1: It guides students on professional path. It helps to write detailed business reports, minutes of meeting. CO 2: It helps students to understand professional obligation. It helps to improve grammar skills of the students. CO 3: It enables students to plan and manage business projects and communication strategy. It enables students to conduct effective business research and communication process and findings in a range of business documents and oral communication. CO 4: It helps in utilizing constructive negotiation and conflict management skills. It improves communication skills of the students and helps them in facing interviews.
Under Garduate	B.C.A.	BCA-117	Lab-I Windows and Powerpoint	2009	CO 1: Students will understand the basic operations of a computer like how to manage files and folders and how to create shortcuts, using the control panel etc. CO2: Students will get to kniow the presentation techniques using Microsoft Powerpoint.
Under Garduate	B.C.A.	BCA-118	Lab-II Word and Excel	2009	CO 1: Students will get understand the MS-Office. CO 2: Students will get introduced with MS-word and its various features. CO 3: Students will understand the basics concepts of MS-excel and how to use the various advanced features of ms-excel like: pivot table, pivot chart, linking and embedded objects, and Database Management in Excel.
Under Garduate	B.C.A.	BCA-121	'C' Programming	2009	CO 1: Students will understand the basics of C Programming language, like history of C, development of C, syntax of C. They will also learn about the strength of C CO 2: Students will learn about decision making and branching statements. They also learn about how to use different looping, and branching statements in different situations. CO 3: Students will learn about the usage of system functions. They also learn about how to create user functions as per the requirement of user to solve a specific problem. CO 4: Students will understand array, pointer, and string concepts. How they are created and used. They will be comfortable in Programming fundamentals like algorithms and flowcharts.
Under Garduate	B.C.A.	BCA-122	Computer Architecture - I	2009	1. Students will cite knowledge of various approaches to document a software system (Remembering) 2. Students will be able to describe functional and non-functional requirements (Understanding) 3. Students will be able to use proper architecture for software (Applying) 4. Students will be able to categorize different components used in the software system (Analyzing) 5. Students will be able to choose from different architectural styles (Evaluating) 6. Students will be able to improve quality of software by selecting proper architecture
Under Garduate	B.C.A.	BCA-123	Computer-Oriented Statistical Methods	2009	CO1. Recognize the error in the number generated by the solution. CO2. Compute solution of algebraic and transcendental equation by numerical methods like Bisection method and Newton Rapshon method. CO3. Apply method of interpolation and extrapolation for prediction. CO4. Recognize elements and variable in statistics and summarize qualitative and quantitative data. CO5. Calculate mean, median and mode for individual series. CO6. Outline properties of correlation and compute Karl-Pearson's coefficient of correlation.

Under Garduate	B.C.A.	BCA-124	Mathematical Foundations-II	2009	Upon completion of this course, students will be able to: 1. Apply knowledge of computing and mathematics appropriate to the discipline using matrices. 2. Analyze a problem and identify and define the computing requirements to solution using binary operations. 3. Understand some aspects of computer programming
Under Garduate	B.C.A.	BCA-125	Accounting & Financial Management	2009	CO1: Students will be able to learn the basics of accounting. CO2: Students will be able to learn the basics of financial management. CO3: to enable the use of computers in accounting and financial sector. CO4: to enable students to work in fianancial aspects.
Under Garduate	B.C.A.	BCA-126	Personality Development	2009	CO1 :Individual or in-group class presentations pertaining to the applications of concepts, theories or issues in human development.. CO2: Scores obtained from essay and or objective tests. CO3: Attendance, classroom participation, small group interactions. CO4: Research and write about relevant topics. CO5: Design and complete a research project that can take the form of a developmental interview, an observation or assessment through service learning. CO6: Develop and maintain a Reflection
Under Garduate	B.C.A.	BCA-127	Lab-I Programming in 'C'	2009	CO 1: Students will understand the basics of C‘ Programming language, like history of C, development of C, syntax of C. They will also learn about the strength of 'C'. CO 2: Students will learn about decision making and branching statements. They also learn about how to use different looping, and branching statements in different situations. CO 3: Students will learn about the usage of system functions. They also learn about how to create user functions as per the requirement of user to solve a specific problem. CO 4: Students will understand array, pointer, and string concepts. How they are created and used. They will be comfortable in Programming fundamentals like algorithms and flowcharts.
Under Garduate	B.C.A.	BCA-128	Lab-II Statistical Methods implementation in 'C'	2009	
Under Garduate	B.C.A.	BCA-231	Object oriented programming using C++	2010	a) Describe the procedural and object oriented paradigm with concepts of streams, classes, functions, data and objects. b) Understand dynamic memory management techniques using pointers, constructors, destructors, etc c) Describe the concept of function overloading, operator overloading, virtual functions and polymorphism. d) Classify inheritance with the understanding of early and late binding, usage of exception handling, generic programming. e) Demonstrate the use of various OOPs concepts with the help of programs
Under Garduate	B.C.A.	BCA-232	Data Structures-I	2010	CO 1 Select appropriate data structures as applied to specified problem definition. CO2 Implement operations like searching, insertion, and deletion, traversing mechanism etc. on various data structures. CO 3 Students will be able to implement Linear and Non-Linear data structures. CO 4 Implement appropriate sorting/searching technique for given problem.CO 5 Design advance data structure using NonLinear data structure.CO 6 Determine and analyze the complexity of given algorithm

PO 1. B.C.A. programme facilitates the

Under Garduate	B.C.A.	BCA-233	Computer Architecture-II	2010	facilitates the graduates to use and apply current technical concepts and practices in the core computer applications. PO 2. Identify computer application related problems, analyze them and design the system or provide the solution for the problem considering legal, ethical and societal issues. 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. Students learn to work and communicate effectively in interdisciplinary environment, either independently or in team, and demonstrate scientific leadership in academic and	Design basic and intermediate RISC pipelines, including the instruction set, data paths, and ways of dealing with pipeline hazards. - Consider various techniques of instruction-level parallelism, including superscalar execution, branch prediction, and speculation, in design of high-performance processors. () - State and understand memory hierarchy design, memory access time formula, performance improvement techniques, and trade-offs.
Under Garduate	B.C.A.	BCA-234	Introduction to Data Base System	2010		Students will able to: 1 Explain the features of database management systems and Relational database. 2 Design conceptual models of a database using ER modeling gather data to analyze and specify the requirements of a system. 3. design system components and environments. build general and detailed models that assist 4. programmers in implementing a system.design a database for storing data, a user interface for data input and output, and controls to protect the system and its data. 5.design a database for storing data, a user interface for data input and output, and controls to protect the system and its data.
Under Garduate	B.C.A.	BCA-235	Structured System Analysis & Design	2010		This module aims to as to introduce variety of new software used by analysts, designers to manage projects, analyze and document systems, design new systems and implement their plans. It introduces also a recent coverage of UML, wireless technologies and ERP; web based systems for e-commerce and expanded coverage on RAD and GUI design.
Under Garduate	B.C.A.	BCA-236	Mathematical Foundations-III	2010		Upon completion of this course, students will be able to: 1. Understand the concepts of logarithms, cartesian coordinate, curvature and tangents. 2. Apply knowledge of computing, mathematics, science, and engineering appropriate to the modeling and design of software. 3. Implement the numerical methods using computer software and apply them in examples
Under Garduate	B.C.A.	BCA-237	Lab-I Programming in 'C++'	2010		1.Bit manipulations. Number conversion. 2.Floating point data manipulations. 3. To use simple input and output statements. To use the for and do…while repetition statements to execute statements repeatedly. 4. To understand multiple selection using the switch selection statement. To use the break and continue statements to alter the flow of control. 5. To use the logical operators to form complex conditional expressions in control statements. To avoid the consequences of confusing the equality and assignment operators. 6. How the function call/return mechanism is supported by the function call stack and activation records. Simulation techniques using random number generation.
Under Garduate	B.C.A.	BCA-238	Lab-II Implementation of Data Structure in 'C++'	2010		COS 1: Know the principles of oops concept and control structure COS 2: Analyze the concept of classes and object, array, functions, constructor and destructor COS 3: Understand the concept of inheritance and classification, pointers virtual function and polymorphism COS 4: Able to work with files, file pointers and its manipulations COS 5: Know the concept of function templates and exception handling

Under Garduate	B.C.A.	BCA-241	Web Designing – I	2010	academic and industry. PO 5. Recognize the need for and an ability to engage in continuing professional development.	Insert a graphic within a web page. Create a link within a web page. Create a table within a web page. Insert heading levels within a web page. Insert ordered and unordered lists within a web page. Use cascading style sheets. Create a web page. Validate a web page. Publish a web page
Under Garduate	B.C.A.	BCA-242	Data Structures-II	2010		Upon completion of this course, students will be able to: ▯ Have a comprehensive knowledge of the data structures and algorithms on which file structures and data bases are based. ▯ Understand the importance of data and be able to identify the data requirements for an application. ▯ Have an understanding and practical experience of algorithmic design and implementation. ▯ Have practical experience of developing applications that utilize databases. ▯ Understand the issues involved in algorithm complexity and performance.
Under Garduate	B.C.A.	BCA-243	Operating Systems	2010		1. An appreciation of the role of an operating system. 2. Understand the theory and logic behind the design and construction of operating systems. 3. Examine the algorithms used for various operations on operating systems. 4. Differentiate between various operating systems functionalities in terms of performance.
Under Garduate	B.C.A.	BCA-244	Relational Data Base Management System	2010		CO 1:Create and populate a RDBMS for a real life application, with constraints and keys, using SQL. CO2: Retrieve any type of information from a data base by formulating complex queries in SQL. CO3 Analyze the existing design of a database schema and apply concepts of normalization to design an optimal database. CO4 Build indexing mechanisms for efficient retrieval of information from a database
Under Garduate	B.C.A.	BCA-245	Management Information System	2010		LO1. Understand the leadership role of Management Information Systems in achieving business competitive advantage through informed decision making. LO2. Analyze and synthesize business information and systems to facilitate evaluation of strategic alternatives.
Under Garduate	B.C.A.	BCA-246	Mathematical Foundations-IV	2010		Upon completion of this module, students will be able to understand: 1. partial derivatives including Euler's theorem 2. Lagrange's multiplier 3. reduction formula 4. Quadrature 5. Beta and Gama functions
Under Garduate	B.C.A.	BCA-247	Lab -I Web designing using HTML	2010		Add interacitivity to web pages with Javascript Apply responsive design to enable page to be viewed by various devices Describe the basics of Cascading Style Sheets (CSS3) Use the Document Object Model (DOM) to modify pages

Under Garduate	B.C.A.	BCA-248	Lab – II ORACLE	2010
Under Garduate	B.C.A.	VCC-581	Environmental Studies	2010
Under Garduate	B.C.A.	BCA-351	Artificial Intelligence	2011
Under Garduate	B.C.A.	BCA-352	Micro Processor	2011
Under Garduate	B.C.A.	BCA-353	Software Engineering	2011
Under Garduate	B.C.A.	BCA-354	Computer Networks	2011
Under Garduate	B.C.A.	BCA-355	Computer Graphics	2011
Under Garduate	B.C.A.	BCA-356	Web Designing – II	2011

1. Enhance the knowledge and understanding of Database analysis and design. 2. Enhance the knowledge of the processes of Database Development and Administration using SQL and PL/SQL. 3. Enhance Programming and Software Engineering skills and techniques using SQL and PL/SQL. 4. Preparation of background materials and documentation needed for Technical Support using SQL and PL/SQL.
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.
CO 1. Demonstrate knowledge of the building blocks of AI as presented in terms of intelligent agents CO2. Analyze and formalize the problem as a state space, graph, design heuristics and select amongst different search or game based techniques to solve them. CO3. Develop intelligent algorithms for constraint satisfaction problems and also design intelligent systems for Game Playing. CO 4. Attain the capability to represent various real life problem domains using logic based techniques and use this to perform inference or planning.
The student will be able to characterise and predict the effects of the properties of the bus on the overall performance of a system. The student will be able to describe some of the characteristics of RISC and CISC architectures.
ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
1. Describe the functions of each layer in OSI and TCP/IP model. 2. Explain the functions of Application layer and Presentation layer paradigms and Protocols. 3. Describe the Session layer design issues and Transport layer services. 4. Classify the routing protocols and analyze how to assign the IP addresses for the given network. 5. Describe the functions of data link layer and explain the protocols. 6. Explain the types of transmission media with real time applications
Have a basic understanding of the core concepts of computer graphics. Be capable of using OpenGL to create interactive computer graphics. Understand a typical graphics pipeline. Have made pictures with their computer.
You will discover how does web works really, what makes web sites work. ? Simple and impressive design techniques, from basics till advanced to focus on goal oriented and user centric designs. ? How to and where to start research, planning for website & actually build excellent web sites. ? Pro level skills in SEO with keyword research and content stratergy for your website. ? To create web elements like buttons, banners & Bars and of course complete UI designs.

Under Garduate	B.C.A.	BCA-357	Lab-I based upon 352	2011	CO1: recall and apply a basic concept of digital fundamentals to Microprocessor based personal computer system. CO2: identify a detailed s/w & h/w structure of the Microprocessor. CO3: illustrate how the different peripherals (8255, 8253 etc.) are interfaced with Microprocessor. CO4: distinguish and analyze the properties of Microprocessors & Microcontrollers. CO5: analyze the data transfer information through serial & parallel ports. CO6: train their practical knowledge through laboratory experiments.
Under Garduate	B.C.A.	BCA-358	Lab-II based upon 355 Programming in 'C++'	2011	1.Bit manipulations. Number conversion. 2.Floating point data manipulations. 3. To use simple input and output statements. To use the for and do…while repetition statements to execute statements repeatedly. 4. To understand multiple selection using the switch selection statement. To use the break and continue statements to alter the flow of control. 5. To use the logical operators to form complex conditional expressions in control statements. To avoid the consequences of confusing the equality and assignment operators. 6. How the function call/return mechanism is supported by the function call stack and activation records. Simulation techniques using random number generation.
Under Garduate	B.C.A.	BCA-361	Core Java	2011	Write, compile, and execute Java programs that may include basic data types and control flow constructs using J2SE or other Integrated Development Environments (IDEs) such as Eclipse, NetBeans, and JDeveloper. - Write, compile and execute Java programs using object oriented class structures with parameters, constructors, and utility and calculations methods, including inheritance, test classes and exception handling.
Under Garduate	B.C.A.	BCA-362	Introduction to Linux	2011	Documentation will demonstrate good organization and readability. File processing projects will require data organization, problem solving and research. Scripts and programs will demonstrate simple effective user interfaces. Scripts and programs will demonstrate effective use of structured programming.
Under Garduate	B.C.A.	BCA-363	Internet Technology	2011	Distinguish, identify and relate between the principal layers of a complex communications system. Know all important telecommunications principles and equipment, protocol suites, architectures, regulatory bodies and common carrier services as well as issues of cross-protocol communications. Have the skills required to install, administer and manage a Local Area Network (LAN) and be able to network that LAN to other network segments over wide area links.
Under Garduate	B.C.A.	BCA-364	Visual Basic	2011	1. Understand an overview of computers and computer programming.Understand Visual Basic applications. Understand how to perform operations and store results.
Under Garduate	B.C.A.	BCA-365	Multimedia Technology	2011	identify the essential features of graphics/image data types, file formats, and colour models in images and video. explain the technical details of multimedia data representations. perform a comparative analysis of the major methods and algorithms for multimedia data compression. explain the technical details of popular multimedia compression standards.
Under Garduate	B.C.A.	BCA-366	Introduction to .NET	2011	The student will be able to: 1. describe the concepts of logic preparation; 2. recognize and explain the benefits of procedural, event driven, and object oriented languages; 3. explain the basics of GUI design; 4. work with Visual Basic Forms, ToolBox controls and Properties; 5. be able to design and create Windows programs using the Visual Basic .NET programming language; 6. design and program using classes a completely documented Visual Basic .NET project.
Under Garduate	B.C.A.	BCA-367	Major Project	2011	

Under Graduate	B.COM.	BC 101	Financial Accounting-I	1980		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	1980		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	1980		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	1980		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	1980		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	1980		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	1980
Under Graduate	B.COM.	BC 202	Macro Economics	1980
Under Graduate	B.COM.	BC 203	Fundamentals of marketing	1980
Under Graduate	B.COM.	BC 204	E-Commerce	1980
Under Graduate	B.COM.	BC 205	Business Mathematics-II	1980

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.
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
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.
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
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	1980		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	1980	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 attitude that will sustain an environment of learning and creativity among the students PO5: Enabling graduates to be capable of making decisions at	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	1981		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	1981		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	1981		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	1981		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	1981	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 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	1981		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.
Under Graduate	B.COM.	BC 401	Corporate Accounting-II	1981		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	1981		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	1981		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	1981		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	1981		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.
Under Graduate	B.COM.	BC 406 (i)	Advertising	1981		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	1982		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	1982	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	1982	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	1982	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.
Under Graduate	B.COM.	BC 505	Auditing	1982	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	1982	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
Under Graduate	B.COM.	BC 601	Management Accounting	1982	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	1982	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	1982	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	1982	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	1982	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	1982	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	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
Under Graduate	B.A.	HPE(P) 104	Health & Physical Education (Practical)	2015
Under Graduate	B.A.	HPE 201	Health & Physical Education	2016
Under Graduate	B.A.	HPE(P) 202	Health & Physical Education (Practical)	2016
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

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.
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.
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.
CO1 Measurement of Body Mass Index (Normal Range of B.M.I for Children, Women and Men)
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
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

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)	1980
Under Graduate	B.A.	HIS 103	Histroy :History of India (600-1526 A.D.)	1980
Under Graduate	B.A.	HIST 201	Histroy :Political History of India (1526 – 1857 A.D.)	1981

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
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
• 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)	1981	• 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	1982	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	1982	• 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	1980	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	1980	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	1981	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	1981	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	1982
Under Graduate	B.A.	ENG 302	English Compulsory Part III	1982
Under Graduate	B.A.	BACS 111	Computer Science (Fundamentals of Computer)	2018
Under Graduate	B.A.	BACS 112	Computer Science (Programming in C)	2018
Under Graduate	B.A.	BACS 113	Computer Science (Computer Lab I)	2018
Under Graduate	B.A.	BACS 121	Computer Science (Data Structure using C)	2018
Under Graduate	B.A.	BACS 122	Computer Science (Computer Organization)	2018
Under Graduate	B.A.	BACS 123	Computer Science (Computer Lab II)	2018
Under Graduate	B.A.	BACS 201	Computer Science (Database Management System)	2019

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.
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.
1 Bridge the fundamental concepts of computers with the present level of knowledge of the students. R 1,3 2 Familiarise operating systems, programming languages, peripheral devices, networking, multimedia and internet U 1,3
Understanding a functional hierarchical code organization. • Ability to define and manage data structures based on problem subject domain. • Ability to work with textual information, characters and strings. • Ability to work with arrays of complex objects. • Understanding a concept of object thinking within the framework of functional model
1. Learn the notions of data structure, Abstract Data Type. 2. Understand Big(O) notation and role of algorithm complexity in computing 3. To evaluate various methods of linked list formulation. Also explore different kinds of linked lists and their applications in day to day problem solving.
Classify and compute the performance of machines. Understand how to implement memory chips, boards, modules and caches. Relate to arithmetic for ALU implementation. Understand the basics of hardwired and micro-programmed control of the CPU. Learn about various I/O devices and the I/O interface.
1. To understand the basic Transaction Management in Databases e.g. Concurency, Recovery, and different protocols. 2. To understand the concepts of Query processing and Query Optimization. 3. To know the important aspects of Single and Multilevel dynamic Indexing. 4. To know the Data warehouse and Data mining.

Under Graduate	B.A.	BACS 202	Computer Science (Operating System)	2019
Under Graduate	B.A.	BACS 203 (	Computer Science (Computer Lab -III)	2019
Under Graduate	B.A.	BACS 204	Computer Science (Software Engineering)	2019
Under Graduate	B.A.	BACS 205	Computer Science (Computer Networks)	2019
Under Graduate	B.A.	BACS 206 (	Computer Science (Computer Lab - IV)	2019
Under Graduate	B.A.	BAMH 111	Mathematics (Algebra)	1980
Under Graduate	B.A.	BAMH 112	Mathematics (Calculus)	1980
Under Graduate	B.A.	BAMH 113	Mathematics Lab I	1980
Under Graduate	B.A.	BAMH 121	Mathematics (Ordinary Differential Equations and Laplace Transforms)	1980

1. An appreciation of the role of an operating system. 2. Understand the theory and logic behind the design and construction of operating systems. 3. Examine the algorithms used for various operations on operating systems. 4. Differentiate between various operating systems functionalities in terms of performance.
1. Understand the functions of the Oracle Database Server and Oracle Database Client. 2. Create, maintain and manipulate an Oracle Database. 3. Understand and apply the Data Dictionary. 4. Understand and apply database statistics in relation to performance and integrity of the database. 5. Create and understand the application of user roles, privileges, and the security of the database. 6. Discuss and understand the concepts of Backup and Recovery Procedures.
1. To broaden your knowledge of Software Process Models. 2. To become aware of the Software Product. 3. To increase your proficiency in Software Project Management. 4. To gain practical experience in Requirements Engineering
Explain the concept of packet-switching, and identify and analyze the different types of packet delay in packet-switched networks (ABET Outcomes: a, e, i, l, m) 2. Describe the essential principles of a transport layer protocol (reliable data transfer, flow control, congestion control) (ABET Outcomes: a, e, i, m) 3. Use IP addressing and apply routing algorithms to find shortest paths for network-layer packet delivery (ABET Outcomes: a, e, i, j, m, n)
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.
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.
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
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)	1980
Under Graduate	B.A.	BAMH 123	Mathematics Lab II	1980
Under Graduate	B.A.	BAMH 201	Mathematics (Advanced Calculus)	1981
Under Graduate	B.A.	BAMH 202	Mathematics (Numerical Analysis)	1981
Under Graduate	B.A.	BAMH 203	Mathematics Lab III	1981
Under Graduate	B.A.	BAMH 204	Mathematics (Partial Differential Equation and Special Functions)	1981
Under Graduate	B.A.	BAMH 205	Mathematics (Mechanics I)	1981
Under Graduate	B.A.	BAMH 206	Mathematics Lab IV	1981

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.
Co-1 Students will be able to understand Arrays CO-2 Genrral progams based onarrays and pointers and branching. Switch and break statements
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.
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

Under Graduate	B.A.	BM 351	Mathematics (Real Analysis)	1982	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	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.A.	BM 352	Mathematics (Groups and Rings)	1982		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.A.	BM 353	Mathematics (Numerical Analysis)	1982		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)	1982		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)	1982		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)	1982	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.	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	1980		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	1980		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	1981		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	1981		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	1982		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	1982		1. नव्यतर गद्य - गौरव 2. हरियाणवी भाषा और साहित्य का इतिहास 3. प्रयोजन मूलक हिंदी - पत्रकारिता
Under Graduate	B.A.	POL 101	Political Science (Indian Constitution)	1980		Students will be able to understand 1ndian Constitution-Evolution, Sources and Features, Preamble, Fundamental Rights, Fundamental Duties and Directive Principles of State Policy. Co2 Union Legislature-Parliament-Composition and Functions; Speaker of Lok Sabha Amendment Process; State Legislature-Vidhan Sabha, Vidhan Parishad Panchayati Raj Institutions. History, Basic Features and 73rd and 74th Amendments. Co 3 Union Executive - President, Vice-President, Prime Minister, Council of Ministers; State Executive- Governor, Chief Minister and Council of Ministers. Co 4 Judiciary-Supreme Court, High Courts and Judicial Activism. Redressal and grievances Institutions; RTI, Lokpal and Lokyaukat
Under Graduate	B.A.	POL 103	Political Science (Indian Politics)	1980		C O 1 Federal: Nature and Features of Indian Federalism; Centre State Relations; Demand for State Autonomy; Emerging Trends in Indian Federalism; Working of NITI Ayog. C O 2Election Commission, Electoral Process and its Defects and Voting Behaviour, Electoral Reforms, Problem of Defection. CO 3Party System in India; Features, National and Regional Parties, and Defects. Coalitional Politics; Basis, Nature and Impact on Indian Polity. Pressure Groups.CO 4 Role of Caste, Religion, Language, Regionalism and Ethnicity in India, Politics of Reservation, Emerging Trends and Challenges Before Indian Political
Under Graduate	B.A.	POL 202	Political Science (Indian Political Thinker)	1981		Students will be able to understand Iviews and thoughts of Indian thinkers in context to politics CO 1Raja Ram Mohan Ray & Swami Dayanand, CO2 Dada Bhai Narojee & Gopal Krishan GokhleCO3Swami Vivekanand & Aurbind Ghosh CO4 Lala Lajpat Rai & Bal Gangadhar Tilak

Under Graduate	B.A.	POL 204	Political Science (Indian Political Thinker)	1981	Students will be able to understand Iviews and thoughts of Indian thinkers in context to politics CO1 J.P. Narayan & Ram Manohar Lohia CO2I Mahatma Gandhi & M.N, Roy CO3Jawaharlal Nehru & B,R,Ambedkar CO4 Subhash Chander Bose & Bhagat Singh
Under Graduate	B.A.	PS-05	Political Science (Comparative Politics)	1982	CO1 Comparative Politics-Definition, Scope; Traditional & Modern Concerns; Comparative Methods.CO 2 Approaches to the Study of Comparative Politics: Input-Out (David Easton), Structural-Function (G. Almond), Political Development (Lucian W. Pye), Political Culture (G. Almond)CO 3 Constitutionalism: History, Nature, Type and Problem in Modern Times.CO4 Constitutional Structure: (a) Formal-Executive, Legislation and Judiciary, (b) Informal Structures– Political Parties and Pressure Groups. Note: Internal
Under Graduate	B.A.	PS-06	Political Science (Comparative Constitution of UK and USA)	1982	CO 1 Evolution, Conventions, Legacies and Basic features of Constitutions of UK & USA; Socio-Economic basis of Constitutions of UK & USA.CO 2 Comparative Study of Executive, Legislation and Judiciary System of UK & USA.CO 3Comparative studies of Structures, Functions and roles of political parties and pressure groups of UK & USA. CO 4 Electoral Processes, Voting Behaviour, Bureaucracy and Recent Trends of the working of the systems of UK & USA.
Under Graduate	B.A.	BECO 101	Economics (Principles of Microeconomics -I)	1980	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)	1980	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)	1981	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)	1981	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
Under Graduate	B.A.	EC-05	Indian economics	1982	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

Under Graduate	B.A.	EC-06	Indian economics	1982
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
Under Graduate	B.A.	PY02(P)	Psychology (Practical)	2006
Under Graduate	B.A.	PY03	Social Psychology	2007

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-
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.
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. 4 Define and explain groups (eg., types, key components, influences of

Under Graduate	B.A.	PY03(P)	Psychology (Practical)	2007	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
Under Graduate	B.A.	PY04	Developmental Psychology	2007	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.
Under Graduate	B.A.	PY04(P)	Psychology (Practical)	2007	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
Under Graduate	B.A.	PY05	Psychopathology	2008	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.
Under Graduate	B.A.	PY05(P)	Psychology (Practical)	2008	2. CAQ 3. TAT 4. WAT 5. Depression Inventory 6. Anxiety Scale 7. WAIS 8. Emotional Intelligence 9. PGI Memory Scale 10. DMI
Under Graduate	B.A.	PY06	Applied Psychology	2008	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, sports, political behavior and political psychology of groups.

Under Graduate	B.A.	PY06(P)	Psychology (Practical)	2008	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
Under Graduate	B.A.	GEOG 101	Geography of India	1980	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 population growth
Under Graduate	B.A.	GEOG 102	Geography (Maps, Scales)	1980	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
Under Graduate	B.A.	GEOG 103	Physical Geography - Geomorphology	1980	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.
Under Graduate	B.A.	GEOG 104	Geography (Representation of Physical features)	1980	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
Under Graduate	B.A.	GEOG 201	Physical Geography - II	1981	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
Under Graduate	B.A.	GEOG 202	Geography (Representation of Climatic Data)	1981	1. Measurement of temprature, rainfall, pressure and humidity 2. Climograph, distribution of pressure, weather map interpretation- change and tape survey

Under Graduate	B.A.	GEOG 203	Human Geography	1981	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)	1981	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
Under Graduate	B.A.	GEOG 301	Economic Geography	1982	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 ,
Under Graduate	B.A.	GEOG 302	Geography (Distribution Maps and Diagrams)	1982	CO1: Distribution maps-Qualitative and Quantitative Distribution Maps CO2: Prismetic compass survey
Under Graduate	B.A.	GEOG 303	Introduction to Remote Sensing, GIS and Quantitative Methods	1982	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.
Under Graduate	B.A.	GEOG 304	Geography (Introduction to Remote Sensing and Field Survey Report)	1982	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.
Under Graduate	B.A.	SANE 101	Sanskrit (Elective)	1980	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 - अच् संधि, हल संधि, विसर्ग संधि आदि)
Under Graduate	B.A.	SANE 102	Sanskrit (Elective)	1980	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

Under Graduate	B.A.	SANE 201	Sanskrit (Elective)	1981	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
Under Graduate	B.A.	SANE 202	Sanskrit (Elective)	1981	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
Under Graduate	B.A.	SANE 301	Sanskrit (Elective)	1982	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
Under Graduate	B.A.	SANE 302	Sanskrit (Elective)	1982	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
Under Graduate	B.A.	HIE 101	Hindi Elective	1980	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	1980	1. प्राचीन एंव मध्य कालीन काव्य 2. निर्मला उपन्यास 3. हिंदी साहित्य का भक्तिकाल
Under Graduate	B.A.	HIE 201	Hindi Elective	1981	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	1981	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	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.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)	1980	इस विषय को पढने के बाद विद्यार्थी यह जान पाएंगे 1. संस्कृत चयनिका 2. संस्कृत व्याकरण - शब्द रूप धातु रूप, स्वर संधि 3. भगवद्गीता १लोक
Under Graduate	B.A.	SANC 102	Sanskrit (Compulsory)	1980	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)	1981	इस विषय को पढने के बाद विद्यार्थी यह जान पाएंगे 1. भास् चारुद्त्तं - प्रथम एंव द्वितीय अंक 2. कृदंत प्रकरण - १त्री, शानच, तव्यत, यत 3. समास - अव्ययी भाव एंव तत्पुरुष
Under Graduate	B.A.	SANC 202	Sanskrit (Compulsory)	1981	इस विषय को पढने के बाद विद्यार्थी यह जान पाएंगे 1. भास् चारुद्त्तं - तृतीय एंव चतुर्थ अंक 2. णइजंत तथा संननत धातु - भू पठ पा गम लिख श्रु आदि 3. समास - द्वंद एंव बहुव्रीहि समास
Under Graduate	B.A.	SANC 301	Sanskrit (Compulsory)	1982	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)	1982	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 - उप्पद्विभक्ति .,
Under Graduate	B.A.	ENGE 101	Functional English Part I (Phonetics and Grammer)	2019	CO1: Students learn about the language skills i.e., reading, writing, listening, speaking, it helps in communications skills and career progressions. CO2: It will help in reducing errors in speech and writing.
Under Graduate	B.A.	ENGE 102	Functional English Part I (Phonetics and Grammer)	2019	CO1: Students will learn about the basics of linguistics an language. CO2: Students will learn about the syllables, transcriptions, allophones, intonations.
Under Graduate	B.SC. Honors Ma	BXL 101	English	2019	Students will able to learn about : 1. Phonetics, Composition 2. Syntax, Comprehension 3. Paraphrases/precis 4. Note Taking/Summarizing

Under Graduate	B.SC. Honors Ma	BXL 102	Environmental Sciences	2019	B.Sc.(Hons.) Mathematics Programme develops: PO 1: Scientific temperament and attitude among the science graduates PO 2: The qualities of a science – observation, precision, analytical mind, logical thinking, clarity of thought and expression, systematic approach, qualitative and quantitative decision making are enlarged PO 3: The program also empowers the graduates to appear for various competitive examinations or choose the post graduate	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.SC. Honors Ma	BML 102	Mathematics – I Basic Algebra	2019		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 generalisations. 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, biquadratic and cubic equations.
Under Graduate	B.SC. Honors Ma	BPL 101	Mechanics	2019		Co 1: Students will be able to apply what they learn in their daily life activities like sports(application of Newton‘s 2nd law), in their movement or journeys(law of inertia) etc.. CO 2: This would enable students to have clear understanding of some important aspects like escape velocity- velocity needed for an object to escape from the influence of gravitational field, launching of satellites and rockets etc. CO 3: Help students to appreciate the implementation of the laws practically say via finding out moment of inertia of flywheel in the laboratory. It will enable the students to think and make them capable of implementing them practically, besides will also convey the significance of the contents when applied to other areas of science such as astronomy (celestial mechanics), chemistry (dynamics of molecular collision).
Under Graduate	B.SC. Honors Ma	BCL 101	Chemistry I	2019		Students will be able to understand CO1: Objectives and limitations of chemical thermodynamics, thermodynamics laws CO2: conductance and electrochemistry , faraday's law of electrolysis CO3: fundamentals of organic chemistry CO4: Stereochemistry and chemistry of biomolecules
Under Graduate	B.SC. Honors Ma	BBL 101	Elementary Biology	2019		Students will be able to understand Co1: basic concepts of biology CO2: closure look at cell, mechanism of macro evolution, diversity of life, Darwin's theory of evolution, genetic approach of biology CO3: chemistry of life, study of carbon compunds CO4: Structure and functions of bimolecules
Under Graduate	B.SC. Honors Ma	BPP 101	Physics Lab I	2019		CO1: Students will be able to know about the moment of inertia and their application related to fly wheel. CO2: They will be able to understand the concepts of elasticity with respect to modulous of rigidity and bulk modulous and young's modulous.

Under Graduate	B.SC. Honors Ma	BCP 101	Chemistry Lab I	2019	graduate programme of their choice. PO 4: This programme trains the learners to extract information, formulate and solve problems in a systematic and logical manner. PO 5: This programme enables the learners to perform the jobs in diverse fields such as science, engineering, industries, survey, education, banking, development-planning, business, public service, self business etc. efficiently.	Students will be able to understand: CO1: REDOX titrations, iodometic titrations CO2: effect of surfactant on surface tension of water CO3: determine the viscocity of liquid CO4: sublimation and crystalization of campher and phthalic acid
Under Graduate	B.SC. Honors Ma	BBP 101	Biology Lab	2019		Students will be able to understand Co1: use of Microscope CO2: principle of fixation and staining CO3: measurement of Cell size, plasmolyisis, estimation of protein, study of bacteria and fungi cell
Under Graduate	B.SC. Honors Ma	BXL 201	Hindi	2019		http://www.gjust.ac.in/uacolleges/2019/Syllabus%20B.Sc.%20Hindi%20&%20B.Sc.%20Sanskrit%20[2nd%20Year]%20(3rd%20and
Under Graduate	B.SC. Honors Ma	BML 202	Mathematics II Calculus	2019		Students will be able to learn CO- 1 tracing of curves, rectification CO-2 Asymptotes, Curvature, Co-3 Multiple integral , Quadrature.
Under Graduate	B.SC. Honors Ma	BPL 201	Wave and Optics	2019		CO1: Students will be able to understand the concepts of Transfers and Logtiutidinal waves. CO2: Youngs double slit experiment enables to make to know about optical phenomena. CO3: Concepts of refractive index, zone plate, various types of difraction enable students to deal with natuaral phenomena. CO4: Basic Idea of the light propagation through optical fibre make students interested towards new way of communicaiton.
Under Graduate	B.SC. Honors Ma	BCL 201	Chemistry II	2019		Students will be able to understand 1. Chemical boding (ionic bonding and cobalent bonding) and molecular structure 2. concepts of conjugate acid and bases and applications of HSAB process 3. basic cordination chemistry (stereochemistry of different coordination numbers, valence bond properties geometry colours and magnetism) 4. chemiscal kynetics and catalysis- methods of determining order of reaction, homogeneous catalysis, acid base catalysis 5. basics of spectroscopy - origin of spectra, electromagentic radiations, electronic transitions, functional groups and fingerprint region
Under Graduate	B.SC. Honors Ma	BXL 202	Computer Science	2019		Students will be able to understand 1. computer system- anatomy of digital computer, decimal, binary, octal, hexadecimal numbers and their interconversion 2. operating system basics- unix, linux, dos, windows 2000 version 3. internet basics- major features of internet, networking, ftp, http 4. programming language- assembly language, high level language, compiler, interpretor, assembler
Under Graduate	B.SC. Honors Ma	BPP 201	Physics Lab II	2019		CO1: Newton's ring, Resolving power of telescope make students aware about new technology of industrial physics. CO2: Study of series and parallel resonant circuits with V-I characterstics of PN diode enable students to do well in electronics fabricated circuits.
Under Graduate	B.SC. Honors Ma	BCP 201	Chemistry Lab II	2019		Students will be able to understand 1. complexometeric titrations, 2. paper cromatography, 3.specific refractivity of two liquids, 4. conductance of electrolytes, 5. physical and chemical characterstics of N,S,Cl,Br and I

Under Graduate	B.SC. Honors Ma	BXP 201	Computer Science Lab	2019		Students will be able to understand 1. programming in C 2. input output statements 3. arrays functions 4. structure of program 5. basic knowledge of pointers with some basic programs
Post Graduate Dipl	PG Diploma in Y	YMH 101	Fundamentals of Yoga	2019		This course provides the preparation of student towards providing an introduction of yoga and its important streams, a brief introduction of Indian Philosophy; and a brief history and the basis different yoga. The student will be in a position to appreciate the Yogic way of living, which they can inculcate in their life style and will be prepared to teach others the benefits of same.
Post Graduate Dipl	PG Diploma in Y	YMH 102	Principles of Hatha Yoga	2019		The objective of teaching Hatha yoga text subject to students is to introduce and provide them the knowledge of the Yogc practices quoted in Hatha Yoga texts and their values and benefits for human being It will also provide understanding of the prerequisites of Hatha Yoga, to introduce the principles of Hatha Yoga and essential Hatha Yoga text.
Post Graduate Dipl	PG Diploma in Y	YMH 103	Human Biology	2019		It aims at giving inclusive knowledge of the gross structure and development of Human body. Further, it will to provide a basis for enhancing the knowledge of body's structure and function. This will help students to get fmiliarized with the structure of the different systems in the human body.
Post Graduate Dipl	PG Diploma in Y	YMH 104	Mental Health	2019		The objective is to provide a fundamental understanding of various concepts of mental health. The students will be able to understand the concept and impart the yoga teaching accordingly.
Post Graduate Dipl	PG Diploma in Y	YMH 151	Practical- Yoga Skill and Prowess-I	2019		The main objective of the course is to impart knoeledge about the prevention of health problems by promoting positive health through Yoga practices. To understand the underlying mechanisms of yoga practices. Student will be able to understand how to strengthen the different systems using Yoga which will help them to prevent health problems and promote positive health.
Post Graduate Dipl	PG Diploma in Y	YMH 201	Patanjala Yoga Sutra	2019		The objective of teaching patanjala Yoga Sutras to students is to provide them with knowledge of Patanjala's contribution to the field of Yoga, well verse with the yogic principles and it's meaning mentioned in patanjalayoga sutra. The students will be able to understand human's psychology as patanjali had explained.
Post Graduate Dipl	PG Diploma in Y	YMH 202	Mental Health and Yoga Philosophy	2019		The objective is to understand the aspects of mental health in texts such as Shrimad Bhagvad geeta, yoga vasishtha and upanishads as basic philosophical and theoretical foundations of Yoga. The students will be able to connect aspects of mental health with yoga philosophy.
Post Graduate Dipl	PG Diploma in Y	YMH 203	Yoga Therapy and Counselling	2019		The objective is to produce a professional who can handle a patient and administer therapy; appreciate the relative contribution of each organ system to the homweostasis. Explain the pathological aspects of disease, illustrate the physiological response and adaptations to environmental stresses, over all personality development.
Post Graduate Dipl	PG Diploma in Y	YMH 251	Practical- Yoga Skill and Prowess-II	2019		Its main objective is to provide understanding of advanced yoga techniques and to impart knowledge about the prvention of health problems by promoting positive health through Yog practices. To understand the underlying mechanisms of yoga practices. Student will be able to understand how to strengthen the different systems using Yoga which will help them to prevent health problems and promote posititve health.
Post Graduate Dipl	PG Diploma in Y	YMH 252	Practical- Yoga teachings, Lesson Plan and Yoga Therapy	2019		The objective is to provide practical approach to yoga teachings planning and therapy. The student will have experience of applied yoga techniques in daily life situations. The student will be able to impart teaching affectively based on his/her experience.

Post Graduate Dipl	P.G.D.C.A.	PGDCA101	Introduction to Information Technology	2019		Reflect with other faculty (and whenever possible alumni and students) on the question: What is it that graduates should know or be able to do with a degree in your discipline? It is often helpful to work with other faculty in your department/program to think about how your course is related to the other courses in your program. Think about how this course fits into the rest of your program(s)' curriculum(s). Draft statements in outcome form. In order to keep the outcomes student centered, begin each one with "Students will be able to…" and choose action verbs that can be observed and measured. CTL has handouts that can assist you in choosing action verbs (short list here and longer list here) and evaluating learning outcomes.
Post Graduate Dipl	P.G.D.C.A.	PGDCA102	Computer Programming Using C	2019		Understanding a functional hierarchical code organization. • Ability to define and manage data structures based on problem subject domain. • Ability to work with textual information, characters and strings. • Ability to work with arrays of complex objects. • Understanding a concept of object thinking within the framework of functional model.
Post Graduate Dipl	P.G.D.C.A.	PGDCA103	Operating Systems	2019		1. An appreciation of the role of an operating system. 2. Understand the theory and logic behind the design and construction of operating systems. 3. Examine the algorithms used for various operations on operating systems. 4. Differentiate between various operating systems functionalities in terms of performance.
Post Graduate Dipl	P.G.D.C.A.	PGDCA104	Database Management Systems	2019		Explain the characteristics, architecture of database approach, describe the components, major functions of a database system and give examples of their use. 2. Compare and contrast appropriate data models, including concepts in modeling notation and how they would be used. 3. Demonstrate use of the relational algebra operations from mathematical set theory (union, intersection, difference, and Cartesian product) and the relational algebra operations developed specifically for relational databases (select (restrict), project, join, and division). 4. Create a relational database schema in SQL, use SQL to create a non-procedural query, write a stored procedure that deals with parameters and has some control flow, to provide a given functionality. 5. Using SQL to implement roles, privileges, access control and authorization policies
Post Graduate Dipl	P.G.D.C.A.	PGDCA105	Web Technologies	2019		Knowledge about: - History and development of the World Wide Web and associated technologies. - The client-server architecture of the World Wide Web and its communication protocol HTTP/HTTPS. - Formats and languages used in modern web-pages: HTML, XHTML, CSS, XML, XSLT, Javascript, DOM - Programming web pages with Javascript/DOM (client)
Post Graduate Dipl	P.G.D.C.A.	PGDCA106	Software Laboratory-I Programming Using C	2019		Design, implement, test, debug, and document programs in C and C++Programming Assignments 1–6 Program with pointers and arrays, perform pointer arithmetic, and use the preprocessor Programming Assignments 1–6 Program low-level input and output routines in C and streaming input and output operators in C++ Programming Assignments 1–6 Understand how to write and use functions, how the stack is used to implement function calls, and parameter passing options

Post Graduate Dipl	P.G.D.C.A.	PGDCA107	Software Laboratory-I HTML and MS-Office	2019	Insert a graphic within a web page. Create a link within a web page. Create a table within a web page. Insert heading levels within a web page. Insert ordered and unordered lists within a web page. Use cascading style sheets. Create a web page. Validate a web page. Publish a web page
Post Graduate Dipl	P.G.D.C.A.	PGDCA108	Seminar	2019	CO1: to prepare students for the corporate sector. CO2: to enable students for good communication skills. CO3: Overall development of the students.
Post Graduate Dipl	P.G.D.C.A.	PGDCA201	Data Structure and Algorithms	2019	To learn Sorting: Insertion sort, merge sort, Heaps and heap sort, Quick sort, Linear sort, priority queqe, order statistics, lower bounds for sorting 7. To learn Searching: Balanced tree, red-black tree, lower bounds for searching 8. To learn Graph: representation and algorithms, Breadth-first search (BFS), Depth-first search (DFS), topological sorting, Shortest Paths, Single-source shortest paths problem, Dijkstra, 9. To explore hashing, and various implementations of searching and hashing algorithms.
Post Graduate Dipl	P.G.D.C.A.	PGDCA202	Computer Networks	2019	To learn the basic concepts and terminology in computer networks. 2. To learn about the physical layer issues in computer networks and different types of network topologies and protocols. 3. To learn about the error correction and detection and MAC protocols. 4. To learn concepts associated with subnetting and routing mechanisms. Understand network industry standards such as: Routing Protocols, Address Resolution and Reverse Address Resolution Protocols, IP Addresses and Subnetting, MAC Addressing.
Post Graduate Dipl	P.G.D.C.A.	PGDCA203	Object Oriented Systems and C++	2019	To learn the concepts of Objects, Classes, Methods, Constructors and Destructors 3. To learn the designing of complex classes: Friend Functions and Static member functions, Inline functions, constant functions. 4. To learn File Handling. Writing and reading data from the file, reading and writing the objects into the file. 5. To learn Inheritance: Single Inheritance, Multiple Inheritance, Multi-level Inheritance, Hierarchical Inheritance and Hybrid Inheritance. 6. To learn the concept of Abstract classes and interfaces.
Post Graduate Dipl	P.G.D.C.A.	PGDCA204	Computer Organization	2019	Course Outcomes Understand how to implement memory chips, boards, modules and caches. Relate to arithmetic for ALU implementation. Understand the basics of hardwired and micro-programmed control of the CPU. Learn about various I/O devices and the I/O interface.
Post Graduate Dipl	P.G.D.C.A.	PGDCA205	Software Engineering	2019	To broaden your knowledge of Software Process Models. 2. To become aware of the Software Product. 3. To increase your proficiency in Software Project Management. 4. To gain practical experience in Requirements Engineering. 5. To gain practical experience in UML tools. 6. To acquire the background of Software Architecture
Post Graduate Dipl	P.G.D.C.A.	PGDCA206	Software Laboratory-III Data Structure implemented in C/C++	2019	a) Implement basic data structures such as arrays and linked list. b) Programs to demonstrate fundamental algorithmic problems including Tree Traversals, Graph traversals, and shortest paths. c) Implement various searching and sorting algorithms.

Post Graduate Dipl	P.G.D.C.A.	PGDCA207	Software Laboratory -IV Programming Using C++	2019		1.Bit manipulations. Number conversion. 2.Floating point data manipulations. 3. To use simple input and output statements. To use the for and do…while repetition statements to execute statements repeatedly. 4. To understand multiple selection using the switch selection statement. To use the break and continue statements to alter the flow of control. 5. To use the logical operators to form complex conditional expressions in control statements. To avoid the consequences of confusing the equality and assignment operators. 6. How the function call/return mechanism is supported by the function call stack and activation records. Simulation techniques using random number generation.
Post Graduate Dipl	P.G.D.C.A.	PGDCA208	Seminar	2019		CO1: to prepare students for the corporate sector. CO2: to enable students for good communication skills. CO3: Overall development of the students.

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