Program/ Program specific/ course outcomes.

S.No	Program	Program/ Program specific/ course outcomes.
I	**Undergraduate Courses**	**Program Outcomes:**
		· A graduate student will develop critical thinking.
		· A student after graduation will acquire life skills and become a better human being, will develop language competence and be proficient in oral communication and written skill.
		· Students can pursue career in multi and interdisciplinary fields.
		· Students can understand the use of analytical methods required for interpreting and analyzing results and drawing conclusions as supported by their data.
		· Students will have better employability in the field of finance, industry, administration, social and extension work, IT sectors, research and many others.
		· Students will develop confidence to appear for various competitive exams related to public and private sectors.
A	**Faculty of Computc**	**Program Specific Outcomes:**
	BCA (030)	At the end of the Program, students will be able to:
		· Understand the concepts of key areas in computer science.
		· Analyze and apply latest technologies to solve problems in the areas of computer applications.
		· Apply technical and professional skills to excel in business.
		· Communicate effectively in both verbal and written form.
		· Develop practical skills to provide solutions to industry, society and business.
		· Job roles include Web Development, Software/ Application development, Software Engineer, Software Tester, System Analyst , Business Analyst to name a few.
		· Provide IT based services in the public domain.
		· Work in a team/group for execution of projects.
		· Pursue higher studies - MCA/ M.Sc.-CS/IT/ MBA/ MS(IT).
	BCA I Year	**Course Outcomes**
		Paper I Fundamentals of Computers
		After studying this subject, student will be acquainted with –
		· Terms and concepts of fundamentals of computers & information technology as regards the basic hardware, software, its basic working .
		· Names and types of programming languages and types of Softwares.
		· Knowledge of communication process, types, channels, network types, devices, and topologies
		Paper II Office Automation Packages And Tools
		After studying this subject, student will be acquainted with –
		· Operate a variety of advanced spreadsheet, operating system and word processing functions.
		· Work effectively with a range of Office suites for documentation, calculation, presentation and database handling.
		· Apply office automation in practical and demonstrate professionalism
		Paper III C Language
		After studying this subject, student will be acquainted with –
		· Define a problem and outline its solution through algorithm writing.
		· Write programs using C language constructs, using algorithms for the problem solution.
		· Use of features like functions, pointers, structures, files in programming.
		· Compile, debug and execute C language programs.
		Paper IV Business Mathematics
		After studying this subject, student will be acquainted with –
		· Apply trigonometric identities, and ratios to determine height/distance.
		· Establish theory of indices and process statistical data to derive results.
		· Solve problems using matrices and determinants.
		· To solve problems involving commonly used calculations in business environment.
		· To apply techniques for finding derivative or integral of given function.
		Paper V Digital Computer Organization
		After studying this subject, student will be acquainted with –
		· Design combinational circuits
		· Perform computer arithmetic operations
		· Write basic machine pseudocode as per the different types of CPU structure and functions of the Control Unit
		· Conceptualize the various modes of data transfer.
		Paper VI Financial Accounting
		After studying this subject, student will be acquainted with –
		· Prepare financial statements in accordance with Generally Accepted Accounting Principles.
		· Apply cost accounting methods to evaluate and project business performance.
		· Employ critical thinking skills to analyze financial data.

	· Apply appropriate judgment derived from knowledge of accounting theory, for financial analysis and decision making.
BCA II Year	**Course Outcomes**
	Paper I Programming With C++ and Data Structures
	After studying this subject, student will be acquainted with –
	· How **C++** improves C with object-oriented features.
	· How to apply the major object-oriented concepts to implement object oriented programs in C++ along with encapsulation, inheritance and polymorphism.
	· Advanced features of C++ specifically stream I/O, templates and operator overloading.
	Paper II CONAM
	After studying this subject, student will be acquainted with –
	· Apply appropriate algorithms to solve selected problems, both manually and by writing computer programs.
	· Compare different algorithms with respect to accuracy and efficiency of solutions.
	· Use appropriate numerical methods, determine the solutions to given Algebraic & transcendental equations, determine approximate solutions to systems of linear equations and ordinary differential equations.
	· Demonstrate the use of interpolation methods to find intermediate values in given tabulated data.
	Paper III Operating System
	After studying this subject, student will be acquainted with –
	· Working of an OS as a resource manager, file system manager, process manager, memory manager and I/O manager and methods used to implement the different parts of OS.
	· Understand the process management policies and scheduling of processes by CPU.
	· Mutual exclusion, Deadlock detection in Distributed operating system. and scheduling techniques.
	· To understand the concepts and implementation Memory management policies and virtual memory.
	· Commands of UNIX/Linux OS.
	Paper IV Web Technology and Application Development using .Net & C#
	After studying this subject, student will be acquainted with –
	· Usage of ASP.NET controls in web applications
	· Basics of debugging and deployment of ASP.NET web applications
	· Knowledge to design web applications using ASP.NET & c#
	· Skills to create database driven ASP.NET web applications and web services
	Paper V RDBMS Concepts & Oracle
	After studying this subject, student will be acquainted with –
	· Describe data models and schemas in DBMS
	· Use SQL- the standard language of relational databases.
	· Understand the functional dependencies and design of the database.
	· Understand the concept of Transaction and Query processing.
	· Design and Normalize a database
	Paper VI Software Engineering
	After studying this subject, student will be acquainted with –
	· Apply software engineering principles and techniques to software system development process..
	· Contribute to the development, maintenance and evaluation of large-scale software systems.
	· Produce efficient, reliable, robust and cost-effective software solutions.
	· Work as an effective member or leader of software engineering teams.
	· Develop good quality software.
	Paper VII Organizational Behavior
	After studying this subject, student will be acquainted with –
	· Know about organizational behavior and its relation with other disciplines.
	· Analyze individual behavior under different conditions.
	· Assess group behavior and intrapersonal influence.
	· Evaluate organizational system and process.
	· Know about & differentiate between organizational design, changes and innovations.
BCA III Year	**Course Outcomes**
	Paper I Computer Networks, Internet Tech. & Security
	After studying this subject, students will be able to –
	· Grasp basics of computer network technology.
	· Understand Data Communications System and its components.
	· Identify the different types of network topologies and protocols.
	· Differentiate the layers of the OSI model and TCP/IP.
	· Use the different types of network devices and implement their functions.

		· Apply the mechanism of subnetting and routing mechanisms.
		· Understand the security threats and protection policies.
		Paper II Core Java
		After studying this subject, students will be able to–
		· Implement Object Oriented programming concepts using basic syntaxes of control Structures, strings and function for developing skills of logic building activity.
		· Identify classes, objects, members of a class and the relationships among them needed for a finding the solution to specific problem
		· Demonstrate how to achieve reusability using inheritance, interfaces and packages and describes faster application development can be achieved.
		Paper III Management Information Systems
		After studying this subject, students will be able to –
		· Relate the basic concepts and technologies used in the field of management information systems;
		· Compare the processes of developing and implementing information systems.
		· Understand the role of the ethical, social, and security issues of information systems.
		· Demonstrate the role of information systems in organizations.
		Paper IV Python Programming
		After studying this subject, students will be able to –
		· Interpret the fundamental Python syntax and semantics and be fluent in the use of Python control flow statements.
		· Express proficiency in the handling of strings, functions and file handling.
		· Determine the methods to create and manipulate Python programs by utilizing the data structures like lists, dictionaries, tuples and sets.
		· Articulate the Object-Oriented Programming concepts such as encapsulation, inheritance and polymorphism as used in Python with class, modules and packages .
		· Identify the commonly used operations involving database connectivity and use of tkinter for GUI programming.
		Paper V E-Governance
		After studying this subject, students will be acquainted with –
		· The concept of e-government technology, importance and its impact.
		· Understanding of difference between the models of development of e-government services, and choosing the best according to situation.
		· Skills to Identify the main challenges in storing huge online government data storage and retrieval.
		· Recognition of various laws, principles and policies to protect e-government services to avoid possible threats that may hinder the developments of online services.
		· The case studies of running projects of India and neighbouring countries, to develop effective and efficient e-government projects.
		Paper VI Principles and Practices of Management
		After studying this subject, students will be able to –
		· Recognize the importance of marketing in an organization, how marketing relates to other business functions, and the role of marketing in society at large.
		· Do basic secondary research relative to marketing in an organization (e.g., by using Internet search engines, such as Yahoo, Google, etc.)
		· Select, analyze and define a target market for a selected product or service.
		· Develop a marketing plan or strategy for a product or service (e.g., company objectives, marketing objectives, target market(s), advertising, pricing, distribution, product/ service development, evaluation of competitors, contingency plans, budget, etc.)
		· Evaluate/analyze the marketing strategy for an existing product and/or services. Know the basic marketing concepts and theories.
		Paper VII Project - Application Development using PHP & MySQL Practical Outcomes
		Upon successful completion students should be able to:
		· Installation of LAMP/XAMPP/WAMP module according to requirement of platform.
		· Write PHP code to produce outcomes and solve problems.
		· Display, insert, update and delete data using PHP and MySQL.
		· Handle images and files in MySQL uploaded via PHP.
		· Test, debug, and deploy web applications containing PHP and MySQL.
B	**Faculty of Commer**	**Programme Specific Outcomes**
	B.Com	**Upon successful completion students should be able to:**
		· prove proficiency with the ability to engage in competitive exam like– C.A., C.S., ICMA etc.
		· Acquire the skills like effective communication, Decision making, Problem solving in day to day business affairs.
		· Acquire practical skills to work as Tax Consultant, Audit Assistant, and other financial supporting services.
		· Gain a thorough grounding in the fundamentals of commerce.
		· The students get the practical exposures which would equip them to face the modern day challenges in commerce.
		· To build a strong foundation of knowledge in different areas of commerce.
		· Develop the skill of applying concepts and techniques used in commerce.
		· To develop an attitude for working effectively and efficiently in a business environment.
		· Graduates will be able to develop strong understanding of core Commerce and Computer Application courses.
		· Take up challenging career options in Commerce and IT sector.

	· Motivated to pursue higher education.
	· Gain updated knowledge to take up employment.
	· Become ethically and socially responsible commerce graduates with computer application knowledge.
B.Com I Year	**Course Outcomes**
Commerce	**Accounting Group Paper-I Financial Accounting**
Course code C032	**Upon successful completion students should be able to:**
	· The students become well equipped to prepare the various accounts like trading and profit and loss a/c, branch a/c, royalty a/c etc.
	· This paper enables the students to get job in institutions where professionals with accounting skills and knowledge are required.
	Paper-II Business Mathematics
	Upon successful completion students should be able to:
	· Demonstrate basic knowledge & skill in business mathematics &elementary statistics
	· Accurately perform common business computations, statistical data presentation & analysis.
	· Develop the student's ability to deal with numerical and quantitative issues in business.
	Management Group Paper-I Business Law
	Upon successful completion students should be able to:
	· To provide knowledge about business laws related to real life.
	· To enable students to understand the practical applicability of the subject.
	Paper-II Business Organization and Communication
	Upon successful completion students should be able to:
	· Students will learn about ethics, communication skills, social responsibility of business.
	· They will be able to understand the functioning of business sector and it will help them in their professional life.
	Applied Economics Group Paper-I Micro Economics
	Upon successful completion students should be able to:
	· The students will become aware about the concept of demand, supply, pricing and production function.
	· They get to know the phenomenon which regulates the overall functioning of the economy.
	Paper-II Macro Economics
	Upon successful completion students should be able to:
	· The outcomes of this paper is to provide an understanding of basic economic principles which can help them to judge or analyze the economic policies.
	· They become aware of the concepts of National Income, GDP, domestic income which are important aggregates of an economy.
B.Com I Year	**Accounting Group Paper-I Financial Accounting**
Commerce Taxati	**Upon successful completion students should be able to:**
Course code C201	· The students become well equipped to prepare the various accounts like trading and profit and loss a/c, branch a/c, royalty a/c etc.
	· This paper enables the students to get job in institutions where professionals with accounting skills and knowledge are required.
	Paper-II Business Mathematics
	Upon successful completion students should be able to:
	· Demonstrate basic knowledge & skill in business mathematics &elementary statistics
	· Accurately perform common business computations, statistical data presentation & analysis.
	· Develop the student's ability to deal with numerical and quantitative issues in business.
	Management Group Paper-I Business Law
	Upon successful completion students should be able to:
	· Gain knowledge about business laws related to real life.
	· Understand the practical applicability of the subject.
	Paper-II Business Organization and Communication
	Upon successful completion students should be able to:
	· Understand ethics, communication skills, social responsibility of business.
	· Understand the functioning of business sector and it will help them in their professional life.
	Tax Procedure and Practice Paper I GST
	Upon successful completion students should be able to:
	· To provide knowledge about Goods and services tax related to real life.
	· To enable students to understand the practical applicability of the subject.
	Paper II Taxation
	Upon successful completion students should be able to:
	· Understand the basic principles of taxation which can help them calculate taxation slabs .

	· They become aware of the sources of National Income, GDP, domestic income which are important aggregates of an economy.
B.Com I Year Commerce with computer applicatio Course code C198	
	Accounting Group Paper-I Financial Accounting
	Upon successful completion students should be able to:
	· The students become well equipped to prepare the various accounts like trading and profit and loss a/c, branch a/c, royalty a/c etc.
	· This paper enables the students to get job in institutions where professionals with accounting skills and knowledge are required.
	Paper-II Business Mathematics
	Upon successful completion students should be able to:
	· Demonstrate basic knowledge & skill in business mathematics &elementary statistics
	· Accurately perform common business computations, statistical data presentation & analysis.
	· Develop the student's ability to deal with numerical and quantitative issues in business.
	Management Group Paper-I Business Law
	Upon successful completion students should be able to:
	· Gain knowledge about business laws related to real life.
	· Understand the practical applicability of the subject.
	Paper-II Business Organization and Communication
	Upon successful completion students should be able to:
	· Understand ethics, communication skills, social responsibility of business.
	· Understand the functioning of business sector and it will help them in their professional life.
	Computer Application Paper I Fundamentals of Computer and PC Software
	Upon successful completion students should be able to:
	· Identify input and output devices of Computers, their working and understand the hardware, software terminologies.
	· Use system functionalities proficiently, and solve basic information systems problems using office packages.
	· Effectively communicate strategic alternatives to facilitate decision making. Understand legal and ethical issues related to E-Commerce
	Paper : II Desktop Publishing and Multimedia
	Upon successful completion students should be able to:
	· Demonstrate critical thinking, creativity and innovation when identifying and responding to problems in diverse contexts within writing, editing and publishing.
	· Use Adobe PageMaker to create personal/business publications such as articles, fliers, advertisements, and reports as per professional/industry standards
	· Use various multimedia elements like text, graphics ,audio, animation and video.
	· Identify the basic hardware and software requirements for multimedia development and playback.
B.Com II Year Commerce Course code C032	**Accounting Group Paper-I Corporate accounting**
	Upon successful completion students should be able to:
	· Students will learn about new provisions of the company act 2013 for the maintenance of company accounts.
	· After completion of the course student will be able to apply the theories when they will be in relevant job.
	Paper II Cost accounting
	Upon successful completion students should be able to:
	· Student will understand the difference between cost accounting and financial accounting.
	· The outcomes of this paper is to provide preparation of cost sheet and statement.
	Management Group Paper I Principles of Statistics
	Upon successful completion students should be able to:
	· The outcomes of this paper is to provide an understanding for graduate student on measures of central tendency, measures of dispersion and Time series,.
	· The students will also learn correlation, regression, index number, diagrammatic and graphic presentation.
	Paper II Principles of Management
	Upon successful completion students should be able to:
	· On successful completion of this course, students will learn management principles.
	· They will be aware of the skills competencies, techniques and knowledge needed to successfully manage an organization
	Applied Economics Group. Paper-I Indian Company Act
	Upon successful completion students should be able to:
	· By studying this paper the students obtained knowledge of Indian company act 2013 and its amendments.
	· After the completion of the course students will be able to understand the use of the memorandum of association and article of association and prospectus in a company.

	Paper-II Banking and Insurance
	Upon successful completion students should be able to:
	· Gain the practical knowledge and skill related to banking functions.
B.Com II Year	**Accounting Group Paper-I Corporate accounting**
Commerce with Tax	**Upon successful completion students should be able to:**
Course code C201	· Students will learn about new provisions of the company act 2013 for the maintenance of company accounts.
	· After completion of the course student will be able to apply the theories when they will be in relevant job.
	Paper II Cost accounting
	Upon successful completion students should be able to:
	· Student will understand the difference between cost accounting and financial accounting.
	· The outcomes of this paper is to provide preparation of cost sheet and statement.
	Management Group Paper I Principles of Statistics
	Upon successful completion students should be able to:
	· The outcomes of this paper is to provide an understanding for graduate student on measures of central tendency, measures of dispersion and Time series,.
	· The students will also learn correlation, regression, index number, diagrammatic and graphic presentation.
	Paper II Principles of Management
	Upon successful completion students should be able to:
	· On successful completion of this course, students will learn management principles.
	· They will be aware of the skills competencies, techniques and knowledge needed to successfully manage an organization
	Taxation group paper I Custom duty
	Upon successful completion students should be able to:
	· Students obtained knowledge of Indian custom duty procedures
	· Students obtained knowledge amendments of Indian custom duty procedures
	· After the completion of the course students will be able to understand the basis and application of custom duty .
	Paper-II Taxation
	Upon successful completion students should be able to:
	· Understand the basic principles of taxation
	· Understand the can calculate taxation slabs .
B.Com II Year	**Accounting Group Paper-I Corporate accounting**
Computer Applicat	**Upon successful completion students should be able to:**
Course code C198	· Students will learn about new provisions of the company act 2013 for the maintenance of company accounts.
	· After completion of the course student will be able to apply the theories when they will be in relevant job.
	Paper II Cost accounting
	Upon successful completion students should be able to:
	· Student will understand the difference between cost accounting and financial accounting.
	· The outcomes of this paper is to provide preparation of cost sheet and statement.
	Management Group Paper I Principles of Statistics
	Upon successful completion students should be able to:
	· The outcomes of this paper is to provide an understanding for graduate student on measures of central tendency, measures of dispersion and Time series,.
	· The students will also learn correlation, regression, index number, diagrammatic and graphic presentation.
	Paper II Principles of Management
	Upon successful completion students should be able to:
	· On successful completion of this course, students will learn management principles.
	· They will be aware of the skills competencies, techniques and knowledge needed to successfully manage an organization
	Computer Application Paper I Internet and E-Commerce
	After studying this subject, student will be acquainted with –
	· Technologies and protocols used on the Internet.
	· Effective use of Internet tools technologies including current web-based applications
	· Fundamental principles of e- Commerce, tools and services.
	· The difference between E-marketing and Traditional marketing.
	· Recognizing the risks in e-Business, importance of E-security,Digital payment and cryptography.

	Paper : II Relational Database Management System
	Upon successful completion students should be able to:
	· The fundamental elements of relational database management systems.
	· Designing ER-models to represent simple database application
	· Converting the ER-model to relational tables, populate relational database and formulating SQL queries on data.
	· Improve the database design by normalization.
	· Basic database storage structures and access techniques: file and page organizations, indexing methods including B tree, and hashing.
B.Com. III Year Commerce Course Code-C032	**Accounting Group Paper I Income Tax Law & Practice**
	Upon successful completion students should be able to:
	· To introduce the basic concept of income tax.
	· It helps to build an idea about income from salaries, house property, business profession, capital gains and other sources as a concept.
	· It gives more idea about the deductions u/s 80 and how to compute tax liability and about the filling of returns.
	Paper – II Goods and Service tax & Custom Duty
	Upon successful completion students should be able to:
	· Providing exposure of basics of Goods and Service tax & Custom Duty **.**
	· The students become aware about the custom duty, G.S.T.
	Management Group Paper-I Auditing
	Upon successful completion students should be able to:
	· The students will be well equipped with various auditing techniques such as vouching, verification of assets etc.
	· The students will be in a position to apply the knowledge in practical auditing work of various business organizations.
	Paper-II Management Accounting
	Upon successful completion students should be able to:
	· Introduction of management accounting compare difference between cost accounting and management accounting.
	· Students will understand the meaning of ratio, their importance and limitations.
	Applied Economics Group Paper-I E commerce and Marketing
	Upon successful completion students should be able to:
	· Students will also learn about marketing strategy preparation and selling skills of sales personnel.
	· Students will be able to deal with the day to day affairs of business, marketing, advertising etc.
	· Sell products to various customer markets, as well as learn various ways to promote a company's products and services.
	Paper-II Financial Market and Investment Management.
	Upon successful completion students should be able to:
	· It gives the fundamental understanding of marketing concepts and marketing policies across the world.
	· It helps in acquiring comprehensive theoretical practical competencies in financial marketing.
	· It develops the understanding of the challenges of business environment.
	· After the successful completion of the course the student should have a complete knowledge on Indian Banking System.
B.Com. III year Tax procedure and practices Course Code-C201	**Accounting Group Paper I Income Tax Law & Practice**
	Upon successful completion students should be able to:
	· To introduce the basic concept of income tax.
	· It helps to build an idea about income from salaries, house property, business profession, capital gains and other sources as a concept.
	· It gives more idea about the deductions u/s 80 and how to compute tax liability and about the filling of returns.
	Paper – II Goods and Service tax & Custom Duty
	Upon successful completion students should be able to:
	· Providing exposure of basics of Goods and Service tax & Custom Duty **.**
	· The students become aware about the custom duty, G.S.T.
	Management Group Paper-I Auditing
	Upon successful completion students should be able to:
	· The students will be well equipped with various auditing techniques such as vouching, verification of assets etc.
	· The students will be in a position to apply the knowledge in practical auditing work of various business organizations.
	Paper-II Management Accounting
	Upon successful completion students should be able to:
	· Introduction of management accounting compare difference between cost accounting and management accounting.
	· Students will understand the meaning of ratio, their importance and limitations.

		Tax procedure and practices Paper-I Corporate Tax Planning
		Upon successful completion students should be able to:
		· Undertake marketing strategy preparation and selling skills of tax planning
		· Deal with the day to day affairs of corporate institutions.
		Paper-II Indirect tax Planning
		Upon successful completion students should be able to:
		Gain fundamental understanding of Indirect tax planning policies across the world.
		· Gain fundamental understanding of Indirect tax planning policies across the world.
		· aquire comprehensive theoretical practical competencies in tax planning.
		· have gined a complete knowledge of indirect tax planning.
	B.Com. III Year Commerce with computer applicatio Course Code C198	**Accounting Group Paper I Income Tax Law & Practice**
		Upon successful completion students should be able to:
		· To introduce the basic concept of income tax.
		· It helps to build an idea about income from salaries, house property, business profession, capital gains and other sources as a concept.
		· It gives more idea about the deductions u/s 80 and how to compute tax liability and about the filling of returns.
		Paper – II Goods and Service tax & Custom Duty
		Upon successful completion students should be able to:
		· Providing exposure of basics of Goods and Service tax & Custom Duty **.**
		· The students become aware about the custom duty, G.S.T.
		Management Group Paper-I Auditing
		Upon successful completion students should be able to:
		· The students will be well equipped with various auditing techniques such as vouching, verification of assets etc.
		· The students will be in a position to apply the knowledge in practical auditing work of various business organizations.
		Paper-II Management Accounting
		Upon successful completion students should be able to:
		· Introduction of management accounting compare difference between cost accounting and management accounting.
		· Students will understand the meaning of ratio, their importance and limitations.
		Computer Application Paper: I Web Design
		After studying this subject, students will be able to –
		· Use basic HTML tags.
		· Create Table, Frames, Forms.
		· Create and use various types of CSS.
		· Designing web pages.
		· Understand the concepts of Web Publishing
		Paper: II
		After studying this subject, student will be able to –
		· Evaluate and apply key concepts related to digital marketing.
		· Demonstrate the role of digital marketing in business strategy.
		· Understand the importance of Search Engine Optimization(SEO).
		· Set up Google Analytics account and add Analytics code in a website.
C	**Faculty of Science**	**Program Specific Outcomes**
(I)	**B.Sc Physical Scienc**	· Students will learn to think in a critical manner.
	PCM -	· Students will develop the proficiency in acquisition of data using variety of laboratory instruments and in the analysis and interpretation of such data.
	PCSM -	· Student should learn how to design and conduct an experiment (or series of experiment) demonstrating their understanding of scientific method and process.
		· Students are also expected to have an understanding of the analytical methods required to interpret and analyze results and draw conclusions as supported by their data.
		· Students will learn the applications of numerical techniques for modelling physical systems for which analytical methods are inappropriate or of limited utility.
		· Describe the methodology of science and relationship between theory and observation.
		· Analyze physical problems and develop, correct solutions using natural Laws
		· To understand basic facts and concepts in Chemistry including atomic structure, periodic properties, etc.
		· Students will be skilled in problem solving, critical thinking and analytical reasoning as applied to scientific problems.
		· Students will be able to explain the central role of chemistry in our society and will be able to handle social, economic, and environmental issues.
		· Make aware and handle the sophisticated instruments/equipments.
		· Students will be able to clearly communicate the chemistry related topics.
		· Learn handling of apparatus and chemicals properly.

Chemistry	Course Outcomes
B.Sc. I Year	**Chemistry Paper- I Physical Chemistry-**
	The students will be able to:
	· Understand the fundamental properties of atom, molecules & various state of matter.
	· Mathematical concepts like Logarithm, differentiation, Integration.
	· The energy & speed of chemical reaction
	· Fundamentals of nuclear chemistry.
	Paper- II Inorganic Chemistry
	The students will be able to:
	· Know essential theoretical knowledge on atomic structure, periodic properties, chemical bonding, ionic solids, ionic structures .
	· Understand the chemistry of s & p- block elements.
	Paper- III Organic Chemistry
	The students will be able to:
	· Understand various types of reaction intermediates and factor affecting their stability.
	· Learn the nomenclature, Synthesis isomerism, properties of alkanes, Cycloalkanes, alkenes, Cycloalkene & dienes, alkyl halides.
	· Recognize & draw constitutional isomers, Stereo isomerism including enantiomer, diastereomers, racemic mixture.
B.Sc. II year	**Chemistry Paper- I Physical Chemistry-**
	The students will be able to:
	· Understand the fundamentals of electrochemistry including pH calculations, buffer behavior & acid base titration.
	· Explain the relationship between microscopic properties of molecules & macroscopic thermodynamic quantities / functions.
	· Understand basic knowledge of surface chemistry, phase equilibria, catalysis.
	Paper- II Inorganic Chemistry
	The students will be able to:
	· Understand the chemistry of ‘d’ and ‘f’ block elements.
	· Know the nomenclature,isomerism ,Werner’s theory and valence bond theory and different concepts of coordination compounds.
	· Explain redox potential data, acid - base concept and chemical reactions in non- aqueous solvents.
	Paper- III Organic Chemistry
	The students will be able to:
	· Describe different classes of alcohols
	· Recognise structures and properties & specific name reaction of acid halides, esters, amides, acid anhydrides, nitroalkanes & nitoarenes.
	· Understand the significance of UV & IR spectra and identification of simple organic compounds.
B.Sc. III Year	**Chemistry Paper- I Physical Chemistry-**
	The students will be able to:
	· Explain the basic concepts of UV spectroscopy
	· Understand the interactions of Electromagnetic Radiations with different matter and their applications like- Infrared Spectroscopy, Raman, UV-Visible, NMR spectroscopy.
	· Understand the basic idea of Surface Chemistry.
	Paper- II Inorganic Chemistry
	The students will be able to:
	· Classify acid & bases as hard & soft, Pearson’s concept of HSAB & it’s applications.
	· Know about inorganic polymer and their characteristic , classification and applications .
	· know the importance of essential and trace elements in biological processes..
	· Understand the magnetic properties , magnetic moment and electronic spectra of complexes.
	Paper- III Organic Chemistry
	The students will be able to:
	· Introduce the basic Chemistry of nitrogen containing compounds like- nitroalkanes, nitroarenes, Halonitroarenes.
	· Develop the skills to recognize and draw particular carbohydrate structure.
	· Know about the classification and structure of amino acids , nucleic acid, fats, oils and Detergents and their importance in life.
	· understand the synthesis, structure and bonding in organometallic and organo sulfur compounds.

	Practical Out comes
	The students will be able to:
	· Learn laboratory practices, handling glassware, equipment & reagent carefully.
	· Prepare Standard solutions of different concentration.
	· Learn to perform common laboratory techniques like distillation, reflux, recrystallization, TLC, Paper chromatography.
	· Verification of Lambert-Beer's law, stoichiometry of complex formation by Job' & Mole ratio method using colorimeter.
	· Separate the binary organic mixture and identify the components.
	· Estimation of ions in sample by gravimetric method.
	· Identification of various ions including interfering radical present in water and mixture of salts.
	· Synthesis of simple organic and inorganic compounds/complexes.
Computer Science	**Programme Specific outcomes**
	· On the Completion of the program the students gain strong foundation of knowledge in different areas of Computer Science.
	· The student will be able to pursue higher education and take-up jobs in the field of Computer Science.
	· The program Develops proficiency in the practice of computing.
BSc I Year	**Course Outcomes**
	Paper I Fundamentals of Computers
	After studying this subject, student will be acquainted with –
	· Terms and concepts of fundamentals of computers, their components, storage and I/O devices.
	· The various application areas and usage of computers.
	· Features of document and work book handling using various utilities.
	· Be familiar with the design of digital logic circuits and their application to computer organization.
	· Computer architecture and data transfer techniques
	Paper II Programming in C
	After studying this subject student will be able to -
	· Develop the ability to analyze problems and propose algorithms to solve them.
	· Develop a good documentation style in all of the programs written in this course.
	· Develop a thorough understanding of stream input/output for both console and files.
	· To understand the main activities of software development and their interactions, and handle some realistic problems of software development.
BSc II Year	**Paper I Object Oriented Programming Concepts Using C++**
	After studying this subject, student will be acquainted with –
	· The relative merits of C++ as an object oriented programming language.
	· Implementing and applying the major object-oriented concepts to programs in C++ including encapsulation, inheritance and polymorphism.
	Paper II Data Structures
	After studying this subject, student will be acquainted with –
	· Algorithms and algorithm correctness.
	· Searching and sorting techniques their implementation and usage.
	· Implementation and usage of stack, queue and linked list operations.
	· Concepts of trees and graphs and associated problems and solutions thereof.
BSc III Year	**Paper I Database Management System**
	After studying this subject, student will be acquainted with –
	· Understanding of data models and schemas in DBMS
	· Usage of SQL- the standard language of relational databases.
	· Knowledge of functional dependencies and design of the database.
	· Implementation of normalization on databases.
	Paper II Operating System Concepts
	After studying this subject, student will be acquainted with –
	· Functioning of OS as a resource manager, file system manager, process manager, memory manager and I/O manager and methods used to implement the different parts of OS.
	· Understanding of the process management policies and scheduling of processes by CPU.
	· Idea of Mutual exclusion, Deadlock detection in Distributed operating system.
	· Various techniques of resource management, process management and scheduling.
	· Implementation of Memory management policies and virtual memory.
	· Commands and working environment of UNIX/Linux OS.
	Practical Outcomes
	· Use Word processing program used for writing letters, memos, reports and paper presentations
	· students are able to develop logics which will help them to create programs, applications for system level programming.
	· Through Data structure students will be able to develop applications using data structure algorithms.

	· Visual Basic programming language enables students to create software interface and codes in an easy to use graphical environment
	· Define trancedental functions , perform integration of functions using reduction formulae.
	· Web designing enables students to create effective web website.
Mathematics	Programme Specific outcomes
	· Students acquire knowledge in areas of mathematics such as algebra , trigonometry , differential equations , vector analysis and geometry , Real analysis , Complex Analysis , Linear Algebra
	· Students develop critical thinking.
	· Formulate and develop mathematical arguments in logical manner.
	· Acquire good knowledge of subject and to use it in various problems arising in other disciplines.
	· Able to recognise , learn and appreciate the importance of life long learning process.
B.Sc . I year	**Course Outcomes**
	Paper I: Algebra and Trigonometry
	The students will be able to
	· Define the characteristic equation of a matrices.
	· Find rank and nullity of matrix
	· Define hyperbolic and inverse functions.
	· Describe the relation between roots and coefficients of an equation of second order..
	Paper II: Calculus and Differential Equations
	The students will be able to
	· Find the solution of differential equations of first order and of degree higher than one, using different methods.
	· Find solution of simultaneous differential equation with constant coefficients.
	· Find limit and continuity of functions of two variables and apply Taylor's theorem, Maclaurin's theorem to functions of two variables.
	· Application of Talyor's and Maclaurin's theorem to functions of one variable.
	Paper III: Vector Analysis and Geometry
	The students will be able to
	· Find and interpret the gradient for a function at a given point .
	· Interpret and calculate line, surface and volume integral.
	· Evaluate integrals using Stoke's , Gauss, Green's theorem.
	· Develop and interpret the concept of three dimensional figures such as cone, cylinder, ellipsoid & paraboloid.
	· Develop and find its solutions by methods such as Charpit's method , Lagrange's multiplier method.
B.Sc. IIyear	**Paper I: Abstract Algebra**
	The students will be able to
	· Define group , its types and there basic properties.
	· Find cycles and transpositions of a given permutation.
	· Prove Lagrange's Theorem , Euler's Theorem and fermatas' theorem , Caley's Theorem.
	· Define Ring, integral domain and field
	Paper II: Advanced Calculus
	The students will be able to
	· Define different types of sequences and series.
	· Verify the convergence and divergence of series using test such as comparison test , Cauchy root test , ratio test..
	· Find maxima and minima of functions of two variables , Double and triple integrals , Beta gamma functions.
	Paper III: Differential Equations
	The students will be able to
	· Find series solution of differential equations , study Bessel's and Legendre function and their properties.
	· Find Laplace transform and inverse Laplace transform of function and its application in finding the solution of differential equations with constant coefficients.
	· Define partial differential equation of First and
	· Classify partial differential equations of second order , find solution of homogeneous and non homogeneous partial differential equations with constant coefficients..
B.Sc. III Year	**Paper I : Linear Algebra & Numerical Analysis**
	The students will be able to
	· Define vector spaces , subspaces ,linear dependence and independence ,basis , Linear transformations , rank, nullity, find characteristic equations, eigen values and eigen vectors.
	· Define basic concepts of E, Δ, ∇ , errors and its types, Solve problems using Newton forward formula, Newton backward formula, Striling and Gauss formula
	· Find solution of system of linear equations using gauss elimination method, Gauss Jordan method, L U decomposition method , iterative methods such as Jacobi method Gauss - Seidel method.
	· Find solutions of differential equation by Euler's method , Runge - Kutta Method , Milne
	–Simpson's method, method based on numerical integration.

	Paper II : Real & Complex Analysis
	The students will be able to
	· Define Riemann Integral and their properties, Mean value theorems of integral calculus..
	· Define metric space , neighbourhoods , limit points , open and closed sets ,subspaces of metric space , Cauchy sequences , prove Cantors intersection theorem , contraction principle.
	· Define continutity & differentiability of complex numbers, condition for a function to be analytic, define mobius transformations and conformal mappings.
	Paper III : Discrete Mathematics
	The student will be able to
	· Boolean functions, Binary relation, partial ordered set, equivalence relations
	· Define Graph , multigraph , paths and circuits , shortest path : Dijkstra's Algorithm, trees and find matrix representation of graphs.
Physics	**Programme Specific outcomes**
	The student will be able to
	· Students aquire core knowledge in Physics including major premises of Mathematical Physics, Mechanics, Properties of Matter, Special Theory of Relativity, and Earlier development in physics .
	· Students are expected to develop a written and oral communicating skill in communicating physics related topics.
	· Students will realise and develop an understanding of Physics and Science on Society.
	· Students should learn how to conduct series of experiments to understand scientific process, interpret and analyze results, draw conclusions as supported by their data.
	· Learn to minimize errors and recognize the limitations of equipments.
	· Discover of Physics concept in other disciplines.
	· Apply conceptual understanding of Physics to general real-world situations.
	Course Outcomes
B. Sc. I	**Paper I : Mathematical Physics, Mechanics and Properties of Matter.**
	The student will be able to
	· Connect concept and mathematical rigor in order to enhance understanding.
	· To obesre concept of Pysics in day-to-day life.
	· Conceptual understanding and approch the problems mathematically.
	Paper II Thermodynamics and Statistical Mechanics
	The student will be able to
	· Be able to use thermal and statistical princoples in a wide range of applications.
	· Learn and understand how statistics of microscopic world can be used to explain thermal features of macroscopc world.
B.Sc. II	**Paper I : Optics**
	The student will be able to
	· To develop and understanding of Principles of Optics.
	· Understand the basic concept of Physical Optics and Wave Optics.
	· To develop an ability to compute basic quantities in Optics.
	· LASER and application, holograms.
	· Observe principles of optics in daily life.
	Paper II: Electrostatics, Magnetostatics and Electrodynamics
	The student will be able to
	· Know the vocabulary and concept of Physics as it applies to Principles of electric and magnetic field sources and to understand relationship between them.
	· Learn AC Circuits and related theorems with applications.
	· Be able to use electromagnetic theory and principles in vide range of application.
	· Develop skill to solve numerical problems on it.
B.Sc. III Year	**Paper I : Quantum mechanics and Spectroscopy**
	The student will be able to
	· Learn the mathematical tools needed to solve quantum mechanics problem (Complex functions and Operators).
	· To build connections between mathematical development and conceptual understanding.
	· Develop and communicate analytical skills in subatomic physics and to develop an interest in this subject .
	Paper II Solid State Physics and Devices
	The student will be able to
	· Understand basic concept of Solid State Physics.
	· Conceptual gain of crystalline structure.
	· Working of Solid State Electronic Devices and to understand their uses.
	· Exposure to basic knowledge of Nanotechology
	Practical Outcomes

		· Students learn to do practical as an application of what they study in theory.
		· Students learn how to use measuring instruments and minimize errors, compare results with standard results.
		· Students can apply various methods of calculations such as graphical etc.
		· Explore the important connections between theory, experiments and current applications.
		· Students develop the proficiency in acquisition of data using a variety of laboratory instruments and in the analysis and interpretation of such data.
		· Develop a basis for future learning and work experience.
		· Students are able to perform experiments based on their some of the theory .
C (II)	**B.Sc.(Life Science)**	**Program Specific Outcomes**
	BBtZ-	The student will be able to
	BBtCS	· pursue multi and inter-disciplinary science careers in future.
	CBZ	· develop scientific temper beneficial for the society and also contributes in the scientific developments of the nation.
	CN	· Students can pursue their career in diverse fields including both public and private sectors.
		· Science graduates can serve in industries, establish their own industrial unit or start ups.
		· apply their broad knowledge of science across a range of fields,
	Biotechnology	**Programme Specific outcomes**
		The student will be able to
		· Students are able to understand the use of living organisms and bioprocesses in engineering, technology, medicine and other fields.
		· Ccandidate can further pursue higher studies in specialised fields of sciences i.e. Biotechnology, Microbiology, Biochemistry, Molecular Biology, and Genetics etc.
		· Students learn safe implication of technology by keeping in mind the ethical standards and to develop human resource to meet the growing demand.
		· Students understand the value their application inreal life and current scenarios etc.
		Course Outcomes
	B.Sc. I Year	**PAPER-I Cell Structure and Biology**
		The student will be able to
		· Gain an insight into the metabolic processes associated with the catabolism of carbohydrates, amino acids and lipids
		· Develop an understanding of the cytoskeleton and cell membrane
		· Discuss the cell cycle, structure of chromosome and types of chromosomal aberrations.
		· Explain the role of energy rich molecules in metabolism.
		· Understand the metabolic pathways of carbohydrates, amino acids, and lipids.
		PAPER-II Microbiology
		The student will be able to
		· To understand the concept, principle and types of sterilization methods.
		· Understand the microbial genetics and recombination in bacteria.
		· Know the cultivation methods of bacteria, yeast and fungi.
		· To understand the principle and working of laminar air flow.
		· Plan and execute an enzyme assay.
	B.Sc. II Year	**PAPER I- Biophysics and Biochemistry**
		The student will be able to
		· The students will develop the capability to demonstrate a multi-scale nature of biophysics by exploring macroscopic and microscopic applications.
		· To understand physical basis of chemical bonding, ion conduction and the chemistry of organic molecules and apply those to biology.
		· The students will understand structure, functions and roles of biomolecules in biological systems.
		· The students will be able to describe role of enzyme in chemical reactions and enzyme kinetics involved in it.
		Paper II- Bioinstrumentation, Biostatistics and Bioinformatics
		The student will be able to
		· The student will understand theoretical approaches can be used to model and analyze complex biological systems.
		· The student should be able to understand the utility of different types of instruments used in Biotechnology.
		· The student should be able to understand how biophysical methods can be used for differentiating biological macromolecule.
		· The student will be able to describe different molecular biology databases and formats in which data is stored.
	B.Sc. III Year	**Paper I : Molecular Biology and Genetic Engineering**
		The student will be able to
		· Discuss the regulation of gene expression in prokaryotes and eukaryotes.
		· Understand the role of different cells, effector molecules and effector mechanisms in **Genetic Enginnering**. Understand the principles underlying various immuno-techniques.
		· Students will be aware of the modern tools and techniques of genomics and isolation and identification of genes.
		Paper II : Applied Biotechnology

	The student will be able to
	· The student will be able to evaluate the potential of biodegradation of organic pollutants.
	· Students will gain basic information of Plant tissue culturing, microbial cultures, sterilization methods and enzyme production.
	· Students will be able to describe the tools and techniques of genetic engineering,
	· Students will be able to explain the industrial aspects of Biotechnology for the production of various of industrial products of biological origin.
	· Students will learn about the bio-safety guidelines.
	Practical Outcomes
	The student will be able to
	· Students will demonstrate proper and safe laboratory practice, proper use of equipment and the ability to use basic Techniques in several areas and advanced Techniques in at least one area.
	· Students will demonstrate the ability to perform appropriate qualitative analysis of experimental data and draw valid conclusions from their analysis.
	· Students will demonstrate the ability to work effectively with computational, mathematical and statistical approaches to acquire, analyse and model experimental datasets.
	· Students will demonstrate the ability to effectively use electronic media to access biological information.
	· Students will demonstrate the ability to orally communicate the findings of their experiments or the work of others.
Botany	**Programme Specific Outcomes**
	The student will be able to
	· Students achieve an up to date level of understanding of plant science.
	· The study of Botany dealing with the structure, function, classification and evolution of plants has inspired many great minds.
	· It is fascinating to study the wide spectrum of reproduction process in algae, fungi, lichens, bryophytes, petridophytes, gymnosperm and flowering plants.
	· A student of Botany has been learning there aspects together with taxonomy, anatomy, plant pathology, plant breeding, microbiology, plant physiology, biochemistry, ecology, genetics, molecular biology and plant biotechnology.
B.Sc. I Year	**Course Outcomes**
	Paper I : Diversity of Lower Plants
	The student will be able to
	· To understand diversity & economic importance of Mycoplasma, Cynobacteria and Actinomycetes.
	· To understand diversity & economic importance of Algae.
	· To understand biodiversity & economic importance of Fungi.
	· To study the characters and classification of Bryophyta.
	· To understand the morphological diversity of petridophytes.
	Paper II: Diversity of Higher Plants
	The student will be able to
	· To study the characters and classification of Gymnosperm.
	· Understand life cycles of Gymnosperms, Cycas, Pinus and Ephedra.
	· To understand the importance, morphology and anatomy of root.
	· To understand the importance, morphology and anatomy of stem.
	· To understand origin, development, importance, morphology and anatomy of leaf.
B.Sc. II Year	**Paper I: Taxonomy & Embryology of Angiosperms**
	The student will be able to
	· Study the Angiospermic Plants.
	· Understand the comparative account among the families of angiosperm
	· Know the economic importance of Angiospermic families.
	· To understand structure and development of microsporangium and mega sporangium.
	· To understand embryology of Angiospermic plants.
	Paper II: Plant ecology, Biodiversity & Phytogeography
	The student will be able to
	· To know the structure and functions of ecosystem.
	· Understand ecological adaptations in plants.
	· Learn about conservation of Biodiversity, Biosphere reserves, santuries and National Park of M.P.
	· Understand the global warming and climate change.
	· Discover botanical regions of India and vegetation types of M.P.
B.Sc. III Year	**Paper I : Plant Physiology & Biochemistry**
	After completion of these course students will be able to:
	· Learn and understand water absorption, osmosis, transpiration and ascent of sap.
	· Learn and understand mineral nutrition in plants, translocation & structure of Biomolecules.
	· Understand the process and importance of photosynthesis.
	· Understand the structure of mitochondria & process of respiration.
	· Understand the structure & classification of enzymes & plant growth regulators.

	Paper II : Cell biology, genetics and Biotechnology
	After completion of these course students will be able to:
	· Understand the structure of cell & cell organelles.
	· Understand structural organization, variation in chromosome and DNA structure.
	· Understand Mendel's laws of inheritance, cytoplasmic inheritance & mutation.
	· Understand the structure of gene, protein synthesis & gene regulation in prokaryotes and eukaryotes.
	· Understand the fundamentals of Biotechnology, RDT and Plant Tissue Culture Techniques.
	Practical Outcomes
	After completion of these experiments students will be able to:
	· Learn Preparation of slides and staining of different plant materials.
	· Learn diversity in Algae, Fungi, Bryophyta, Pteridophyta and Gymnosperm.
	· Learn identification of local plants belonging to different families of angiosperms, their systematic position, morphological characters, floral formula and floral diagram.
	· Learn identification of local plant diseases their causal organisms, symptoms and control measures.
	· Learn Morphology and anatomy of root, shoot & leaf and their identification.
	· Learn more about community ecology by different methods.
	· Learn morphological and anatomical adaptation in locally available hydrophytes & Xerophytes.
	· Learn different physiological experiments related to Photosynthesis, Respiration & Osmosis
	· To understand the plants & plant cell in relation to water.
	· Learn cell division in root tips & flower buds.
Zoology	**Programme Specific Outcomes**
	· Students able to understand the basic concepts of taxonomy of animals, cell biology, anatomy, physiology, genetics, ecology, developmental biology and applied Zoology.
	· Identify and list out common invertebrates and vertebrates.
	· Understand the applications of biological sciences in Apiculture, Sericulture, lac culture Aquaculture, Agriculture, medicine and daily life.
	· Gains knowledge about research methodologies.
	· Understand various genetic abnormalities.
	· Perform procedures as per laboratory standards in the areas of Plant sciences
	Course Outcomes
B.Sc. I year	**Paper I : Invertebrate**
	After completion of these course students will be able to:
	· Understanding of general taxonomic rules.
	· Study of type specimen from each phyla.
	· Describe general taxonomic rules on animal classification
	· Study of classification from Phylum Protozoa to Echinodermata upto orders.
	· Study the diseases caused by protozoan, nematodes and insects along with their remedies
	· Study the larval forms of annelida, arthopoda ,echinodermata and their evolutionary significance.
	Paper II : Cell Biology & Developmental Biology
	After completion of these course students will be able to:
	· Students gain knowledge of basic concepts of cell biology along with internal structure of cell and functions of various cytoplasmic organelles.
	· Understand the process of cell division and study of special type of chromosome.
	· Gains knowledge about developmental processes of frog and chick.
	· Basic concepts of developmental biology regarding gametogenesis, fertilization,cleavage mechanisms, blastulation and gastrulation.
B.Sc. II year	**Paper I : Vertebrates and Evolution**
	After completion of these course students will be able to:
	· Knowledge of classification of protochordates and Vertebrates upto orders.
	· Knowledge of comparative anatomy of different organ system of chordates.
	· Imparts the knowledge about theories and nature of evolution, adaptation , speciation, mimicry and colouration etc.
	· Students are able to understand Fossils, Methods of fossilisation, Determination of age of Fossils and Study of Extinct forms: Dinosaurs and Archaeopteryx.
	· Gain Knowledge of Zoogeographical distribution, Evolution of Man, Geological time scale and Insular fauna.
	Paper II : Animal Physiology and Biochemistry
	After completion of these course students will be able to:
	· Students are taught the detailed concepts of digestion, respiration, excretion.
	· Students able to understand the physiology of nerve impulse conduction, Structure of muscles and theory of muscle contraction and its biochemistry.
	· Gains knowledge about metabolism of protein, carbohydrate and lipids.
	· Students understand the Structure and functions of different endocrine glands, hormones and endocrine mechanisms.
	· Gather knowledge on types of immunity, antigen-antibodies reaction and their properties, vaccines, diseases.

B.Sc. III Year	**Paper I : Genetics**
	After completion of these course students will be able to:
	· Develop idea about Mendelian, non-Mendelian inheritance, genetic disorder, gene mutations, linkage , crossing over and sex determination.
	· Knowledge of molecular organization and function of DNA and RNA , types of RNA and protein synthesis.
	· Imparts the knowledge about Human Karyotype ,Human Genome Project,Multiple allele and inheritance of blood group, Sex linked and different Genetic diseases in human bings.
	· Develop idea about Recombinant DNA technology, DNA fingerprinting and Gene therapy.
	Paper II : Ecology and Applied Zoology
	After completion of these course students will be able to:
	· Imparts knowledge to the student regarding various factors of ecology, types of ecosystem, population and community characteristics and dynamics.
	· Gains knowledge in the areas of animal behavior, wildlife, biodiversity and conservation Biology.
	· Understands concepts of aquaculture, sericulture, apiculture, lac culture along with pest management techniques.
	· Students are able to Maintain the Aquarium.
	· Study of types of pollution : Air, water, soil, thermal and noise pollution and their preventive measures.
	Practical Outcomes
	After completion of these course students will be able to:
	· Study of Museum specimens and slides related to invertebrate and vertebrate studied in theory.
	· Understood the anatomy and physiology of invertebrate and vertebrate animals by dissection.
	· Understood the mechanism of cell division (mitosis and meiosis).
	· Understood the mechanism of developing embryo of chick and frog.
	· Students are able to prepare slides to observe Giant chromosome.
	· Obtained the knowledge about direct observation of fossils and evolutionary important specimen by which evolutionary relationship of animal groups.
	· Skill development for the observation of blood cells and blood grouping and haemoglobin.
	· Attained knowledge of qualitative analysis of protein, carbohydrate and lipids, excretory products, blood glucose.
	· Understood the enzyme reaction and influence of temperature on enzyme action.
	· Studied the histological slides of different visceral organs and endocrine glands.
	· Understood the working, principle and applications of different instruments.
	· Attained knowledge on the observation of preserved specimens of fresh water, marine and terrestrial fauna.
	· Analyzed water quality like dissolved oxygen, hardness, pH, turbidity etc.
	· Studied ecosystem, wild life and life cycle of economically important insects.
Clinical Nutrition	**Program Specific outcomes**
	The Programme enables the students to/in understanding
	· Concept of Nutrition and Energy with respect to Human Body.
	· Understanding metabolism and physiology of in the Human Body.
	· Types of food services and understanding food material management
	· Dietary Treatment for Human Diseases.
	· Understanding of Microbiology of Different Food and Spoilage and Contamination
	· Introduction to Financial Management
	· Understanding of Microbiology of Different Food and Spoilage and Contamination.
	Course Outcomes
B.Sc. I year	**Paper I Basic Nutrition and Food Commodities**
	After completion of these course students will be able to:
	· Concept of Nutrition and Energy with respect to Human Body.
	· Introduction to various types of Proteins and Vitamins.
	· Energy giving Foods for Nutritional Diet.
	· Introduction to Milk Products and its utility.
	· Types of Sugar products and sources of fats and Oils.
	Paper 2 Physiology and Biochemistry
	After completion of these course students will be able to:
	· Understanding of Physiology of Human Body.
	· Function of various organs in the Human Body.
	· Understanding of Nervous System and Reproductive System
	· Understanding of Biochemical processes in the Body.
	· Understanding metabolism in the Human Body.
B.SC 2nd Year	**Paper 1 Family Meal Management and Community Nutrition**
	After completion of these course students will be able to:
	· Meal Planning and creating Balance between Food and Population Growth.

		· Understanding of Nutrition in Pregnancy.
		· Nutrition in early childhood and Adolescence Period.
		· Assessment of Nutritional Status.
		· Nutrition and Health in National Development.
		Paper 2 Food Services Management and Accountancy
		After completion of these course students will be able to:
		· Management of Food Services Organization
		· Understanding Personnel Management
		· types of food services and understanding food material management
		· Introduction to Financial Management
		· Food Cost Accountancy
	B.SC 3rd Year	**Paper 1 Advance Clinical Nutrition and Dietetics**
		After completion of these course students will be able to:
		· Introduction to Diet Therapy and Diet Counseling
		· Dietary Considerations for disturbances in Human Body.
		· Dietary Treatment for Human Diseases.
		· Understanding of Common Food Allergies Treatment and Cardio Vascular Diseases
		· Understanding Malnutrition and Renal Diseases.
		Paper 2 Food Microbiology, Sanitation and Hygiene (Theory)
		After completion of these course students will be able to:
		· Historical Development of Microbiology and understanding Micro-organisms growth curve.
		· Understanding of Microbiology of Different Food and Spoilage and Contamination
		· Introduction to Environmental Microbiology and Food borne illnesses
		· Introduction to Microbiological Standards of Food Safety and personal Hygiene.
		· Understanding Food Sanitation and Management of Waste Products (Solid and Wastes).
		Practical Outcomes
		· Understood the biochemistry and physiology of human body.
		· Understood the mechanism of cell division (mitosis and meiosis).
		· Understood the nutritional needs of a developing child.
		· Students are able to prepare meals according to dietary requirements .
		· Obtained the knowledge about various food groups and their importnce..
		· Skill development for the observation of patient for nutritional defficency.
		· Attained knowledge of qualitative analysis of protein, carbohydrate and lipids, excretory products, blood glucose.
		· Understood the enzyme reaction and influence of temperature on enzyme action.
		· Studied the histological slides of different visceral organs and endocrine glands.
		· Understood the working, principle and applications of different instruments.
D	**Faculty of Managen**	**Program Outcomes:**
	BBA	· A graduate student develops critical thinking.
		· A student after graduation will acquire life skills and become a better human being, will develop language competence and be proficient in oral communication and written skill.
		· Students can pursue career in multi and interdisciplinary fields.
		· Students can understand the use of analytical methods required for interpreting and analyzing results and drawing conclusions as supported by their data.
		· Students will have better employability in the field of finance, industry, administration, social and extension work, IT sectors, research and many others as office assistants .
		· Students will develop confidence to appear for various competitive exams related to public and private sectors.
	BBA I	**Paper-I Financial Accounting**
		After studying this subject, student will be acquainted with –
		· The students become well equipped to prepare the various accounts like trading and profit and loss a/c, branch a/c, royalty a/c etc.
		· This paper enables the students to get job in institutions where professionals with accounting skills and knowledge are required.
		Paper II Communication skills
		After studying this subject, student will be acquainted with –
		· Acquired skill to handle written and verbal business communication required for workplace
		· Learnt business etiquettes and mannerisms.
		· Proficiency in oral communication skills. To enhance language through a task-based and learner – centric syllabus
		· carry out LSRW skills and to channelize energy through soft skills and Value orientation

	Paper III Principles of Management
	· On successful completion of this course, students will learn management principles.
	· They will be aware of the skills competencies, techniques and knowledge needed to successfully manage an organization
	Paper IV Economics
	After studying this subject, student will be acquainted with –
	· The students will become aware about the concept of demand, supply, pricing and production function.
	· They get to know the phenomenon which regulates the overall functioning of the economy.
	· The outcomes of this paper is to provide an understanding of basic economic principles which can help them to judge or analyze the economic policies.
	· They become aware of the concepts of National Income, GDP, domestic income which are important aggregates of an economy.
	Paper V Business Statistics
	After studying this subject, student will be acquainted with –
	· The outcomes of this paper is to provide an understanding for graduate student on measures of central tendency, measures of dispersion and Time series,.
	· The students will also learn correlation, regression, index number, diagrammatic and graphic presentation.
	Paper VI Business Maths
	After studying this subject, student will be acquainted with –
	· After the successful completion of the course the students will be able to demonstrate basic knowledge & skill in business mathematics &elementary statistics by accurately performing common business computations, statistical data presentation & analysis.
	· Develop the student's ability to deal with numerical and quantitative issues in business.
BBA II	**Paper I- Organizational Behavior**
	After studying this subject, student will be acquainted with –
	· Know about organizational behavior and its relation with other disciplines.
	· Analyze individual behavior under different conditions.
	· Assess group behavior and intrapersonal influence.
	· Evaluate organizational system and process.
	· Know about & differentiate between organizational design, changes and innovations.
	Paper II-Project Management
	After studying this subject, student will be acquainted with –
	· Students learn to plan a project or a task, organize it and bring it to the completion.
	· Identify the main objectives of the project, its purpose and the scope.
	· To be able to identify constrains and requirements of any project.
	· To satisfy the stake holders
	Paper III Financial Management
	After studying this subject, student will be acquainted with –
	· Students will be able to plan strategically all the financial resources in an organization.
	· To be able to identify financial constrains and requirements of any project.
	· They are expected to know how to maintain enough supply of funds for the organization.
	· They are expected to know how to create real and safe investment opportunities
	Paper IV Marketing Management
	After studying this subject, student will be acquainted with –
	· After the successful completion of the course the students will be able to understand various factors which are playing in a specific market.
	· Set goals for the organization
	· Plan strategies , promotional and other schemes for the organization.
	Paper V Marketing Research
	After studying this subject, student will be acquainted with –
	· **Students gain insight about how to identify the needs ,wants and demands of a target customer.**
	· **To apply the above findings to effectively give direction to marketing team.**
	· **To create and maintain brand loyalty and customer base.**
	Paper VI-Human Resource Management
	After studying this subject, student will be acquainted with –
	· The student develop good communication skills, so as to manage employees at various levels.
	· The students become proficient in employing , training and compensating them.
	· They are able to develop human resource policies in accordance with the laws of the country.
BBA III	Paper I -Business Law
	After studying this subject, student will be acquainted with –
	· **To provide knowledge about business laws related to real life.**

	· **To enable students to understand the practical applicability of the subject.**
	Paper II Business Environment
	After studying this subject, student will be acquainted with –
	· Students will be able to evaluate the legal social and economic environment of the business.
	· Students will demonstrate understanding of ethical and moral issues in running the business.
	· The students will have ability to address them in the course of business.
	· Students will be able to apply decision support tools to business decision making.
	Paper III Management information system
	After studying this subject, student will be acquainted with –
	· Students learn strategic planning, management control and transaction processing
	· They will be able to process the data pertaining to transaction, the status of a particular record and reference on a variety of documents.
	Paper IV Entrepreneurship development
	After studying this subject, student will be acquainted with –
	· Understanding the stages of entrepreneurial process and the resources needed for the successful development of entrepreneurial ventures.
	· Understand basic concepts in the area of entrepreneurship.
	Paper V-HRD
	After studying this subject, student will be acquainted with –
	· It Aims to equip students to develop themselves into a critically reflective and capable manager.
	· The explain and demonstrate the contribution of human resource in an organization.
	· Learn the process of identifying needs and designing and delivering HRD interventions that are beneficial for the company.
	· To enable students to develop an ability to decide learning and training needs for staff of various strata.
	· To enable students to identify specific inherent skills of candidates before their incorporation in the organization.
	Paper VI- Wages and salary
	After studying this subject, student will be acquainted with –
	· Students learn the process by which wage and salary levels and structures are determined in organizational settings.
	· It explains basic components of the salary e.g. allowances, Gratuity, EPF etc.
	· Difference between wages and Salary.
	· Establish rules for allowances so as to save revenue for the company on one hand and keep employees satisfied and motivated.
	· Factors to be considered for deciding wages and salaries.
Foundation Course	Course Outcomes
BCA/ B.Com/B.Sc /BBA IYear	**Paper-I Hindi Bhasha Evam Naitik Mulya**
Course Code – 69	After studying this subject, student will be acquainted with –
	· Development reading writing and communication skills.
	· Develop Hindi reading and linguistics comprehension of students.
	· Develop interest in literature story and poetry.
	· Inculcate moral and human values within themselves.
	Paper II English Language
	After studying this subject, student will be acquainted with –
	· Knowledge of the English language grammar constructs in order to write legible sentences independently.
	· Acquired skill to handle written and verbal business communication required for workplace
	· Learnt business etiquettes and mannerisms.
	· Proficiency in oral communication skills. To enhance language through a task-based and learner – centric syllabus
	· carry out LSRW skills and to channelize energy through soft skills and Value orientation
	· To help and make them proficient English to prosper in professional and personal lives and for global competency through the text reading ,grammar exercises and comprehension.
	Paper III Entrepreneurial Development
	After studying this subject, student will be acquainted with –
	· Understanding the stages of entrepreneurial process and the resources needed for the successful development of entrepreneurial ventures.
	· Understand basic concepts in the area of entrepreneurship.
Foundation Course	**Paper Hindi- Naitik Mulya Aur Bhasha**
BCA/ B.Com/B.Sc /BBA IIYear	· The verbal and non-verbal skills of communication are developed.
Course Code – 69	· Make accurate use of Hindi language in their respective fields.
	· Understand the basic forms of story and poetry.

		Paper II English Language
		· To learn the correct usage of English.
		· To expose the students to a range of contexts where the language is used to meet a variety of real life communication needs.
		· To equip with the practical, emotional, intellectual and creative aspects of language by integrating knowledge and skills.
		· To focus on readability, teach-ability and testability - to think beyond the text.
		· To enhance practice in objective and subjective writing through expansion of ideas,passages etc..
		· To give them a practice of Subject –Verb agreement,enhance vocabulary and develop writing skills.
		Paper III Environmental Studies
		Upon successful completion of this course, students are expected to be able to
		· Appreciate the role of solar energy, food chains & food webs in ecosystem.
		· Understand the causes, impacts & remedies for environment pollution.
		· Know the importance of family welfare programmes & human health.
		· Understand about various types of energy resources.
		· Admire / Significance of national park, centuary, poaching.
		· Able to cherish the wild life Biodiversity of India.
		· Know about various laws for wildlife, pollution & environment conservation.
		· Know about management of various disasters like flood, earthquake, cyclones & landslides.
		· Able to effectively use informational technology for protecting environment health.
	BCA/ B.Com/	**Paper-I Hindi Bhasha Evam Naitik Mulya**
	B.Sc/BBA III Year	· To understand fundamental human values.
		· To improve communication and soft skills.
		· To make all round personality development.
		· To develop their social and moral sense in life.
		Paper II English Language
		· To help the students to learn good English to prosper in professional and personal lives.
		· To equip with the practical, emotional, intellectual and creative aspects of language by integrating knowledge and skills.
		· To make them proficient in drafting C.V.,writing E-mails Report etc for their job and other career prospects.
		· To expose the students to a range of contexts where the language is used to meet a variety of real life communication needs.
		· To develop intellectual, personal and professional abilities through effective communicative skills;
		· Students should be proficient in oral communication and writing.
		Paper III Basics of Computer & Information Technology
		After studying this subject, student will be acquainted with –
		· Understand the basic organization of Computer System.
		· Demonstrate input and Output devices.
		· Understand capacity and speed of Different Storage devices.
		· Develop basic understanding of various Operating Systems.
		· Work on text reading and Editing Software.
		· Power point enables them to create presentations.
		· Microsoft Excel helps them in preparing sheets with calculations, charts and recording data about all sorts of business processes.
		· Knowledge of emerging tools offered by the internet.
E	**Faculty of Educatio**	**Program Out come**
		· Develop understanding of the concept, meaning and aims of education
		· Experiences to interact with student and training in methods to understand the aspects of the development of Children.
		· To understand the concept about childhood (specially with reference to Indian social context)
		· Acquaint with respect to the role of different agencies in the healthy developent of a child.
		· Understand inter-relation of education and philosophy
		· Develop reflective thinking among students.
	B.Ed -2 year	**Program Specific Out Come**
	(IV semester course.)	
		After studying this subject, student will be acquainted with –
		· Understand Educational and Humanistic Psychology and perspectives in development.
		· Understand Commonalities and diversities within the notion of Childhood and stages of Human Development.
		· Get an insight to the psycho-social development and how differential gender socialization occurs.
		· Understanding the concept of socialization and relationships with peers.

	· To develop an understanding of the brief historical background of Indian Education with special reference to Secondary Education.
	· To develop an understanding of the Objectives and Scope of Secondary Education.
	· To develop an awareness of the professional ethics.
	· It will also enable the teachers to comprehend the ideas better for reflection and thinking as well as for the expression and Communication.
	· To familiarize students with designing of Curriculum.
B.Ed Semester 1	**CC 1 : Childhood and Growing Up**
	Course Out Come
	After studying this subject, student will be acquainted with –
	· To build sensitivity towards children's developmental needs and Capabilities within their socio-cultural context.
	· To develop an understanding of different aspects of a child's physical, mental, social and Emotional Development.
	· To understand the developmental process of Children with diverse abilities in social, cultural and political context.
	· To provide hands-on experiences to interact with Children and training in methods to understand the aspects of the development of Children.
	· To build an interdisciplinary framework to interpret, analyze observations and interactions from cross culture psychology.
	CC2 - Education in India- Status, Problems and Issues
	Course Out Come
	After studying this subject, student will be acquainted with –
	· Understanding preservation of our Cultural Heritage and Values with Indian and Western aims of Education.
	· Learning the traditions in Education and efforts towards evolving a national system of Education.
	· Understanding streams of Secondary Education and role of Secondary School teacher in Emerging India.
	· Professional Organization in the field of Teacher Education.
	CC 3 - Language across the Curriculum- Part 1
	Course Out Come
	After studying this subject, student will be acquainted with –
	· This course is visualized as a range of primarily text based language activities which will aid in strengthening the ability to read, think, discuss and communicate as well as to write in the language of instruction.
	· Retelling the narrative and descriptive accounts in one's own words from different view point.
	· Engagement with popular subject based Expository Writing
	· Learning Journalistic writing with the help of newspaper and magazines Articles.
	CC 4 - Curriculum Development and School
	Course Out Come
	After studying this subject, student will be acquainted with –
	· To acquaint students with the nature and types of Curriculum.
	· To give practical experience in evaluating, designing and reviewing Curriculum.
	· Issues and problems of existing curriculum.
	· Curriculum construction and Development and various curriculum models.
	· Gradation and Organization of Curriculum along with Curriculum Enrichment.
	EPC 1 Reading and Reflecting on Texts
	Course Out Come
	After studying this subject, student will be acquainted with –
	· To enable the students to read and response to a variety of text in different ways.
	· To develop Meta Cognitive Awareness.
	· To enhance the capacities as readers and writers by becoming participants in the process of reading.
	· Enhancing reading skills with scaffolding activities.
	· Acquisition of reading skills and Discourse analysis.
	· Understanding of different types of skills and strategies.
	· Text analysis of school textbooks to improve skills in critical literacy.
B.Ed Semester 2	**CC 1 - Learning and Teaching**
	Course Out Come
	· After studying this subject, student will be acquainted with –
	· To become aware of different contexts of learning and situate schools as a special environment for learning.
	· To reflect on their own implicit understanding of the nature and kinds of learning.
	· Gain an understanding of different theoretical perspectives on learning with a focus on cognitive views of learning as well as social-constructivist theories.
	· Implicit knowledge and beliefs about Learning along with demystifying misconceptions.
	CC 2. Pedagogy of School Subject Part 1
	Subject - Hindi (A)
	After studying this subject, student will be acquainted with –

· appreciate the importance of teaching Hindi as third subject
· the aims and objectives of teaching Hindi
· principles of curriculum construction.
· basic skill of language teaching
· use of teaching aids and modern tools in teaching (Charts models OHP transparencies, Film strips, slides, video tapes, films, educational videos).
· create tools for teaching
· Organizing Drama / skit poem recitation in Hindi.
· develop professionally by organizing and attending seminars, workshops and conferences.
· Writing articles and research papers.
· Knowledge, understanding, application, Skill, Attitude, interest, Appreciation in Hindi.
Sanskrit (B)
After studying this subject, student will be acquainted with –
· appreciate the importance of teaching Sanskrit as a subject
· the aims and objectives of teaching Sanskrit
· principles of curriculum construction.
· History and evolution of Sanskrit as originator of modern Indian languages.
· use of teaching aids and modern tools in teaching Charts models OHP transparencies, Film strips, slides, video tapes, films, educational videos.
· Create tools for teaching Sanskrit.
· Drama / skit poem recitation in Sanskrit teaching
· Experiments and laboratory work in teaching
· develop professionally by organizing and attending seminars, workshops and conferences.
· Writing articles and research papers.
English (C)
After studying this subject, student will be acquainted with –
· appreciate the importance of teaching different techniques and devices of the second language structure sounds and vocablury
· the aims and objectives of teaching English
· principles of curriculum construction.
· use of teaching aids and modern tools in teaching Charts models OHP transparencies, Film strips, slides, video tapes, films, educational videos.
· Create tools for teaching English.
· Drama / skit poem recitation in English teaching
· Experiments and laboratory work in teaching
· develop professionally by organizing and attending seminars, workshops and conferences.
· Writing articles and research papers.
CC 2 Pedagogy of School Subject Part 1
Physical Sciences (chemistry and Physics)
After studying this subject, student will be acquainted with –
· appreciate the importance of teaching Chemistry and Physics.
· principles of curriculum construction.
· use of teaching aids and modern tools in teaching Charts models OHP transparencies, Film strips, slides, video tapes, films, educational videos.
· Create tools for teaching Sanskrit.
· Experiments and laboratory work in teaching
· develop professionally by organizing and attending seminars, workshops and conferences.
· Writing articles and research papers.
CC 2 Pedagogy of School Subject Part 2
History/ Civics
After studying this subject, student will be acquainted with –
· appreciate the importance of teaching History and civics as a subject
· principles of curriculum construction.
· use of teaching aids and modern tools in teaching Charts models OHP transparencies, Film strips, slides, video tapes, films, educational videos.
· Create tools for teaching istory & civics.
· Aquire knowledge about local, regional, national and world history
· Experiments and laboratory work in teaching
· develop professionally by organizing and attending seminars, workshops and conferences.
· Writing articles and research papers.
CC 2 Pedagogy of School Subject Part 2
Geography/Economics
After studying this subject, student will be acquainted with –

· appreciate the importance of teaching Geography as a subject
· the aims and objectives of teaching Geography.
· principles of curriculum construction.
· Aquire knowlegde about local, regional, national and world geography
· use of teaching aids and modern tools in teaching Charts models OHP transparencies, Film strips, slides, video tapes, films, educational videos.
· Create tools for teaching Geography.
· Experiments and laboratory work in teaching
· develop professionally by organizing and attending seminars, workshops and conferences.
· Writing articles and research papers.
CC 2 Pedagogy of School Subject Part 2
Commerce
After studying this subject, student will be acquainted with –
· appreciate the importance of teaching Commerce as a subject
· the aims and objectives of teaching Commerce
· principles of curriculum construction.
· use of teaching aids and modern tools in teaching Charts models OHP transparencies, Film strips, slides, video tapes, films, educational videos.
· develop professionally by organizing and attending seminars, workshops and conferences.
· Writing articles and research papers.
CC 2 Pedagogy of School Subject Part 1
Mathematics
After studying this subject, student will be acquainted with –
· appreciate the importance of teaching Mathamatics as a subject
· the aims and objectives of teaching Mathmatics
· principles of curriculum construction.
· use of teaching aids and modern tools in teaching Charts models OHP transparencies, Film strips, slides, video tapes, films, educational videos.
· Create tools for teaching Mathamatics.
· Experiments and laboratory work in teaching
· develop professionally by organizing and attending seminars, workshops and conferences.
· Writing articles and research papers.
CC 2 Pedagogy of School Subject Part 1
Biological Sciences
After studying this subject, student will be acquainted with –
· appreciate the importance of teaching Biology as a subject
· the aims and objectives of teaching Biology.
· principles of curriculum construction.
· use of teaching aids and modern tools in teaching Charts models OHP transparencies, Film strips, slides, video tapes, films, educational videos.
· Create tools for teaching Biology
· Experiments and laboratory work in teaching
· develop professionally by organizing and attending seminars, workshops and conferences.
· Writing articles and research papers.
CC 4 **Language across the Curriculum- Part 2**
After studying this subject, student will be acquainted with –
· Recognize nature, function and role of language across the curriculum.
· Acquaint with obstacles in language usage while using the language and ways to
· overcome them.
· Understand importance and use of first and second language, multilingualism and
· impact of culture.
· Familiarize the students with the barriers to (Listening, Speaking, Reading, Writing)
· LSRW skills and activities for developing these skills.
EPC 2: Drama and Art in Education.
After studying this subject, student will be acquainted with –
· Understand the use of “Drama” as Pedagogy.
· Use “Role play” technique in the teaching learning process.
· Understand the importance of dramatic way of presentation.
· Integrate singing method in teaching learning process.
· Understand various “Dance forms” and their integration in educational practices.
· Use art of drawing and painting in teaching learning process.
· Develop creativity through different creative art forms.

	· Understand the efficacy of different art forms in education
B.Ed Semester III	**CC1 Pedagogy of School Subject Part II**
	After studying this subject, student will be acquainted with –
	· Demonstrate effective and constructive acquaintance with the basic foundations of
	· Language teaching in India and West Bengal.
	· Acquire practical expertise in pedagogical analysis and develop behavioural
	· competencies in teaching skills.
	· Apply principles abstracted from the study of various methods and approaches as
	· regards purpose and procedure of planning lesson.
	· Work out and practice strategies for teaching language skills and communication skills.
	· Explain concepts of language learning assessment.
	· Use different kinds of Language Test.
	· Construct Test and Test Items.
	· Explore and experience various resources for target language learning.
	· Try out various means of organizing various resources for target Language Learning.
	School Internship
	After studying this subject, student will be acquainted with –
	· Critical thinking: Analyze critically the skill of teaching and the pedagogy of the subject
	· Design: Design lesson plans for effective teaching-learning based on various teaching
	· models as per the needs of the students of different socio economic background.
	· Effective communication: Communicate effectively with students in class and parents regarding teaching-learning process in school.
	· Conduct investigations of complex problems / Problem analysis:
	· Use research based knowledge and action research methods to analyse teaching-learning problems and synthesise
	· the information to provide valid conclusions.
	· Modern tool Usage: Create, select and apply appropriate techniques and resources to build school as a learning community.
	· Individual and Team Work: Function effectively as an individual and as a team and shoulder responsibilities to accomplish a task.
	· Environment and Sustainability: Understand the impact of environmental education including population education on the environment and the need for sustainable development.
	· Self-directed and Life Long Learning: Recognise the need for and engage in independent and lifelong learning.
	PROGRAMME SPECIFIC OUTCOMES
	After studying this subject, student will be acquainted with –
	· Analyze the challenges and opportunities in Education.
	· Demonstrate effective and innovative teaching skills.
	· Examine the Pedagogy of a school subject.
	· Create effective teaching aids to achieve objectives of a lesson.
	· Understand the need and techniques of inclusive education.
	· Understand and execute Community outreach activities and analyse its educational implications.
	· Celebration of National Festivals, Teachers' Day, etc.
	· Determine the ways to enhance Quality in Education.
	· Analyse the relationships among Gender, School and Society.
	· Learn through participation in all activities of the school
	· Conducting School survey
	· Maintaining Reflective Journal
	· Conducting assessment,Assembly,Community games, Cultural Programmers
	EPC I Educational Psychology Practical
	After studying this subject, student will be acquainted with –
	Intellegence test verbal / and non verbal
	Interest Test
	Attude test
	Achievement test
	Value test
B.Ed Semester IV	**CC 1 Gender School and Society**
	After studying this subject, student will be acquainted with –
	· Develop gender sensitivity among the student teachers.
	· Understand the gender issues faced by the schools.
	· Understand the paradigm shift with reference to gender studies.
	· Understand how gender, power and sexuality relate to education (in terms of access,
	· curriculum and pedagogy)
	· Realize the concepts of curriculum and syllabi.
	· Discover the relationship between power, ideology, process and practice & its
	· transactional modes.

CC2 Education technology and ICT
After studying this subject, student will be acquainted with –
· Identify the policy concerns for ICT.
· Describe a computer system.
· Operate the Windows and/or Linux operating systems.
· Use Word processing, Spread sheets and Presentation software.
· Acquire the skill of maintaining the computer system and the skill of troubleshooting
· with the help of Anti-Virus and other tools.
· Operate on Internet with safety.
· Elucidate the application of ICT for Teaching Learning.
· Develop various skills to use computer technology for sharing the information and
· ideas through the Blogs and Chatting groups
CC 3 Creating an inclusive School
After studying this subject, student will be acquainted with –
· Understand the concept of inclusive education and social inclusion.
· The legal and policy perspectives behind inclusion in education.
· Understand the types, probable causes, preventive measures and characteristics of
different types of disability.
· Understand street children, platform children and orphans, children born and brought
up in correctional homes, child labor and other socioeconomically backward children.
· Know how inclusion can be practiced in mainstream class.
CC 4 optional Course - Value Education
After studying this subject, student will be acquainted with –
· Understand the concept and the types of values
· meaning and basic theories of axiology
· Insight into strategies of inoculation of values among children
· skill and techniques to teach values
· role of teacher in value education
Futurology in Education
After studying this subject, student will be acquainted with –
· significance of the study of future in general and futurology in general
· develop knowledge and skill s of students for forecasting the future of education through methods and techniques
· critical thinking of students about the problem and prospects of school education in future
· Technological changes forecasting
Health and Physical Education
After studying this subject, student will be acquainted with –
· Understanding the significance of health education for all round development
· Maintain and promote good health
· develop understanding if physical education and relevant field
· Acquire knowledge about the teaching methods of physical education and its activity.
· effective organization of physical education activities
Guidance and counseling in Schools
After studying this subject, student will be acquainted with –
· Understand guidance and counseling in details.
· Understand the mental health
· Develop the knowledge about adjustment and maladjustment,
· Acquire skill to develop tools and techniques.
· Understand the idea about Abnormal Behavior and Mental illness
Environment Education
· Understand the concept of population and environmental education.
· Know the objectives and methods of teaching environment and population.
· Be aware of population and environmental education policies.
· Help teachers students analyze the various issues related to population and
· environmental education.
Understanding the self.
After studying this subject, student will be acquainted with –
· Understand the meaning and importance of self-concept and self-esteem.

·	Be aware of different factors related to self-concepts and self-esteem.
·	Understand the concept of and importance of yoga and well-being.
·	Be sensitized about the interrelationships of yoga and well-being
·	Know and develop their personality through various practices.
·	Develop interpersonal intelligence.
EPC 4 Understanding of ICT	
After studying this subject, student will be acquainted with –	
·	Identify the policy concerns for ICT.
·	Describe a computer system.
·	Operate the Windows and/or Linux operating systems.
·	Use Word processing, Spread sheets and Presentation software.
·	Acquire the skill of maintaining the computer system and the skill of troubleshooting
·	with the help of Anti-Virus and other tools.
·	Operate on Internet with safety.
·	Elucidate the application of ICT for Teaching Learning.
·	Develop various skills to use computer technology for sharing the information and
·	ideas through the Blogs and Chatting groups

Post Graduate Department of Education	
M.Ed.)	**Programme Outcomes (POs):**
(Two-year program)	
	PO1 Train teacher trainees to develop their positive attitude, teaching skills which will enable them
	to become a multi facet personality shining in any chosen field.
	PO2 Investigate teaching-learning problems and solutions in a variety of contexts related
	to psychology, science, technology, philosophy, special education, and illustrate these
	solutions using different methods.
	PO3 Apply the knowledge of teacher education to address real life problems of students at
	all levels.
	PO4 Gain the knowledge of advanced psychology which will be useful in Research.
	Acquire the strong foundation of knowledge which will benefit to them become a
	good
	teacher.
	PO5 Qualify various competitive exams like NET, SET, SLET, MPSC, UPSC, etc.
Programme Specific	PSO1: To enhance self-learning and improve classroom teaching performance.
Outcomes (PSOs):	PSO2: To perform research in conjunction with others as well as individually.
	PSO3: To imbibe effective teaching skill and confidence level.
	PSO4: To develop problem solving skills, thinking and creativity.
	PSO5: To produce next generation researchers in education.
M.Ed.-I (Semester-I)	**Course Objectives &Outcomes**
	PHILOSOPHCAL PRESPECTIVES OF EDUCATION
	Course 1
	Objectives:
·	To understand the nature and function of philosophy of education.
·	To develop the understanding of basic trends, principles and practices of the major school of
·	Indian and Western Philosophy.
·	To develop skill of Logical analysis, interpretation and synthesis of various concept,
·	proposition and philosophical assumptions about educational phenomena.
	Course Outcomes:
At the end of this course a student will be able to :	
·	understand the nature and function of philosophy of education.
·	develop the understanding of basic trends, principles and practices of the major school of
·	Indian and Western Philosophy.
·	develop skill of Logical analysis, interpretation and synthesis of various concept, proposition
·	and philosophical assumptions about educational phenomena.
	EDUCATIONAL RESEARCH -I
	Course: 2
	Objectives of the course:

- To understand the sources of knowledge.
- To understand the concept of scientific method.
- To understand formation of research proposal.
- To understand method and types and research.
- To identify research problem along with its specification in terms of objectives,
- hypothesis, definitions, variables and delimitations.
- To understand about probability and non-probability sampling design.

Course Outcomes:

At the end of this course a student will be able to :

- understand the sources of knowledge.
- understand the concept of scientific method.
- understand formation of research proposal.
- understand method and types and research.
- identify research problem along with its specification in terms of objectives,
- hypothesis, definitions, variables and delimitations.
- understand about probability and non-probability sampling design.

INFORMATION AND COMMUNICATION TECHNOLOGY

Course: 3

Objectives

- To enable students to understand the scope of ICT in education and its application in pedagogic applications
- To help students understand the mening of ICT integration in teaching
- To aquient students with basic concept of computer system and their Functions.
- To enable students to handling of application like Excel And MS Word.

Course Out comes

At the end of this course a student will be able to :

- understand the importance of knowledge of ICT in education.
- understand the concept of computer system and their functions.
- understand and able **to handle application like Excel And MS Word.**
- understand and integrate ICT in teaching & research.

CRITICAL READING OF LITERATURE

Course: 4

Objectives:

- Students understand various researches going on in various aspects of teacher education.
- Select a topic of relevance for further studies.
- To understand the difference between a research paper, an article and a review article.
- To differentiate between a magazine, professional journals, books, policy documents, and project report.

Course Outcomes:

At the end of this course a student will be able to :

- Select a topic for dissertation
- write an abstract of thesis/book reviews/ critical reviews of published research papers/ policy documents**.**
- understand the difference between a research paper, an article and a review article.
- differentiate between a magazine, professional journals, books, policy documents, and project report.

FIRST ADVANCE LEVEL COURSE-I

EDUCATIONAL TECHNOLOGY I

Course : 5

Objectives:

- To familiarize students with the concept of education technology.
- To equip students with the fundamentals of system approach for solving educational problems scientifically
- To make students aware of availability of different types of instructional materials
- To make students aware of role of mass media in education
- To make students aware of the challenges and opportunities emerging in integration new technology in education process.

Course Outcomes:

At the end of this course a student will be able to :

- Understand concept of education technology.
- **Able to incorporate** approach for solving educational problems scientifically
- Use different types of instructional materials
- Use different tools of media in education.

	· Prepare PLM on any topic
	· Develop Modules for teaching.
M.Ed. Semester-II	**Course Objectives &Outcomes**
	PSYCHOLOGICAL PERSPECTIVES OF EDUCATION
	Course:6
	Objectives:
	· To acquaint students with various concerns and methods of psychology
	· To develop critical insight to various theories of learning
	· To develop critical insight to various theories of personality.
	· To enable the students to understand the significance of the ultimate human concerns and the
	· contribution of psychology in this regard.
	· To develop abilities to make comparisons between different psychologies of students and their
	· educational implications.
	Course Outcomes:
	At the end of this course a student will be able to :
	· Candidates will be able to understand various concerns and methods of psychology
	· Develop critical insight to various theories of learning
	· Develop critical insight to various theories of personality.
	· Develop critical appraisal of contribution made to education by prominent educational psychologists
	· Enable the students to understand the significance of the ultimate human behaviour.
	· Develop abilities to make comparisons between different psychologies of students and their
	educational implications.
	RESEARCH DATA ANALYSIS AND INTERPRETATION-I
	Course :7
	Objectives
	· To understand the concept of research tools and techniques.
	· To understand meaning of reliability and validity of research tools.
	· To understand descriptive statistics in research.
	· To understand inference statistics.
	· To understand competencies in research reporting
	· To understand ethics of qualitative research and quality of researcher
	Course Outcomes:
	At the end of this course a student will be able to :
	· understand the management of teacher education
	· understand the recent trends in teacher education
	· understand profession and professional development of a teacher
	· acquaint with various issues and innovations in teacher education.
	· understand the researches in teacher education.
	SECOND ADVANCE LEVEL COURSE-I
	TEACHER EDUCATION
	Course :8
	Objectives
	· To familiarize students with the evolution of teacher education in India.
	· To acquaint students with pre service and in service Teacher education in India.
	· To make students understand the nature and perspective of the Teacher education.
	· To develop understanding of different modalities of transacting Teacher Education Curriculum.
	· To develop the concept of accountability in teacher education.
	· To understand the changing needs of teacher education.
	At the end of this course a student will be able to :
	· Understand the evolution of teacher education in India.
	· Understand pre service and in service Teacher education in India.
	· Understand the nature and perspective of the Teacher education.
	· Understand different modalities of transacting Teacher Education Curriculum.
	· Incorporate the concept of accountability in teacher education.
	· Understand and respond to the changing needs of teacher education
	DISSERTATION PROPOSAL

	Course : 9
	Objectives
	· To develop a dissertation proposal .
	· To develop a step wise time bound plan for own research work.
	· To be able to present the proposal in front of external examiner, faculty and fellow students using power point.
	Course Outcome
	· Dissertation proposal prepared by every student.
	· A time bound research plan developed.
	· Student teachers present the proposal in front of external examiner, faculty and fellow students.
	· Student teachers are able to prepare and present lectures using power point.
M.Ed. Semester-III	**Course Objectives &Outcomes**
	SOCIOLOGICAL PERSPECTIVES OF EDUCATION
	Course 10
	· To enable the students to understand the sociological perspective in education.
	· To acquaint students with various concepts of the subject of sociology of education.
	· To develop critical insight to the relationship of society, economy, polilics , religion and culture and education.
	· To help students appreciate the role of agencies like family , community politics and economy in education/schools in India.
	· To develop abilities to make comparisons between students of different socio-economic back grounds and their educational implications.
	· To understand the nature and function of society in education.
	Course Outcomes:
	At the end of this course a student will be able to :
	· understand the nature and function of society in education.
	· Candidates will be able to understand various concepts and methods of sociology
	· Develop critical insight to various theories of sociology.
	· Develop critical appraisal of contribution made to education by prominent educational sociologists
	· Enable the students to understand the significance of the agencies like family , community politics and economy in education/schools in India.
	· Develop abilities to make comparisons between students of different socio-economic back grounds and their educational implications.
	· To understand the nature and function of society in education.
	EDUCATIONAL RESEARCH -II
	Course 11
	Objectives:
	· To help student to discriminate between different methods of research
	· To enable student to select the most appropriate Experimental design.
	· To help understand student differentiate between the external Validity and internal validity.
	· To help understand student differentiate between the parametric and non parametric statistical techniques
	· To understand the concept of research tools and techniques.
	· To understand meaning of reliability and validity of research tools.
	· To understand descriptive statistics in research.
	· To understand inference statistics.
	· To understand competencies in research reporting
	· To understand ethics of qualitative research and quality of researcher
	Course Outcomes:
	At the end of this course a student will be able to :
	· Discriminate between different methods of research
	· Select the most appropriate Experimental design
	· Differentiate between the external Validity and internal validity.
	· Understand profession and professional development of a teacher
	· Acquaint with various issues and innovations in teacher education.
	· Understand ethics of qualitative research and quality of researcher
	FIRST ADVANCE LEVEL COURSE-II
	EDUCATIONAL TECHNOLOGY II
	Course :12
	Objectives:
	· To enable students to understand the models of teaching
	· To make students aware of new technological applications in education including online learning.
	· To empower students in pedagogical applications of multimedia.
	· To acquaint students with the challenges and opportunities emerging in integrating new technology in educational Process.

	Course Outcomes:
	At the end of this course a student will be able to :
	· Understand various models of teaching
	· Understand and use technological applications in education including online learning.
	· Apply pedagogical applications of multimedia.
	· Develop e content in their subject area.
	· Write script for multimedia program.
	· Use ICT effectively in Education.
	FIELD ENGAGEMENT
	Course: 13
	Objectives:
	· To develop an understanding of underlying principles of curriculum development and evaluation
	· To offer students opportunities of gaining first hand experience of the working of teacher education institutions
	· To give them opportunity in the field of text book production.
	· To give them firsthand experience in the educational administration.
	· To understand profession and professional development of a teacher
	Course Outcomes:
	At the end of this course a student will be able to
	· Gain firsthand experience of the working of teacher education institutions.
	· Execute production of text book .
	· Have firsthand experience in the educational administration.
	· Understand profession and professional development of a teacher
Semester-IV	**Course Objectives &Outcomes**
	CONTEMPORARY ISSUES IN INDIAN EDUCATION
	Course 14
	Objectives:
	· Be familiarize with contemporary issues in education at various levels by accessing various types of learning resources surveys and interactions.
	· To develop skills to work out solutions of the existing educational problems in light of the contemporary socio- political framework.
	· To develop professional competence to participate in the policy development for education and its implementation modalities at various levels.
	Course Outcomes:
	At the end of this course a student will be able to
	· Understand and familiarize with contemporary issues in education at various levels by accessing various types of learning resources surveys and interactions.
	· Develop skills to work out solutions of the existing educational problems in light of the contemporary socio- political framework.
	· Develop professional competence to participate in the policy development for education and its implementation modalities' at various levels.
	RESEARCH DATA ANALYSIS AND INTERPRETATION-II
	Course :15
	Objectives
	· To understand the concept of interaction of variables in factorial design ANOVA.
	· To understand meaning of reliability and validity of research tools.
	· To understand descriptive statistics in research.
	· To understand inference statistics.
	· To understand competencies in research reporting
	· To understand ethics of qualitative research and quality of researcher
	· To empower students in skills of computer applications for analyzing and interpreting data
	Course Outcomes:
	At the end of this course a student will be able to :
	Understand the concept of interaction of variables in factorial design ANOVA.
	· Understand meaning of reliability and validity of research tools.
	· Understand descriptive statistics in research.
	· Understand inference statistics.
	· Understand competencies in research reporting
	· Understand ethics of qualitative research and quality of researcher
	· Students aquire skills of computer applications for analyzing and interpreting data
	SECOND ADVANCE LEVEL COURSE-II
	TEACHER EDUCATION- II
	Course :16

		Objectives
		· To familiarize students with recent researches in teacher education in India.
		· To acquaint students with Teacher education in USA, UK, & USSR.
		· To make students understand and be aware of area, problems & emerging trends of research in teacher education.
		· To develop understanding of different role of NCTE, NCERT, UGC-ASC, NUEPA ICSSR, RIE Teacher Education .
		· To understand the role of state bodies like SBTE, DIET, IASEs, UTDs, CTEs & BITEs in professional developments of teacher Educators.
		At the end of this course a student will be able to :
		· Understand the evolution of teacher education in India.
		· Understand Teacher education in other parts of the world.
		· Understand the role of various national, state and university level organizations in teacher Education..
		· Understand the importance of IQAC in education.
		· Incorporate the concept of accountability in teacher education.
		· Undertake SWOT analysis of any teacher education institute.
		DISSERTATION PROPOSAL
		Course : 17
		Objectives
		· To develop and submit a dissertation biased on original research.
		· To be able to present the proposal in front of external examiner, faculty and fellow students using power point.
		Course Outcome
		At the end of this course a student will be able to :
		· Dissertation prepared by every student and submitted in hard copies as well as in CD .
		· Student teachers present the proposal in front of external examiner, faculty and fellow students.
		· Student teachers are able to prepare and present lectures using power point.