Program Outcome 18-19

M.Com (Advanced Accountancy)

Program Outcomes

Skill of Business Management

Learners understands the Economic policies and theories

Learners will be skilled in Corporate, Banks and Insurance Company accounts

Specific Outcomes

Learners will be proficient in Strategic Management policies and practices

Learners will be able understand research principles, methods and techniques.

Learners will be able to have theoretical and practical knowledge and professional skills of Financial, Cost Accounting, Banking, Cooperative and Insurance Company accounts

Course Outcomes

Semester I

Subjects	Outcomes
Strategic Management	Learner will be proficient in the principles and practice of corporate management and strategies and policies
Economics for Business Decisions	Learners are skilled to take business decisions of economic activities
Cost and Management Accounting	Learner will be skilled in different methods of costing and explain the reports for managerial decisions
Business Ethics and Corporate Social Responsibility	Learner will be competent in the corporate ethics, corporate social responsibility and Corporate Governance

Semester II

Research Methodology for Business	Learner gets the knowledge of research process, techniques and tools to be applied for research in commerce and management
Macro Economics concepts and Applications	Learner will understand and interpret economic policies
Corporate Finance	Learner will be competent in techniques of investment, financial decision making.

E-Commerce	Learner will be able to understand emerging world of e-commerce

Semester III

Advanced Financial Accounting	Learner will be competent in the accounts of Banking, Insurance and company.
Advanced Cost Accounting	Learner will be proficient to evaluate the cost of product and able to allocation of cost as per the technique of costing
Direct Taxation	Learner will be able to understand the taxation rules and regulations to compute taxable incomes

Semester IV

Corporate Financial Accounting	Learner will be able to draft Annual Reports and compute Goodwill and Valuation of shares.
Indirect Tax- Introduction of GST	Learner will be competent in ascertainment of Goods and Service Tax
Financial Management	Learners will be skilled in capital budgeting, working capital and financial management.
Project	The learner will be able to prepare the project on the Management, Accounting, Costing and Taxation.

M.Sc. (Organic Chemistry)

Program outcome

- Determine molecular structure by using UV, IR and NMR.
- Study of medicinal chemistry for lead compound.
- Improve the Skill of student in organic research area.
- Synthesis of Natural products and drugs by using proper mechanisms.
- Study of Asymmetric synthesis.
- Determine the aromaticity of different compounds.
- Study retrosynthesis and design synthesis of different compounds in the field of pharma, dyes industry, natural products etc.
- Solve the reaction mechanisms and assign the final product.

MSc-I **Semester I**	**Course Outcome**
Physical Chemistry Paper I	• Students are expected to: - understand and explain the Maxwell's relations, state functions, Joule Thomson's effect, third law thermodynamic, standard molar entropies. • Quantum chemistry, postulates, Schrodinger's equation and its solution for particle in one, three-dimensional box, free particle, harmonic oscillator, Hermitian operators. • Chemical Dynamics: - rate laws and kinetics of thermal chain reaction, decomposition reaction, polymerization reactions, reactions in gas phase. • Electrochemistry: - Debye Huckel theory, Electrolytic conductance, batteries, bio-electrochemistry, elementary reactions in solutions, enzyme catalyzed reactions, inhibition of enzyme action, kinetics of solid-state reactions • Solid state chemistry: - types of defects and stoichiometry, phase equilibria, two component system, three component system.
Inorganic Chemistry-	• Students are expected to know chemical bonding in specific

Paper-II	polyatomic molecules like SF_6, B_2H_6, I_3, CO_2, they should have an idea about weak intermolecular forces of attraction. • Students are expected to know group multification table, group theoretical treatment, for molecules by use of group theoretical concept. • Some environmental chemistry aspects should be known by students as well as some bio-inorganic concept of bio-molecules. • They should know inorganic spectroscopic concept and coordination reaction mechanism.
Organic Chemistry Paper- III	• Students should understand the various type of aliphatic, aromatic, nucleophilic substitution reaction. • Understand and apply principles of Organic Chemistry for understanding the scientific phenomenon in reaction mechanisms. • Understanding of stereochemistry applied to different types of organic molecules. • Learn the familiar name reactions, reagents and their reaction mechanisms.
Analytical Chemistry Paper-IV	• The student is expected to know about language of analytical chemistry, quality management system, audit, safety in laboratories, Accreditations, GLP. • Calculations based on chemical principals. • Optical methods (F.T.I.R, X-Ray), Thermal methods such as T.G.A, D.T.A and D. S.C. (instrumentation and applications) •
MSc-I Sem-II	**Course Outcome**
Physical Chemistry Paper I	• Quantum chemistry, postulates, Schrodinger's equation and its solution for particle in one, three-dimensional box, free particle,

	harmonic oscillator, Hermitian operators. • Chemical ThermoDynamics: - rate laws and kinetics of thermal chain reaction, decomposition reaction, polymerization reactions, reactions in gas phase. • Kinetics of reactions catalyzed by enzymes, their inhibition action and reaction in solid state. • Solid state chemistry: - types of defects and stoichiometry, phase equilibria, two component system, three component system.
Inorganic Chemistry-Paper-II	• Students are expected to know group multification table, group theoretical treatment, for molecules by use of group theoretical concept. • Understanding of Organometallic chemistry of transition metals • Some environmental chemistry aspects should be known by students as well as some bio-inorganic concept of bio-molecules. • They should know inorganic spectroscopic concept and coordination reaction mechanism.
Organic Chemistry Paper- III	• Students should understand the various type of aliphatic, aromatic, nucleophilic substitution reaction with carbonyl compounds. • Understand and apply principles of Organic Chemistry for understanding the scientific phenomenon in reaction mechanisms. • Understanding of molecular orbital theory for organic compounds. • Determine molecular structure by using UV, IR, NMR and Mass spectroscopy.
Analytical Chemistry Paper-IV	• Automation in chemical analysis. • Separation methods (G.C, H.P.L.C) • Mass Spectrometry also the radio analytical methods and

	surface analytical techniques. • They should know new sources for atomic spectroscopy. Electroanalytical methods such as electrogravimetry, couolometry etc.
MSc-II **Semester III**	**Course Outcome**
Theoretical Organic Chemistry- Paper-I	• Students are able to understand the structure effects and reactivity by determination of reaction mechanism involving different intermediates for synthesis. • Understanding of different types of pericyclic reaction and their mechanism under thermal and photochemical condition. • Stereochemistry of different molecules of medium ring size and their reactivity towards different reagents. • Photochemical reactions of different functional groups and their application.
Synthetic Organic Chemistry- Paper-II	• Understanding of various name reactions, their mechanism & applications. • Understanding the concept of radical mechanism and its use in the organic synthesis. • Study of various reaction intermediates, ylides, enamines and their reactions along with applications. • Concept of metals and non-metals use in organic synthesis.
Natural Product and Spectroscopy - Paper III	• Student should be able to understand the classification, properties, structure elucidation and few synthesis of carbohydrates, natural pigments and insect pheromones. • Understand the multi-step synthesis of natural products and study of prostaglandins, lipids and insect growth regulators. • Detail study of 1D-Proton NMR spectroscopy. Understand the

	factors affecting chemical shift, spin notations of various spin systems. • Interpret NMR spectra on basic values of PMR & C-13 NMR Delta values & IR -frequencies. • Discuss the problem of UV, IR and NMR & Mass. • Discuss the 2D-NMR spectroscopy with different techniques: COSY, HETCOR, DEPT, NOESY. Discuss the problems of the same technique.
Medicinal Chemistry, Biogenesis, Green chemistry Paper-IV	• Student are able to understand the concept of drug discovery, design and development and synthesis. • Understanding basic concept of medicinal chemistry related to drug action. • Knowledge of the connection between the structural features of the drugs & their physicochemical characteristics, mechanism of action & uses. • Understanding of biogenesis and biosynthesis of natural products. • Concepts of Green chemistry and technologies like microwave synthesis, ultrasound assisted reaction.
MSc-II **Semester IV**	**Course Outcome**
Theoretical Organic Chemistry- Paper-I	• Understanding the concept of racemisation and resolution method. Determination of enantiomers and diastereomers by chromatographic, chiral derivatisation agent and lanthanide shift reagents. • Concepts of supramolecular chemistry and their application with synthesis. • Understanding of the concept of asymmetric synthesis with use of chiral auxiliary in different types of reactions like aldol, sharpless epoxidation, aminohydroxylation, Diels-Alder

	reaction.
Synthetic Organic Chemistry- Paper-II	• Designing organic synthesis using protecting groups. Introduction of retro synthetic analysis. • Students are able to understand the electro-organic chemistry and selected methods of organic synthesis. • Application of transition and rate earth metals in organic synthesis.
Natural Product, Heterocyclic chemistry Paper III	• Concepts of classification, structure, occurrence, biological role and synthesis of natural products like steroids, vitamins, antibiotics and terpenoids. • Classification of heterocyclic compounds of monocyclic and fused heterocycles with their structure, reactivity, synthesis and reactions.
Research Methodology- Paper-IV	• Understanding basic concepts of research & its methodologies. • Identify appropriate research topics. • Select & define appropriate research problem and parameters. • Prepare a project proposal, organise and conduct research. • Write a research proposal, report and thesis. • Understanding of Data analysis, Chemical safety and Ethical handling of chemicals.

M.Sc(Information Technology) 2018-19

M.Sc Programme Outcome

- To equip postgraduate students with an integrated set of skills that will allow them to develop their professional careers in Information Technology.

- To equip students with the theoretical and practical knowledge that is necessary to enable them to understand the design of complex computer application/science.

Programme Specific outcome

- The program helps students to acquire the latest skills and build their future capabilities using world-class technology.

- Skills to work with higher end applications in internet technologies; also managerial ability to analyze, design, develop and to maintain software development.

Course outcome SEMESTER 1

Course Name	Outcome
Data Mining	A learner should be able to: • Understand the functionality of the various data mining and data warehousing component. • Appreciate the strengths and limitations of various data mining and data warehousing models • Understand the underlying classification and predictions techniques • Should be able to correlate with multi dimensional spatial data
Distributed System	• Identify various web services and distributed transactions • Identify the advantages and challenges in designing distributed algorithms for different primitives like mutual exclusion, deadlock detection, agreement, etc. • Design and develop distributed programs using sockets and RPC/RMI
Data Analysis Tools	• Understanding matrices and coding tools • Understanding Tools and Techniques used for Scientific Computing • Understanding how to use hypothesis testing
Software Testing	• Understand various testing process improvement models • Learn different techniques used to do testing in the software industry • understand How to use them

COURSE OUTCOME SEMESTER-II

Course Name	Outcome
Mobile Computing	• The purpose of this course is to build interest in understanding the mobility of systems, users, data, and computing • Data management issues in mobile environments. Integration of wired and mobile, wireless systems
Advanced Computer Networks	• The course is aimed at providing basic understanding of Computer networks starting with OSI Reference Model, Protocols at different layers with special emphasis on IP, TCP & UDP and Routing algorithms. • Some of the major topics which are included in this course are TCP/IP implementation, LANs/WANs, internetworking technologies, Routing and Addressing.
Cloud Computing and Ubiquitous System	• Learn what is distributed System Models and Enabling Technologies • Understand Public Cloud Platforms like GAE, AWS, and Azure:
Advanced Database Systems	• Understand the role of a database management system in an organization. • Understand the role of the database administrator

COURSE OUTCOME SEMESTER-III

Infrastructure Management	▪ To become able to explain various Information security threat and controls for it. ▪ To become able to analyze a security incidents and design countermeasures. ▪ To become able to explain information security incident response. ▪ To become able to explain the usage of Common Key cryptography and Public Key cryptography. ▪ To become able to explain the mechanism to protect confidentiality and completeness of data.
Embedded Systems	▪ An ability to design and conduct experiments, as well as to analyze and interpret data ▪ An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
Virtualization	▪ To describe aims of virtualization - in the context of similar aims in other software components. ▪ To distinguish System and Process Virtualization. ▪ To place System and Process Virtualization in the context of other Virtualization Technologies. ▪ To understand how System, Process and other Virtualization Technologies are likely to develop

Ethical Hacking	▪ Assess an environment using footprinting. ▪ Collect information using network scanning. ▪ Identify methods to gain access to systems. ▪ Analyze social engineering methods. ▪ Explain common physical security weaknesses.

COURSE OUTCOME SEMESTER-IV

Course Name	Outcome
Computer Forensics	• Understand the definition of computer forensics fundamentals. • Describe the types of computer forensics technology. • Analyze various computer forensics systems. • Illustrate the methods for data recovery, evidence collection and data seizure. • Summarize duplication and preservation of digital evidence.
Artificial Intelligence	• Demonstrate fundamental understanding of the history of artificial intelligence (AI) and its foundations. • Apply basic principles of AI in solutions that require problem solving, inference, perception, knowledge representation, and learning.
Cloud Management	• Design different workflows according to requirements and apply map reduce programming model. • Apply and design suitable Virtualization concept, Cloud Resource Management and design scheduling algorithms. • Create combinatorial auctions for cloud resources and design scheduling algorithms for computing clouds • .Assess cloud Storage systems and Cloud security, the risks involved, its impact and develop cloud application
Information Technology Management	• Design different workflows according to requirements and apply map reduce programming model. • Apply and design suitable Virtualization concept, Cloud Resource Management and design scheduling algorithms. • Create combinatorial auctions for cloud resources and design scheduling algorithms for computing clouds • cloud Storage systems and Cloud security, the risks involved, its impact and develop cloud application

B.Com (Accounting & Finance)

Program Outcome

- The course provides aspirants ample expertise and efficiency in the field of accounting, taxation, auditing, risk management, financial accounting, managerial economics, business law and business communication.
- Improves self-employment as well as benefits the organization by providing them suitably trained persons in the field of accounting and finance.
- Provides exposures to learners on new developments recent trends in accounting and finance
- Guides the students with theoretical knowledge as well as practical application and trains them adequately in market reforms, new finance policies and regulation.
- Prepares students to make the best of opportunities being newly created in accounting and finance field due to Globalization, Privatisation and Liberalization

F.Y.B.Com (Accounting & Finance)

Semester –I

Sr. No.	Subject Name	Course Outcome
1	Financial Accounting (Elements of Financial Accounting) – I	To learn various accounting methods of manufacturing firms.
2	Cost Accounting (Introduction and Element of cost) – I	To understand basics of cost accounting & preparation of cost sheet.
3	Financial Management (Introduction to Financial Management) – I	Helps to know how to manage the finance and how to invest in the business. It also provides the knowledge of Interest calculation on bank deposits.
4	Business Communication- I	It enhances communication skills for the students and aids in their personality development.
5	Foundation Course – I	It enhances learner's knowledge on Indian society, culture and Indian Constitution.
6	Business Economics – I	Help to understand the working of an economy.
7	Commerce (Business Environment) – I	To make students understand the environmental implication affecting business.

F.Y.B.Com (Accounting & Finance)

Semester –II

Sr. No.	Subject Name	Course Outcome
1	Financial Accounting (Special Accounting Areas) - II	To learn special accounting areas like consignment, branch, fire insurance claims and account for incomplete records.
2	Auditing (Introduction and Planning) – I	Helps to know how to examine various financial statements in appropriate manner.

3	Innovation Financial Service	Develops the knowledge on various types of financial services and facilities.
4	Business mathematics	Develops logical and mathematical techniques of learners.
5	Foundation Course II	To make learner understand the LPG concept of Indian economy, Human rights, ecology & stress management skills.
6	Business Communication II	It enhances communication skills for the students and aids in their personality development.
7	Business Law (Business Regulatory Framework) – I	To understand the basic concept of law and various types of Act.

S.Y.B.Com (Accounting & Finance)

Semester –III

Sr. No.	Subject Name	Course Outcome
1	Foundation Course in Commerce (Financial Market Operations) – III	To gain knowledge about financial terms, market, operation.
2	Business Law (Business Regulatory Framework) - II	To learn about legal framework.
3	Taxation - II (Direct Taxes Paper- I)	To impart to the students various source of income tax and its procedure to calculate Income Tax.
4	Auditing (Techniques of Auditing and Audit Procedures) - II	To get knowledge on techniques and procedures of auditing.
5	Business Economics - II	To teach the students major concepts of economy.

6	Financial Accounting (Special Accounting Areas) - III	To gain the knowledge about final A/c, Merger, piecemeal distribution & Foreign exchange.
7	Information Technology in Accountancy – I	Students will be able to understand E-business, techno management and application of Information Technology in banking. They will get the knowledge of MS-Office packages for institutional automation.To learn basics of computer and internet. To learn use of office productivity tools to perform seepdy and accurate business transactions. To learn various aspects of E-Commerce.

S.Y.B.Com (Accounting & Finance)

Semester –IV

Sr. No.	Subject Name	Course Outcome
1	Financial Accounting (Special Accounting Areas) - IV	To acquire knowledge on companies related accounting treatment.
2	Research Methodology in Accounting and Finance	To understand basic research, Data collection, data processing, Sample and research report.
3	Taxation - III (Direct Taxes- II)	To understand tax saving and tax calculation of different person.
4	Foundation Course in Management (Introduction to Management) – IV	To obtain knowledge about management & its various skills.
5	Auditing – III	To understand the innovative tools and techniques of auditing.
6	Business Law (Company Law) – III	To understand concept of incorporation of company and its prospectus.
7	Information Technology in Accountancy – II	To learn need for computerized accounting for speedy and accurate business transactions. To learn use of automated tools to increase individual productivity. To learn effective use of information system at management level to serve the function of planning, controlling and decision making by providing reports.

T.Y.B.Com (Accounting & Finance)

Semester –V

Sr. No.	Subject Name	Course Outcome
1	Financial Accounting V	To learn about accounting standard and underwriting of shares and debentures.
2	Financial Accounting VI	To gain the knowledge about banking companies final a/c and valuation of goodwill and share.
3	Cost Accounting - III	To inculcate cost accounting system with special references to service costing and processing costing.
4	Financial Maagement -II	To provide adequate understanding about financial management and capital structure, cost of capital and credit policy etc.
5	Management -II (Management Applications)	To learn about different areas of management like finance, marketing, HR.
6	Taxation - IV (Indirect Taxes - II)	To learn the basic concepts of GST.

T.Y.B.Com (Accounting & Finance)

Semester –VI

Sr. No.	Subject Name	Course Outcome
1	Financial Accounting VII	To obtain the knowledge about co-operating and electricity companies accounting treatment.
2	Cost Accounting - IV	To get the knowledge related to effective cost structure and managerial decision.
3	Financial Management -III	To develop the understanding about business valuation and decision making related to finance.
4	Taxation - V (Indirect Taxes-III)	To understand the various concept of tax and IT refund.
5	Economics Paper – III (Indian Economy)	To understand the concept of our Indian economy.
6	Project Work	To develop basic research skills in relation to accounting finance & management.

B.Com (Banking & Insurance)

Program Outcome

- The course clears concepts of Banking & Insurance.
- Provides knowledge on modern trends in banking & insurance industry
- Helps in train students in the field of finance, banking, accounting, insurance law, insurance regulations, etc
- Guides the students with theoretical knowledge as well as practical application and provides exposure to students in market reforms, new banking policies and regulations.
- Creates an additional avenue of self-employment and also benefits banks, insurance companies by providing suitable trained persons in the field of banking and insurance.
- Prepares students to make the best of opportunities being newly created in this field due to Globalization, Privatisation and Liberalization.

F.Y.B.Com (Banking & Insurance)
Semester –I

Sr. No.	Subject Name	Course Outcome
1	Environment and Management of Financial Services.	To improve basic knowledge on environment and management and its financial services.
2	Principles of Management	To make the management concepts clear among the students
3	Financial Accounting - I	To developed the knowledge of various accounting standard and its accounting transactions.
4	Business Communication-I	To enhance communication skills of the students. It aids in personality development of the students.
5	Foundation Course - I	To make the better understanding about Indian society and constitution
6	Business Economics-I	It help to focus on effective use of economic resources to achieve defined objective

F.Y.B.Com (Banking & Insurance)
Semester –II

Sr. No.	Subject Name	Course Outcome
1	Principles and Practices of Banking & Insurance	To learn about the concepts, functions and types of banks and insurances.
2	Business Law	To learn basic concept of the constitution of India and its various types of law and Acts
3	Financial Accounting - II	To gain the knowledge of various accounting concept of companies related to long term sources of funds.
4	Business Communication-II	To enhance communication skills of the students. It aids in personality development of the students.
5	Foundation Course - II	To learn concepts of human rights, understanding of stress and conflicts & how to manage it
6	Organizational Behavior	To understand management theory and its practices and frame and how organization behavior is conducted in various field
7	Quantitative Methods-II	To improve the knowledge of students in mathematical technique

S.Y.B.Com (Banking & Insurance)
Semester –III

Sr. No.	**Subject Name**	**Course Outcome**
1	Financial management -I	To understand the financing evaluation technique
2	Management accounting	To get the knowledge about financial statement analysis and dividend policy
3	Organizational behavior	To understand the skill to developed knowledge related to behavior in organization
4	Information Technology in Banking & Insurance-I	Students will get the knowledge and understanding of E-Commerce and Cyber Security. They will learn MS-Excel and MS-Word.
5	Foundation Course – III (An Overview of Banking Sector)	To gain the knowledge of banking concepts, terms, about NABARD and micro finance

6	Financial markets	To develop knowledge of various financial market of India
7	Direct taxation	To learn the basic concept of direct tax

S.Y.B.Com (Banking & Insurance)

Semester –IV

Sr. No.	Subject Name	Course Outcome
1	Financial management –II	To get the knowledge of financial management with reference to budgeting
2	Cost accounting	To get the knowledge about various cost accounting techniques
3	Entrepreneurship management	To understand various concepts, skills of entrepreneurship and its various theory
4	Information technology in banking & insurance-II	To understand e-business and techno management. Application of I.T in banking. Knowledge of MS-Office packages for institutional Automation.
5	Foundation course - IV (an overview of insurance sector)	To learn concepts, advantages of insurance and its various types
6	Corporate & securities law	To learn about new corporate rules and regulations
7	Business economics-II	To get the knowledge about economic relations of India with foreign countries

T.Y.B.Com (Banking & Insurance)

Semester –V

Sr. No.	Subject Name	Course Outcome
1	Financial Reporting & Analysis(Corporate Banking & Insurance)	To get practical accounting treatment in corporate banking and insurance
2	Auditing – I	To learn basic of auditing and understand vouching & verification
3	Strategic Management	To develop the understanding and decision making skills among the students related to business strategy
4	Business Ethics and Corporate Governance	Students learn the concepts of ethic, values, corporate governance in business.
5	International Banking and Finance	Making students capable to actively participate in the changing trends of foreign currency and international financial markets.
6	Research Methodology	To obtain the knowledge about research technique and tools in banking and insurance

T.Y.B.Com (Banking & Insurance)

Semester –VI

Sr. No.	Subject Name	Course Outcome
1	Security Analysis and Portfolio Management	To understand introduction and process of portfolio management
2	Auditing – II	To enhance skill of auditing in banking companies
3	Human Resource Management	To understand human resources management in large and small businesses
4	Marketing in Banking & Insurance	To learn about the marketing concepts in relation to banking and insurance
5	Central Banking	Helps learners to understand the various policy measures of Central Bank in different economic scenario. It helps learners to appear for competitive exam
6	Project Work In Banking & Insurance	To develop the basic skills of research in banking & insurance
7	Quantitative Methods-I	To learn various quantitative method using statistical techniques.

BAMMC (BA in Multimedia and Mass Communication)

BMM (BACHLEOR OF MASS MEDIA)

BMM Programme Outcome

1. The program considers media industries and relationship to culture and society, the understanding of role and functions of media, media psychology.

2. Students would demonstrate the ability to apply rhetorical principles in a variety of creative, cinematic, organizational, professional and journalistic venues.

3. Learners will understand mass media as a system of interrelated forces, including historical foundations, technological advances, economic dynamics, regulatory constraints, and ethical concerns.

Programme Specific Outcome

1.The program prepares students for a wide variety of careers in business and industry, advertising, public relations and journalism or advanced study.

2. The program will equip the learners with professional skills essential for making career in Entertainment industry, Cinema, Television, OTT Platform, social media platform, etc.

3. This program also give them an improved sense of self confidence and self - efficacy and an awareness of their responsibilities as professional in their field.

4. Learners will be able to create and design emerging media products, including blogs, digital audio, digital video, social media, digital photography and multimedia.

Course outcome SEM I

Course Name	Outcome
Effective Communication Skills-I	• To make the students aware of functional and operational use of language in media. • To equip or enhance students with structural and analytical reading, writing and thinking skills. • To introduce key concepts of communications.
Introduction to Sociology	*To acquaint the students with the basic foundations of Sociology*

	• To establish the relationship between Sociology and Mass Media • To discuss Mass Media from a sociological perspective • To highlight the need and relevance of Sociology in Mass Media.
Fundamental of Mass Communication	• To introduce students to the history, evolution and the development of Mass Communication in the world with special reference to India. • To study the evolution of Mass Media as an important social institution. • To understand the development of Mass Communication models. • To develop a critical understanding of Mass Media. • To understand the concept of New Media and Media Convergence and its implications.
Introduction to Computer	• To equip the students with a general understanding of computer basics for everyday use. • To train them to use this understanding to supplement their presentation skills. • To equip the student with basic knowledge of use of technology in Media Industry.
Introductions to Economics	• The aim of this paper is to introduce the basic concepts of Micro & Macro Economics to First Year BMM students. Coupled with this, a basic understanding of the Indian economy is crucial for

	media students. • This will sensitise them on economic issues relevant to India, Considering the augmenting importance of the media in highlighting and debating such concerns, a brief overview is essential.
Landmark Events in History of World, India and Maharashtra.	*-To acquaint the student with global happenings which have made historical milestones, changing power equations.* *-Help the student understand the role of media in these events.* *-To know about global events, history of Africa in modern times, refugee problems, humanitarian work, human rights violation, Asian perspective and of course, India.*

Course outcome SEM II

Course Name	Outcome
Effective Communication II	• To make the students aware of use of language in media and organization. • To equip or enhance students with structural and analytical reading, writing and thinking skills. • To introduce key concepts of communications.

Introduction to Media Psychology	To impart knowledge of the basic concepts and modern trends in psychology. To provide an interdisciplinary study of concepts in the field of media, communication and psychology. To expose students to a multicultural understanding, use, influence and impact of media. To prepare students for a future filled with opportunities in the field of media and communication.
Political Concepts and the Indian Political System	-To acquaint the students with fundamental political concepts essential for understanding political systems and theories. -To orient the students to the Indian Constitution and the functioning of the Indian political system. -To provide the students with a strong base in the 'Indian Political System' and to expose them to its dynamics and complexities. -To establish a link between Politics and Media
Principles of Management	-To understand Management - Concept, nature, process and Significance. -To build Leadership qualities. - To develop Group Dynamics and Team Management.
Principles of Marketing	-To Understand Marketing – scope, nature, definition, core marketing concepts, Marketing environment, and recent trends in marketing in India. - Developing the concept of marketing mix, managing the product.
Introduction to Literature	-To give exposure to media students to

	various forms of Literature -To make them understand how literature reflects contemporary period -To identify relation between Literature and Media

Course outcome SEM III

Course Name	Outcome
Introduction to Creative Writing	• To encourage students to read stories, poems, plays • To develop further and build upon the writing and analytical skills acquired in Semesters I and II • To acquaint students with basic concepts in literary writing • To familiarize students with the creative process
Introduction to Cultural Studies	• To introduce students to a set of approaches in the study of culture • To examine the construction of culture • To understand how the media represents culture.
Introduction to Public Relations	• The objective of this paper is to introduce the subject of public relations to the student and help understand its role and function it plays in society. It will equip

	the student with the basic tools of public relations and give them an overall understanding of the subject.
Introduction to Media Studies	To expose students to the well-developed body of media theory and analysis. • To foster analytical skills that will allow them to view the media critically.
Understanding Cinema	• To acquaint the students with the various styles and schools of cinema throughout the world.
Advanced Computer	• To work on Macromedia Flash to create banner ads for websites. • Introduction to High-end animation softwares like 3d Studio Max, Maya, etc.

Course outcome SEM IV

Course Name	Outcome
Introduction to Advertising	• To give a brief insight about advertising & its different aspects to the students of Media.
Introduction to Journalism	• To give students an understanding of the history and development of journalism in the global and the Indian context • Introduce students to concepts related to news and journalistic practice.
Print, Production, Photography	• To help students understand the principles and practice of photography • To enable students to enjoy photography as an art.
Radio and Television	• To introduce the basic terms and

	concepts of broadcasting • To give an overview of the structure and function of the broadcast industry • To create an awareness of the development of broadcast media and current trends
Mass Media Research	• To introduce students to debates in Research approaches and equip them with tools to carryon research • To understand the scope and techniques of media research, their utility and limitations.
Organizational Behavior	• Orienting students to issues in organizational functioning. • To introduce students to the concepts given below at a preliminary level.

Course outcome SEM V (Advertising)

Course Name	Outcome
Advertising in Contemporary Society	• To recognize the roles of advertising in modern society • To understand the current developments and problems concerning advertising as an economic and social force. • Appreciate the increasingly international nature of advertising. • To analyze the interdependent nature of advertising and popular culture.
Copywriting	• To familiarize the students with the concept of copywriting as selling through writing • To develop their inherent writing skills • To train students to generate, develop and express ideas effectively • To familiarize students with

	contemporary advertising techniques and • Practices
Advertising Design	• To expose students to the creative and technical aspects of art direction
Consumer Behavior	• To introduce the students to the complexities of consumer behavior.
Media Planning and Buying	• To develop knowledge of major media characteristics and buying advertising space in them to develop an understanding of procedures, requirements, and techniques of media planning.
Brand Building	• To provide an introduction to the concepts and practices of contemporary brand management. • To understand the appropriate strategies and tactics to build, measure and manage Brand Equity. • To learn to plan an effective advertising campaign

Course outcome SEM VI (Advertising)

Course Name	Outcome
Advertising and Marketing Research	• To discuss the foundations of research and audience analysis that is imperative to successful advertising.
Legal Environment and Advertising Ethics	• To provide a perspective on the Legal Environment in India. • To guide students of media through the various ethics connected to Advertising. • Maharashtra state centric cases to be discussed in class as the situation demands.
Financial Management For Marketing and Advertising	• Introduction to Marketing and Advertising Finance
Agency Management	• To expose students to the business

	of advertising • To familiarize students with the different aspects of running an ad agency
The Principles and Practice of Direct Marketing	• To learn and understand what Direct marketing is, including direct marketing terminology • How direct marketing differs from "traditional marketing" • Direct marketing techniques.
Contemporary Issues	• To sensitize students to the environment around them • Developing a perspective towards issues related to the marginalized sections of the society.
Digital Media	▪ To acquaint and prepare student for Digital Global Environment. ▪ Develop skills for digital marketing and reach. ▪ To engage students in world of Digital media and impart new modes of learning and creating digital communities.

Department of Management Studies (BMS)

Program outcome:-

The main aim of BMS course is to impart management skills and knowledge among students. To impart this knowledge, the academic program utilizes both classroom lectures and practical training.
Businesses and Organizations across the world need skilled managers to take care of their daily operations. Managers are the ones who coordinate and manage the following things – human resources, finance, operations, decision-making, material resources, marketing etc.

BMS department of our college offers all three specializations offered by University of Mumbai from second year. They are as follows:
Other Information (if any)

- **HUMAN RESOURSE SPECIALIZATION**

Students learn to develop, implement, and evaluate employee orientation, training, and development programs. Facilitate and support effective employee and labour relations in both non-union and union environments. Research and support the development and communication of the organization's total compensation plan.

- **FINANCE SPECIALIZATION**

The ***finance specialization*** in a business administration degree program introduces students to ***financial*** literacy, money management, and accounting principles. Students acquire knowledge regarding finance, various models and techniques and trading, clearing and settlement mechanism in market.

- **MARKETING SPECIALIZATION**

Students understand distinctive features of various marketing activities, New trends and ways for marketing., International marketing trends and working.

COURSE OUTCOME	
FYBMS(SEM I)	
COURSE	**OUTCOME**
Introduction to Financial Accounts	• To introduce the basic theory, concepts and practice of financial accounting and to enable students to understand information contained in the published financial statements of companies and other organizations.
Business Law	• Demonstrate an understanding of the Legal Environment of Business. • Apply basic legal knowledge to business transactions. • Communicate effectively using standard business and legal terminology.

Foundation of Human Skills	To get knowledge about: • Human beings, their personalities, environment, organizational power, politics, change and how to deal with them. • Generating the team and team building as well as team work • Leadership qualities and motivating factors
Business Statistics	To get knowledge about: • The ability to interpret statistical analysis tools commonly used in the workplace; • The ability to critically evaluate a standard business report including the graphics, probability statements and resultant commentary; and, • Use of Excel for basic data manipulation and simple statistical and graphical analysis
Foundation Course –I	To get knowledge about: • Nature of Indian Society • The gender inequality in society • Diversity As difference and disparity as inequality. • Philosophy of the constitution of India.
Business Economics – I	• Apply the concept of opportunity cost • Employ marginal analysis for decision making • Analyze operations of markets under varying competitive conditions • Analyze causes and consequences of unemployment, inflation and economic growth.
Business Communication- I	Students are expected to be able to demonstrate a good understanding of: • effective business writing • effective business communications • research approaches and information collection • developing and delivering effective presentations

	• effective interpersonal communications

FYBMS(SEM II)	
SUBJECTS	**OUTCOME**
Principles of Marketing	Upon successful completion of Principles of Marketing, students will be able to: • Use an understanding of marketing and the market driven enterprise to differentiate market driven enterprises from non market driven enterprises in a market economy as a foundation for future course work and employer selection. • Identify some of the basic approaches to formulating a marketing strategy in order to participate effectively when working with marketing policy coordinators • Identify key stages of the market planning process in order to create marketing plans through development of key sections common to most plans, as well as execution of rudimentary primary and secondary research.
Industrial Law	Upon completion of the course, the student would: • Be aware of the present state of Industrial relations in India. • Be acquainted with the concepts, principles and issues connected with trade unions, • Understand the various processes and procedures of handling Employee Relations.
Business Mathematics	Upon successful completion, students should be able to: • Analyze real world scenarios to recognize when simple and compound interest, annuities, payroll preparation, pricing,

	invoice preparation, trade discounts, taxes, and depreciation are appropriate, formulate problems about the scenarios, creatively model these scenarios. • Appreciate business mathematics concepts that are encountered in the real world, understand and be able to communicate the underlying business concepts and mathematics involved to help another person gain insight into the situation.
Business Communication II	• To be familiar with the complete course outline/Course Objectives/Learning Outcomes/ Evaluation Pattern & Assignments • To participate in an online learning environment successfully by developing the implication-based understanding of Paraphrasing, deciphering instructions, interpreting guidelines, discussion boards & Referencing Styles. • To demonstrate his/her ability to write error free while making an optimum use of correct Business Vocabulary & Grammar.
Business Environment	On completion of this course, learners will be able to: . • Familiarize with the nature of business environment and its components. • The students will be able to demonstrate and develop conceptual framework of business environment and generate interest in international business.
Principles of Management	On completion of this course, the students will be able: • Understand the concepts related to Business. • Demonstrate the roles, skills and functions of management.

	• Analyze effective application of PPM knowledge to diagnose and solve organizational problems and develop optimal managerial decisions
Foundation Course –II	To get knowledge about: • Nature of Indian Society • The gender inequality in society • Diversity As difference and disparity as inequality. • Philosophy of the constitution of India.

SYBMS(SEM III)	
COURSE	**OUTCOME**
Business Planning & Entrepreneurial Management	• Students will be able to define, identify and/or apply the principles of entrepreneurial and family business. • Students will be able to define, identify and/or apply the principles of viability of businesses, new business proposals, and opportunities within existing businesses. • Students will be able to define, identify and/or apply the principles of entrepreneurial management and growth through strategic plans, consulting projects and/or implementing their own businesses.
Information Technology in Business Management-I	• Design, document and develop robust, extensible and highly maintainable data-intensive applications using cutting edge technologies tailored to the specific needs of any business scenario. • Explain and apply the core aspects of information technology principles and tools, and manage their implementation in a business context
Accounting for Managerial Decisions	• Understand the utility of Ratio Analysis, Financial Statements and Cash Flow Analysis in any organization. • Comprehend different contemporary issues in Management Accounting and Reports & Reporting needs &

	Reporting Levels in an organization.
Strategic Management	• Identify the forces impacting on corporate and business strategies. • Critically aware of factors involved in strategy making. • Assess the resources and constraints for strategy making in a business context.
Foundation Course-IV	• Students should be able to identify, analyze, interpret and describe the critical ideas, values, and themes that appear in literary and cultural texts and understand the way these ideas, values, and themes inform and impact culture and society, both now and in the past. • Students should be able to write analytically in a variety of formats, including essays, research papers, reflective writing, and critical reviews of secondary sources.

• **HR SPECIALIZATION**	
Organizational Behavior & HRM	• Demonstrate the applicability of the concept of organizational behavior to understand the behavior of people in the organization. • Demonstrate the applicability of analyzing the complexities associated with management of individual behavior in the organization.
Recruitment & Selection	• Helps to create a talent pool of potential candidates for the benefits of the organization. • To increases the pool of job seeking candidates at minimum cost. • It helps to increase the success rate of selection process by decreasing the no of visits qualified or over qualified job applicants.
• **FINANCE SPECIALIZATION**	
Corporate Finance	• Identify the key themes in corporate finance. • Explain the role of finance in an organization. • Analyze the relationship between strategic decision making and corporate financing decisions.

Introduction to Cost Accounting	• Be able to identify the dynamics of human behavior and the basic factors that influence the consumers' decision process. • Be able to demonstrate how concepts may be applied to marketing strategy
• **MARKETING SPECIALIZATION**	
Advertising	• After completion of the requirements for this course, students will be able to: appreciate the ways that communication through advertising influences and persuades consumers; • Discuss the role of the advertising agency and its client relationships. • Discuss the decisions which need to be made in budgeting and planning for promotion;
Consumer Behavior	• Be able to identify the dynamics of human behavior and the basic factors that influence the consumers' decision process. • Be able to demonstrate how concepts may be applied to marketing strategy

SYBMS(SEM IV)	
SUBJECTS	**OUTCOME**
Business Economics	• Apply the concept of opportunity cost • Employ marginal analysis for decision making • Analyze operations of markets under varying competitive conditions
Business Research Method	• Apply a range of quantitative and / or qualitative research techniques to business and management problems / issues • Understand and apply research approaches, techniques and strategies in the appropriate manner for managerial decision making • Demonstrate knowledge and understanding of data analysis and interpretation in relation to the research process
Foundation Course-IV	• Students should be able to identify, analyze, interpret and describe the

	critical ideas, values, and themes that appear in literary and cultural texts and understand the way these ideas, values, and themes inform and impact culture and society, both now and in the past. • Students should be able to write analytically in a variety of formats, including essays, research papers, reflective writing, and critical reviews of secondary sources.
Production & Total Quality Management	• To realize the importance of significance of quality • Manage quality improvement teams. • Identify requirements of quality improvement programs
I.T. in BM	• Apply conceptual learning skills in today's business environment. • Analyze financial performance of an organization. • Evaluate organizational decisions with consideration of the political, legal and ethical aspects of business.

• **FINANCE SPECIALIZATION**	
Strategic Cost Management	After having taken this course participants will be able to: • Understand cost drivers • Apply alternative cost accounting method • Analyze cost and value
Auditing	By the end of the course and having completed the Essential reading and activities, students should be able to: • explain why external audits and other types of assurance services are conducted • discuss the duties of auditors and other assurance providers and how these have changed over time • explain the meaning of concepts that are fundamental to auditing and assurance services, such as 'independence', 'audit evidence', 'audit

	risk', 'materiality'
• **HR SPECIALIZATION**	
Conflict and Negotiation	• Students will recognize the nature of conflict and its impact on interpersonal relationships and organizations. • Students will demonstrate the role of communication in generating productive conflict outcomes and to use communication skills effectively in a rage of specific conflict situations. • Students will effectively utilize and apply conflict intervention strategies such as coaching, negotiation, mediation, and system design in the management and resolution of conflict.
Training & Development in HRM	• To have an understanding of the basic concepts, functions and processes of human resource management • To be aware of the role, functions and functioning of human resource department of the organizations. • To Design and formulate various HRM processes such as Recruitment, Selection, Training, performance appraisals and Reward Systems, Compensation Plans and Ethical Behavior.
• **MARKETING SPECIALIZATION**	
Event Marketing	• Explain all the components and various roles involved in planning, organising, running and evaluating an event; • Apply the theory and skills necessary to professionally plan, organise and run a business event; and • Understand the importance of strategic planning for an event or festival, including monitoring and evaluating the impacts on the wider community.
Tourism marketing	• Apply relevant technology for the production and management of tourism experiences. • Demonstrate commitment to ethical practices of tourism. • Acknowledge one or more philosophical perspectives to

	knowledge creation.

TYBMS(SEM V)	
COURSE	**OUTCOME**
• **CORE COURSE**	
Logistics and Supply Chain Management	• Students are able to describe major logistics functions and activities. Differentiate logistics and supply chain management. • Describe alternative ways to organize for supply chain management. • Describe methods of inventory planning. • Technological changes and its impact on logistics and supply chain management. • Compare modes of transportation and related policies. Outline computer and supply chain security measures.
Corporate Communication & PR	• Understand of the concepts of corporate communication and public relations. • Introduce the various elements of corporate communication and consider their roles in managing organizations. • Examine how various elements of corporate communication must be coordinated to communicate effectively. • Develop critical understanding of the different practices associated with corporate communication.
• **FINANCE SPECIALIZATION**	
Investment Analysis and Portfolio Management	• The learners are well acquainted with various concepts of finance. • Students understood the terms which are often confronted while reading newspaper, magazines etc for better correlation with the practical world. • Learners understood various models and techniques of security and portfolio analysis.
Risk Management	• Familiarize the student with the

	fundamental aspects of risk management and control. • Give a comprehensive overview of risk governance and assurance with special reference to insurance sector. • Introduce the basic concepts, functions, process, techniques of risk management.
Financial Accounting	• Identify and describe different types of inter-entity relationships based on relevant Australian Accounting Standards. • Discuss and solve accounting issues that arise from inter-entity relationships. • Explain the consolidation process and prepare consolidated financial statements based on relevant accounting Standards.
Direct Tax	• Students gained the knowledge of Income Tax act 1961. • Students understood the definitions under income tax act 1961. • Students able to calculate income from Salary, House property, Capital Gain, Business and Profession, Other Sources. • Students know the various exemptions available under section 10. • Students learn and apply deductions under section 80 while calculating net taxable income. • Students able to compute total income of assess. •
• **MARKETING SPECIALIZATION**	
Service Marketing	• Understand distinctive features of services and key elements in services marketing. • Provide insight into ways to improve service quality and productivity. • Understand marketing of different services in Indian context**.** • E-Commerce and Digital Marketing. •

Sales and Distribution Management	• Develop understanding of the sales & distribution processes in organizations. • Get familiarized with concepts, approaches and the practical aspects of the key decision. • Making variables in sales management and distribution channel management.
Customer Relationship Management	• Learner understood concept of Customer Relationship Management (CRM) and implementation of Customer Relationship Management. • Students get insight into CRM marketing initiatives, customer service and designing CRM strategy. • Learner understood new trends in CRM, challenges and opportunities for organizations.
E – Commerce	• Demonstrate an understanding of the foundations and importance of E-commerce • analyze the impact of E-commerce on business models and strategy • Describe the infrastructure for E-commerce • Describe the key features of Internet, Intranets and Extranets and explain how they relate to each other.
• **HR SPECIALIZATION**	
Industrial Relation	• Demonstrate descriptive knowledge of the field of industrial relations. • Apply the essential concepts of industrial relations and their interrelationship at the personal, organisational and national levels. • Recognise and consider the social, historical and equity issues within industrial relatins. • Investigate solutions to industrial relations problems based on research and assessment of current practices.

	• Communicate your knowledge of industrial relations in both written and verbal formats reactive to both audience and purpose.
Performance Management	• The rating distribution – this will help the management to reward good performers and recognize their efforts, whereas it serves as a warning to poor performers to improve their performance. • The final rating for employees is an outcome of the performance appraisal. This can help to detail out the compensation of the employees. • An employee's competency gaps can be identified and areas of improvement in the performance can be suggested. Managers can take the necessary steps to help the employees improve on those areas. This will lead to growth of employees as well as organizational growth. • Identification of high potential employees. This can help in succession planning of an organization. High potential employees can be nurtured and can turn out future leaders. • The necessary training requirements of employees can be an outcome of the performance appraisals. This can be a very valuable input to the training department, who can plan their training calendar based on that.
Strategic HRM	• Contribute to the development, implementation, and evaluation of employee recruitment, selection, and retention plans and processes.. • Develop, implement, and evaluate employee orientation, training, and development programs. • Collaborate with others, in the development, implementation, and evaluation of organizational and health and safety policies and practices. • Research and analyze information

	needs and apply current and emerging information technologies to support the human resources function. • Develop, implement, and evaluate organizational development strategies aimed at promoting organizational effectiveness.
Finance for HR Professional & Compensation Management	• Contribute to the development, implementation, and evaluation of employee Compensation Management • Develop, implement, and evaluate organizational development strategies aimed at promoting Compensation Management and helps HR employees in studying finance related issues in the organization.

TYBMS(SEM VI)	
SUBJECTS	**OUTCOME**
• **CORE SUBJECTS**	
Operation Research	• Knowledge and understanding - Be able to understand the characteristics of different types of decision-making environments and the appropriate decision making approaches and tools to be used in each type. • Cognitive skills (thinking and analysis) - Be able to build and solve Transportation Models and Assignment Models. • Communication skills (personal and academic). - Be able to design new simple models, like: CPM, MSPT to improve decision –making and develop critical Thinking and objective analysis of decision problems.
• **FINANCE SPECIALIZATION**	
Indirect Taxes	After the completion of the course, Students will be able to

	• To record the basic journal entries. • Memorize how to calculate depreciation by applying various methods. • Maintain the financial statements of a business entity.
Innovative Financial Services	• Examine Financial Services management as an important and contemporary area of financial management. • Understand the various financial services and their future • determine the most suitable financial service Fact
Project Management	• Manage the scope, cost, timing, and quality of the project, at all times focused on project success as defined by project stakeholders. • Align the project to the organization's strategic plans and business justification throughout its lifecycle. • Identify project goals, constraints, deliverables, performance criteria, control needs, and resource requirements in consultation with stakeholders
Strategic Financial Management	• Identify a range of business resources to meet organizational objectives • Apply tools and techniques to the planning and allocating of resources. • Identify the risks to strategy from inadequate resources,
• **HR SPECIALIZATION**	
HRM in Global Perspective	• Competent managers with requisite knowledge, skills and right attitude Sustenance in globally competitive environment. • Management professionals with pro-active thinking and Innovative approach • Sensitive professionals with ethical values..
Organizational Development	• Think critically to integrate theory into practice in complex organizational settings with diverse workplace groups. • Analyze organizational contexts and

	cultures in order to develop problem-solving approaches that are responsive to current dynamics and reflect new possibilities for the future. • Develop ethical patterns of communication that demonstrate self-awareneses and awareness of an organization's culture and purpose.
HRM in Service Sector Management	• Develop Reading & Listening Skills • Demonstrate Problem Solving Skills • Use Application of Technology Tools in business. Demonstrate Mastery on Analytics (Quantitative Aspects)
Indian Ethos in Management	• Developing understanding of managerial practices and their perspectives. • Knowledge Remembering: Applying planning and managerial decision making skills. • Applying: Develop analytical and problem solving skills, based on understanding of management concepts and theories.
• **MARKETING SPECIALIZATION**	
Brand Management	• Understand what a product is, the various levels which make it up, and different types of products • Understand how products can be classified, and the nature of the product line and product mix.
Retail Management	• Explain the design, implementation, and assessment of retailing strategies based on consumer needs and market changes. • Explain how factors of culture, economics, legal requirements, political activity, technology, the internet and the news media affect the operation of organizations in a global environment. • Demonstrate the skills needed to develop ideas and make decisions based on ethics, proper research, analysis, and critical thinking.
International Marketing	• the marketing principles that together constitute the field of study known as

	international marketing; • The steps and processes involved in planning market entry strategy of a firm into a foreign market;
Sports Marketing	• Adapting to new situations and resolving conflict in globalized contexts. • Appropriately selecting information from the business world related to sport. • Analyzing and evaluating marketing strategies for internationalizing sport activity.

B.SC (Information Technology)

Program Outcome: The program aims to produce graduates who have been exposed to experiences that will prepare them to address the information processing requirements of organizations.

Program Specific Outcome: Identify information technology related problems, analyze them and design the system or provide the solution for the problem. Communicate effectively in written and oral context with specialized and non-specialized audiences. Apply current technical concepts and practices in the core information technologies of human computer interaction, information management, programming, networking, and web systems and technologies.

Course Outcome

Imperative Programming	Students will be able to choose appropriate data structures to represent data items in real world problems. They can analyze the time and space complexities of algorithms.
Digital electronics	Students will be able to understand number representation and conversion between different representation in digital electronic circuits and they will be able to analyze logic processes and implement logical operations using combinational logic circuits.
Operating System	Students can Identify use and evaluate the storage management policies with respect to different storage management technologies. They can also describe the important computer system resources and the role of operating system in their management policies and algorithms.
Discrete Mathematics	Students will be able to apply basic counting techniques to solve combinatorial problems. They will gain experience in using various techniques of mathematical induction (weak, strong and structural induction) to prove simple mathematical properties of a variety of discrete structures.
Communication Skills	Students will be able to understand and apply knowledge of human communication and language processes as they occur across various contexts, e.g., interpersonal, intrapersonal, small group, organizational, media, gender, family, intercultural communication, technologically mediated communication, etc. from multiple perspectives.

Semester-II

Course Name	Outcomes
Object Oriented Programming	The students will gain knowledge about Object Oriented Programming through C++. They can make their own Applications/Projects using C++ and can be deputed as a C++ programmer in IT companies.
Microprocessor Architecture	Students will be able to describe basic organization of computer and the architecture of 8085 microprocessor and can implement assembly language program for given task for 8085 microprocessor.
Web Programming	Students are able to develop a dynamic webpage by the use of java script and HTML. Students will be able to write a well formed / valid XML document
Numerical and Statistical Methods	Students can use a range of standard numerical and statistical methods to solve problems. They can solve system of linear equations.
Green Computing	Students can use Green IT Strategies and metrics for ICT development and they can Illustrate various green IT services and its roles.

Semester-III

Course Name	Outcomes
Python Programming	Students can describe the Numbers, Math functions; Strings, List and Dictionaries in Python and the can design and develop Client Server network applications using Python.
Data Structures	Students will be able to implement Linear and Non-Linear data structures. They can Determine and analyze the complexity of given Algorithms. They can also implement appropriate sorting/searching technique for given problem.
Computer Networks	Students will be able to Explain the types of transmission media with real time applications. They can classify the routing protocols and analyze how to assign the IP addresses for the given network. They can also describe the functions of each layer in OSI and TCP/IP model.
Database Management System	Students will be able to Retrieve any type of information from a data base by formulating complex queries in SQL. They can Analyze the existing design of a database schema and apply concepts of normalization to design an optimal database.
Applied Mathematics	Student will be able to identify the permutation and combinations. They can Define variable and also identify the mapping and also apply the Set theory and Relation

	Concepts

Semester-IV

Course Name	Outcomes
Core Java	Students will be able to write, compile and execute Java programs using object oriented class structures with parameters, constructors, and utility and calculations methods, including inheritance, test classes and exception handling.
Introduction to Embedded System	Students will be able to understand the internal architecture and interfacing of different peripheral devices with Microcontrollers. They will be able to write the programs for microcontroller.
Computer Oriented Statistical Techniques	Students will be able to learn statistical and optimization methods, in particular, with reference to frequency distribution and measures of central tendency, measures of dispersion and they will be able to learn theory of probability, linear programming problems, transportation, assignment and game problems.
Software Engineering	Students can explain needs for software specifications also they can classify different types of software requirements and their gathering techniques and they will be able to convert the requirements model into the design model and demonstrate use of software and user interface design principles.
Computer Graphics and Animations	Students can implement various algorithms to scan, convert the basic geometrical primitives, transformations, Area filling, clipping. They can describe the importance of viewing and projections.

Semester-V

Course Name	Outcomes
Software Project Management	Students can compare and contrast the several existing solutions for research challenge 4. Demonstrate an ability to work in teams and manage the conduct of the research study.
Internet of Things	Students can apply the concepts of IOT and they can design and develop smart city in IOT. They can also analyze and evaluate the data received through sensors in IOT.
Advanced Web Programming	Students can apply three-tier architecture concepts and advanced database techniques in web applications. Students build sites that use session management.
Enterprise Java	Students will be able to identify classes, objects, members of a class and the relationships among them needed for a finding the solution to specific problem an can demonstrate how to achieve reusability using inheritance, interfaces and packages and describes faster application development can be achieved.
Linux System Administration	Students will be able to identify the basic Linux general purpose commands; can implement shell scripts and sed. They can also apply and change the ownership and file permissions using advance Unix commands.

Semester-VI

Course Name	Outcomes
Software Quality Assurance	Students will be able to investigate the reason for bugs and analyze the principles in software testing to prevent and remove bugs and can implement various test processes for quality improvement
Security in Computing	Students develop a secure computer network plan. Students evaluate and recognize a problem as being a possible network security threat. Students collect information from Computer network logs.
Business Intelligence	Students can apply BI to solve practical problems -Analyze the problem domain, use the data collected in enterprise apply the appropriate data mining technique, interpret and visualize the results and provide decision support.

Principal of Geographic Information system	Students can apply basic graphic and data visualization concepts such as color theory, symbolization, and use of white space. They can demonstrate organizational skills in file and database management.
IT Service Management	Students will be able to recognize enterprise IT architecture for Information technology and can Describe the importance of IT enabled services and challenges and can also Identify strategic IT planning for software development.

B.Sc Chemistry

Program outcome:

- Demonstrate, solve and an understanding of major concepts in all disciplines of chemistry.
- Solve the problem and also think methodically, independently and draw a logical conclusion.
- Employ critical thinking and the scientific knowledge to design, carry out, record and analyze the results of chemical reactions.
- Create an awareness of the impact of chemistry on the environment, society, and development outside the scientific community.
- Find out the green route for chemical reaction for sustainable development.
- To inculcate the scientific temperament in the students and outside the scientific community.

BSc Physics: Program outcome:

- The systematic and planned curricula from these courses shall motivate and encourage learners to understand basic concepts of Physics.
- Developing Curriculum that is progressive and purposeful to create positive improvement in the education system is the logic behind this revision.
- Out of the three courses in each Semester, two courses are devoted to core Physics, catering to Mechanics, Thermodynamics, Optics , Electrodynamics, Quantum Mechanics, Mathematical Physics and Digital and Analog Electronics.
- To develop analytical abilities towards real world problems.
- To familiarize with current and recent scientific and technological developments.
- To enrich knowledge through problem solving, hands on activities, study visits, projects etc.
- The science of Physics has diversified immensely in recent times and numerous new fields in Physics, such as Crystal physics, Geo-Physics, Radio.

B.Sc. Zoology : Program Outcome

- To nurture interest in the students for the subject of Zoology
- To create awareness of the basic and modern concepts of Zoology.
- To orient students about the importance of abiotic and biotic factors of environment and their conservation.
- To provide an insight to the basic nutritional and health aspects of human life.
- To inculcate good laboratory practices in students and to train them about scientific handling of important instruments.

Course Outcome:

SEMESTER I

Course	Outcome
Chemistry Paper-I	• Facilitate the learner to make solutions of various molar concentrations. This may include: The concept of the mole; Converting moles to grams; Converting grams to moles; • Defining concentration; Dilution of Solutions; Making different molar concentrations. State and apply the laws of thermodynamics and kinetics. • Classification and Nomenclature of organic compounds. Electronic effects. • In addition to that atomic structure, stereo chemical concept, and fundamentals of reaction mechanism must be known by students.
Chemistry Paper-II	• Students can apply the fundamental principles of measurement, matter, atomic theory, chemical periodicity, chemical bonding, general chemical reactivity and solution chemistry to subsequent courses in science. • Concept of Chemical Kinetic and Liquid state. • Stereochemistry basic concepts. Understanding and Writing mechanism of organic reactions to predict the outcome of reactions. • Comparative study of main group elements

Physics **Paper-I**	• Understand Newton's laws and apply them in calculations of the motion of simple systems. • Use the free body diagrams to analyze the forces on the object. • Fluid mechanics and be able to perform calculations using them. • Understand the concepts of lens system and interference. • Apply the laws of thermodynamics to formulate the relations necessary to analyze a thermodynamic process. • Demonstrate quantitative problem solving skills in all the topics covered. 3. Understand the concepts of friction and the concepts of elasticity
Physics **Paper-II**	• Understand nuclear properties and nuclear behavior. • Understand the type isotopes and their applications. • Demonstrate and understand the quantum mechanical concepts. • Demonstrate quantitative problem solving skills in all the topics covered
Zoology **Paper-I**	• Curiosity will be ignited in the mind of learners, to know more about the fascinating world of animals which would enhance their interest and love for the subject of Zoology. • Learners would appreciate treasure of Biodiversity, its importance and hence would contribute their best for its conservation. • Minds of learners would be impulse to think differently and would be encouraged ipso facto to their original crude ideas from the field of biological sciences.
Zoology **Paper-II**	• Learners would work safely in the laboratory and avoid occurrence of accidents (mishaps) which will boost their scholastic performance and economy in use of materials/chemicals during practical sessions. • Learners would understand recent advances in the subject and their applications. • Students will be skilled to select and operate suitable instruments for the studies of different components of Zoology of this course and also of higher classes including research.
Mathematics **Paper-I**	• System of real numbers with their properties with respect to (+),(.)

Calculus-I	density property, Archimedean property. • Method of induction, definition of sequence, limit of sequence, monotonic sequence. • Epsilon delta definition of limit, algebra of limit, continuity at point and in domain, sequential continuity.
Mathematics Paper-II Algebra-I	• Integers and their properties with respect to (+),(.), division algorithm, gcd , lcm , Euler's function, congruence. • Function and their types, equivalence classes, residue class modulo n. • Polynomials and their properties in R[x], solving cubic equations. .
Foundation Course I	• It helps the students to upgrade their knowledge on current challenges and issues of Indian society. • To develop awareness regarding Indian Constitution & Political processes. • To impart the knowledge of Ethical & Cultural values in Indian Society.

SEMESTER II

Course	**Outcome**
Chemistry Paper-I	• Chemical equilibria and Thermodynamic Parameters and concept of Qualitative analysis • Formation of alkanes, alkenes and alkynes and fundamentals of reaction mechanism must be known by students.
Chemistry Paper-II	• Concepts of Ionic equilibria and solid state chemistry. • Understanding of Molecular spectroscopy and solving numerical problems. • Chemical bond and reactivity and concept of oxidation and reduction chemistry. • Stereochemistry of cycloalkanes and its conformation analysis to understand different strain in the molecules. • Aromaticity of Hydrocarbons.

Physics **Paper-I**	• Understand the basic mathematical concepts and applications of them in physical situations. • Demonstrate quantitative problem solving skills in all the topics covered.
Physics **Paper-II**	• Understand the basic electrical concepts and applications. • Demonstrate quantitative problem solving skills in all the topics
Zoology **Paper-I**	• This paper would allow learners to study about nature of animal population, specific factors affecting its growth and its impact on the population of other life form. Erupting spur of desire for conservation of all flora and fauna. • Learners would be inspired to choose career options in the field of wild life conservation, research, photography and ecotourism.
Zoology **Paper-II**	• Healthy dietary habits would be inculcated in the life style of learners in order to prevent risk of developing health hazards in younger generation due to faulty eating habits, • Promoting optimum conservation of water, encouragement for maintaining adequate personal hygiene. • Learners will be able to promptly recognize stress related problems at initial stages and would be able to adopt relevant solutions.
Mathematics **Paper-I** **Calculus- II**	• Series, sum of series, test for convergence of series . • Algebra of continues function, higher order derivatives, implicit function. • Definition of local maxima and local minima, monotonic function, Taylor polynomials.
Mathematics **Linear** **Paper-II** **Algebra- II**	• System of linear equations and their solutions, matrices & their properties, rank of matrix. • Definition of vector space over R, linearly independent ,linearly dependent , subspace of vector spaces and their properties. • Basis of vector space, dimension of vector space, linear transformation, kernel of L.T., image of L.T., Rank-Nullity theorem.

Foundation Course II	• It helps the students to upgrade their knowledge about Globalization & connected issues of Indian society. • To develop awareness regarding human rights. • To impart the skills to handle the stress & conflicts in day to day life.

SYBSC

SEMESTER III

Course	Outcome
Chemistry Paper-I	• Students are expected to understand and derive equations for Free energy functions, Gibb's- Helmholtz equation, Van't Hoff reaction Isochore and Gibb's Duhem equation. Understand the Concept of fugacity and activity. • Students should be able to define conductance, specific conductance, equivalent and molar conductance. State Kohlrausch's law if independent migration of ions and its applications. What is transference number and how it is determined using Moving Boundary Method. • Discuss kinetics, mechanism and stereochemistry of SN1 and SN2 reactions. Compare between SNAr and SNCB reactions. • Understanding of reactions and reactivity of halogenated hydrocarbons, alcohol, phenol and epoxides. • Understand the evidences, reactivity and mechanism of various reactions. Synthesis using Organometallics. • In addition to that students should aware about application of molecular orbital theory with its fundamentals to various diatomic molecules of homo and hetero atoms type.
Chemistry Paper-II	• Students are expected to know the diferent types of Complex reactions. Thermal chain reactions, Arrhenius equation, Concept of energy of activation. Collision theory and activated complex theory.

	• Ideal solutions and Raoults law, Gibbs phase rule,Vapour composition diagram, Critical solution temperature, phenol water sytem, trimethylamine water system and Nicotine water system. Steam distillation method, Nernst distribution law. • Students are expected to apply their knowledge to problem-solving, deduce structures, and synthesize simple organic molecules using the studied reactions. • The students familiar about the inorganic halogen compounds, coordination compounds and transition elements. • Synthesis reactions &conversions using Carbonyl compounds.
Chemistry-Paper-III	• The learner is expected to be familiar with the question of what analysis, why it is required and the methods, techniques, procedures • Protocols that may be used in the course of given problem of analysis.
Physics Paper-I	• Understand the concepts of mechanics & properties of matter & to apply them to problems. • Comprehend the basic concepts of thermodynamics & its applications in physical situation. • Learn about situations in low temperature. • Demonstrate tentative problem solving skills in all above areas
Physics Paper-II	• Understand the basic concepts of mathematical physics and their applications in physical situations. • Understand the basic laws of electrodynamics and be able to perform calculations using them. • Understand the basics of transistor biasing, operational amplifiers, their applications • Understand the basic concepts of oscillators and be able to perform calculations using them. • Demonstrate quantitative problem solving skill in all the topics covered.

Physics **Paper-III**	• Students will be exposed to contextual real life situations. • Students will appreciate the role of Physics in 'interdisciplinary areas related to materials and Acoustics etc. • The learner will understand the scope of the subject in Industry & Research. • Experimental learning opportunities will faster creative thinking & a spirit of inquiry.
Zoology **Paper-I**	• Learner would comprehend and apply the principles of inheritance to study heredity. • Learner will comprehend the structure of chromosomes and its types and also the mechanisms of sex determination. • Learner will understand the importance of nucleic acids as genetic material.
Zoology **Paper-II**	• Learner would understand the increasing complexity of nutritional, excretory and osmoregulatory physiology in evolutionary hierarchy. • Learner would understand the increasing complexity of respiratory and circulatory physiology in evolutionary hierarchy. • Learner would understand the process of control and coordination by nervous and endocrine regulation.
Zoology **Paper-III**	• Learner would gain insight into different types of animal behaviour and their role in biological adaptations. • Learner would understand the general epidemiological aspects of parasites that affect humans and take simple preventive measures for the same. • Learner would learn the modern techniques in animal husbandry.
Mathematics **Calculus** **Paper-I**	• Inner product in n –dimension, open ball, closed ball, directional derivates. • Differentiability in n-dimension, gradients, chain rule, partial derivatives. • Jacobin matrix. Hessian matrix, local extrema in two variables.

Mathematics Algebra Paper-II	• ker(T),image(T) ,row space ,solution of homogeneous and non homogenous system of linear equations . • Determinants and their properties, cramer's rule, area of triangle. • Dot product and their properties, norm of vectors, pythagorus theorem, orthogonal vectors and orthogonal compliments ,Gram Schmidt's process of orthoganility.
Discrete Mathematics & Differential equations Paper-III	• Permutation and their properties, product and transpositions, sign of permutations, solving recurrence relation. • Countability of number system. • Pascal's identity, s(n,k), principal of inclusion and exclusion , Euler's function.
Foundation Course III	• To make aware of various Rights their role in development of Indian Society. • To impart the knowledge of environment & science & their correspondence with present world.

SYBSC

SEMESTER IV

Course	**Outcome**
Chemistry-Paper-I	• Students are expected to understand the concept of electrochemical conventions , reversible and irreversible cells. Nernst equation and its importance. • Calculation of thermodynamic properties likeΔG, ΔH and ΔS, Concentration cell with and without transferene, Liquid junction potential and salt bridge. Use of Quinhydrone electrode for pH determination. • Gibb's phase rule, Clausius- Clapeyron equation, one component

	systems:- water and sulphur system, two component system :- lead silver system. • In addition to that students should aware about application of molecular orbital theory with its fundamentals to various diatomic molecules of homo and hetero atoms type. • Concept of reactions of carboxylic acids and derivatives and application in the field of synthetic chemistry
Chemistry-Paper-II	ts are expected to understand the characteristics of simple, face centered dy centered cubic systems, interplanar distances, Bragg's equation, X-ray tion method for crystal structure determination. Determination of dros number. ts are expected to know types of catalysis, catalytic activity, mechanisms ıetics of acid base catalysed and enzyme catalysed reactions, effect of e size and efficiency of nanoparticles as catalyst. stry of ions in aqueous medium and their application in pKa acidity etc. environmental chemistry of oxides and oxo-acids. ts are expected to apply their knowledge to problem-solving, deduce res, and synthesize simple organic molecules based on nitrogen ıing compounds and heterocyclic compounds using the studied reactions. sis reactions &conversions using Carbonyl compounds.
Chemistry-Paper-III	• The learner is also expected to appreciate the role of analytical chemist and chemical analyst • Correctness or acceptability of the results of a given analysis and how to deal with wrong or erroneous results, when to reject them and when and how to retain them to be meaningful are some other attributes expected as outcomes of learner.
Physics	• Understand the diffraction and polarization processes and

Paper-I	applications of them in physical situations. • Understand the applications of interference in design and working of interferometers. • Understand the resolving power of different optical instruments. • Understand the working of digital circuits • Use IC 555 time for various timing applications. • Demonstrate quantitative problem solving skills in all the topics covered
Physics Paper-II	• Understand the postulates of quantum mechanics and to understand its importance in explaining significant phenomena in Physics. • Demonstrate quantitative problem solving skills in all the topics Covered
Physics Paper-III	• Understand the concepts of mechanics & properties of matter & to apply them to problems. • Comprehend the basic concepts of thermodynamics & its applications in physical situation. • Learn about situations in low temperature. • Demonstrate tentative problem solving skills in all above areas..
Zoology Paper-I	• Learner will analyse and critically view the different theories of evolution. • Learner would understand the forces that cause evolutionary changes in natural populations. • The learner will imbibe the skills of scientific communication and he/she will understand the ethical aspects of research.
Zoology Paper-II	• Learner would acquire insight into the composition of the transport mechanisms adopted by the cell and its organelles for its maintenance and composition of cell. • Learner would appreciate the intricacy of endomembrane system. The learner will realize the importance of biomolecules and their clinical significance.

Zoology Paper-III	• Learner would gain knowledge on the functioning of various aspects of dairy industry, indigenous, exotic cattle and buffalo breeds in India. • To comprehend the functioning of sericulture industry and its scope in India. • To comprehend various kinds of aquaculture practices and its scope as fishery resource in India.
Mathematics Calculus Paper-I	• Riemann integration, lower sum, upper sum, properties of Reimann integration. • Continuity of indefinite and improper integrals, mean value theorem, Abel's test. • Alpha, beta functions, area between curves, length of curves.
Mathematics Algebra Paper-II	• Groups, subgroups definition and their properties, Sn, U(n),K4,types of groups. • Cyclic groups and subgroups of cyclic groups and their properties. • Lagrange's theorem, group homomorphism, cosets, kernel & image of homomorphism.
Discrete Mathematics & Differential equations Paper-III	• Solving differential equations by variable separable method, by substitution method, exact differential equation, non exact differential equations and their solutions techniques. • Homogeneous and non homogeneous second order differential equation, wronskian, auxillary equations. • Linear system of ODE'S.
Foundation Course IV	• To make awareness About competitive examination & development of soft skills in learner. • To make aware of environment & science & technology used in present world.

T.Y.B.Sc. Chemistry

Semester-V

Course	Outcome
Physical Chemistry-Paper-1	• Students understands the concept of dipole moment and its applications, derive the equations for energy of the molecules performing rotational motion and vibrational motion in terms of wave number, explain the Raman spectroscopy theory and should be able to solve numericals based on it. • Students should be able to explain the colligative properties in chemical thermodynamics and various methods to determine the colligative properties. • Students should be able to explain the collision theory of Chemical reaction rates. Classification of reaction rates. • Concepts of Nuclear Chemistry. Detection and measurement of radioactivity, application of use of radioisotopes as tracers, nuclear reactions, fission process, fusion process. • Students should be able to explain and derive Langmuir adsorption isotherm, types of adsorption isotherm, colloidal state, its electrical properties, micelle formation, classification of surfactants and its applications.
Inorganic Chemistry-Paper-II	• Students are expected to understand basic concept of symmetry and point group symbols, they must be able to know the importance of symmetry, point group in theoretical chemistry. • It is expected that students must be aware about application of molecular orbital theory for polyatomic species like BeH_2 , CO_2, H_2O etc. • Information of inner transition elements and their properties and

	extraction, information of metal carbonyls , 16th and 17th group elements must be known to students
Organic Chemistry-Paper-III	• Introduction to spectroscopy and application of Mass spectra. • Understanding of organic reaction mechanisms to predict the outcome of reactions and to design syntheses of organic molecules. Knowledge in Organic photochemistry. • Students should be able to understand the stereochemistry of molecules and their effect on chemical reactions. • The fundamental structure, properties and reactivity of biologically important molecules (Alkaloids and Terpenoids). • Student will gain an understanding of Green chemistry and application of the same in organic synthesis with selectivity.
Analytical Chemistry-Paper-IV	• Students should be able to explain the theoretical principles of various separation techniques in chromatography, and typical applications of chromatographic techniques. • Assess and suggest a suitable analytical method for a specific purpose, and evaluate sensitivity, important sources of interferences and errors, and also suggest alternative analytical methods for quality assurance.
Applied component-Drugs & Dyes-Paper V	• To know the classification based on pharmacodynamic and chemotherapeutic drugs, their application and synthesis. • To understand the concept of routes of drugs administration and dosages. • To understand the concept drug discovery, design and development. • Students are able to have the knowledge of use of nano particles in medicinal chemistry and effect of drugs on the environment. • To understand the function of natural and synthetic dyes, paints and pigments. • To understand different unit process involved in the synthesis of

	Intermediates • Students are able to understand the concept of classification of dyes based on application and their synthesis.

T.Y.B.Sc.

SEMESTER-VI

Course	Outcome
Physical Chemistry-Paper-1	• Students are expected to know concepts of activity and activity coefficient, classification of cells, polarisation, decomposition potential and overvoltage. • Basic terms in polymers, classification of polymers, molar mass of polymers, method of determining molar masses of polymers, light emitting polymers, antioxidants and stabilisers. • Basics of Quantum Chemistry, classical mechanics, quantum mechanics, progressive and standing waves, renewable energy resources. • Basics of NMR and ESR.
Inorganic Chemistry-Paper-II	• Theories of Metal-ligand bond and reactivity of metal complexes and their stability. • Electronic spectra studies and their application. • Knowledge about coordination chemistry and its bonding by various theories, organometallic chemistry, metallurgy, fundamentals of Bio-inorganic chemistry of must be known to students.
Organic Chemistry-Paper-III	• Students will gain an understanding of the use of nuclear magnetic resonance spectroscopy and infrared spectroscopy for organic structure elucidation. • Understanding of organic reaction mechanisms in molecular rearrangement to predict the outcome of reactions and to design syntheses of organic molecules.

	• Students should be able to understand the stereochemistry of molecules and their effect on chemical reactions. • The fundamental structure, properties and reactivity of biologically important molecules (e.g. carbohydrates, proteins, nucleic acid). • Differentiate between natural and man-made polymers. Explain polymerization methods. • Use of catalyst and reagents in organic synthesis.
Analytical Chemistry-Paper-IV	• Students should be able to explain the theoretical principles of various separation techniques in chromatography, and typical applications of chromatographic techniques. • Assess and suggest a suitable analytical method for a specific purpose, and evaluate sensitivity, important sources of interferences and errors, and also suggest alternative analytical methods for quality assurance.
Applied component-Drugs & Dyes-Paper V	• To know the classification based on pharmacodynamic and chemotherapeutic drugs, their application and synthesis. • To understand the concept of routes of drugs administration and dosages. • To understand the concept drug discovery, design and development. • Student are able to have the knowledge of use of nano particles in medicinal chemistry and effect of drugs on the environment. • To study the waste management in the field of dye industry. • To understand different unit process involved in the synthesis of dye molecules. • Students are able to understand the concept of classification of dyes based on chemical constitution and application and their synthesis. • They are able to understand the application of dyes in the various non-textile fields.

TYBSC PHYSICS	Outcomes
Sem-V Paper I	• From this course, the students are expected to learn some mathematical techniques required to understand the physical phenomena at the undergraduate level and get exposure to important ideas of statistical mechanics. • The students are expected to be able to solve simple problems in probability, understand the concept of independent events and work with standard continuous distributions. • The students will have idea of the functions of complex variables; solve non homogeneous differential equations and partial differential equations using simple methods. • The units on statistical mechanics would introduce the students to the concept of microstates, Boltzmann distribution and statistical origins of entropy. • It is also expected that the student will understand the difference between different statistics, classical as well as quantum.
Paper II	• Understand the basics of crystallography, Electrical properties of metals, • Band Theory of solids, demarcation among the types of materials, • Semiconductor Physics and Superconductivity. • Understand the basic concepts of Fermi probability distribution function, • Density of states, conduction in semiconductors and BCS theory of • superconductivity. • Demonstrate quantitative problem solving skills in all the topics covered
Paper III	• the application of quantum mechanics in atomic physics • the importance of electron spin, symmetric and antisymmetric wave • functions and vector atom model • Effect of magnetic field on atoms and its application Learn Molecular physics and its applications. • This course will be useful to get an insight into spectroscopy.

Paper IV	• Understand the laws of electrodynamics and be able to perform • Calculations using them. • Understand Maxwell's electrodynamics and its relation to relativity • Understand how optical laws can be derived from electromagnetic • principles. • Develop quantitative problem solving skills.
Paper V	• Understand the difference between a transducer and a sensor. • Understand the construction, working and uses of different types of transducers. • Understand the concept of signal conditioning, devices used and their operations. • Get acquainted with the measuring instruments used in laboratory. • Get the insight of the modern medical instruments in principle, which are used in day to day life.
Sem-VI **Paper I**	• This course will introduce the students to different aspects of classical mechanics. • They would understand the kinds of motions that can occur under a central potential and their applications to planetary orbits. • The students should also appreciate the effect of moving coordinate system, rectilinear as well as rotating. • The students are expected to learn the concepts needed for the important formalism of Lagrange's equations and derive the equations using D'Alembert's principle. • They should also be able to solve simple examples using this formalism. The introduction to simple concepts from fluid mechanics and understanding of the dynamics of rigid bodies is also expected. • Finally, they should appreciate the drastic effect of adding

	nonlinear corrections to usual problems of mechanics and nonlinear mechanics can help understand the irregularity we observe around us in nature.
Paper II	• Understand the basics of semiconductor devices and their applications. • Understand the basic concepts of operational amplifier: its prototype and applications as instrumentation amplifier, active filters, comparators and waveform generation. • Understand the basic concepts of timing pulse generation and regulated power supplies • Understand the basic electronic circuits for universal logic building blocks and basic concepts of digital communication. • Develop quantitative problem solving skills in all the topics covered.
Paper III	• Upon successful completion of this course, the student will be able to: • Understand the fundamental principles and concepts governing classical nuclear and particle physics and have a knowledge of their applications interactions of ionizing radiation with matter the key techniques for particle accelerators the physical processes involved in nuclear power generation. • Knowledge on elementary particles will help students to understand the fundamental constituents of matter and lay foundation for the understanding of unsolved questions about dark matter, antimatter and other research oriented topics.
Paper IV	• Understand the significance of Michelson Morley experiment and failure of the existing theories to explain the null result • Understand the importance of postulates of special relativity, Lorentz • transformation equations and how it changed the way we look at space and time, Absolutism and relativity, Common sense versus

	Einstein concept of Space and time. • Understand the transformation equations for: Space and time, velocity, • frequency addition, Doppler effect, mass energy relation and resolve paradoxes in relativity like, mass, momentum, force, Energy, Charge and current density ,electric and magnetic fields. • Solve problems based on length contraction, time dilation, velocity twin paradox etc.
Paper V	• Analyze/design and implement combinational logic circuits. • Develop assembly language programing skills and real time applications of microprocessor. • Illustrate how to interface the I/O peripheral (PPI) with 8085 microprocessor. • Understand architecture, silent features, instruction set, programming and interfacing of 8051 microcontroller. • Develop the programming skills in programming Language C++. • Train their practical knowledge through lab experiments. • Get practical training to interface different programmable peripherals and I/O devices to microprocessor and microcontroller

Bachelors in Commerce (B.Com)

PROGRAMME OUTCOME

1: After completing three years for Bachelors in Commerce (B.Com) program, students would gain a thorough grounding in the fundamentals of Commerce and Finance.

2: The commerce and finance curriculum offers a number of specializations and practical exposures which would equip the student to face the modern-day challenges in commerce and business.

3: The all-inclusive outlook of the course offer a number of value based and job oriented courses & ensures that students are trained into up-to-date. In advanced accounting courses beyond the introductory level, affective development will also progress to the valuing and organization levels.

PROGRAMME SPECIFIC OUTCOME

1. Students will be able to demonstrate progressive learning of various tax issues and tax forms related to individuals. Students will be able to demonstrate knowledge in setting up a computerized set of accounting books.

2. Students will demonstrate progressive affective domain development of values, the role of accounting in society and business.

3. Students will learn relevant financial accounting career skills, applying both quantitative and qualitative knowledge to their future careers in business.

F.Y.B.Com

Course Outcome

Semester I

Subject	Outcome
Financial Accounting I	1. To understand the various accounting concepts like Departmental Accounts, Hire purchase Accounts etc. 2.To impart the knowledge of various accounting concepts. 3.To instill the knowledge about accounting procedures, methods .
Business Economics I	1.To understand the basic elements of economics & to understand certain common features of economic applications in real world 2. To expose Students of Commerce to basic micro economic concepts and inculcate an analytical approach to the subject matter. 3. To stimulate the student interest by showing the relevance and use of various economic theories. To apply economic reasoning to problems of business.
Business Mathematics and Statistics I	1.To understand basic concepts of mathematical & statistical techniques & its application in commerce & management 2. To understand the concept of Simple interest, compound interest and the concept of EMI. 3. To understand the concept of shares and to calculate Dividend. 4. To understand the concept of population and sample.
Commerce I	1. To enable the students to get the know- how of commerce & to create an interest in investment its wide scope. 2. To make the students aware about the Business Environment. 3. To motivate students lo make their mind set for taking up entrepreneurship as career.
	1. Learner learns basic communication skills in business & day to day life.

Business Communication I	2To develop awareness regarding new trends in business communication. 3. To provide knowledge of various media of communication.
Foundation Course I	1. It helps the students to upgrade their knowledge on current challenges and issues of Indian society. 2. To develop awareness regarding Indian Constitution & Political processes. 3. To impart the knowledge of Ethical & Cultural values in Indian Society.
Environmental Studies I	1. To expose the students to the emerging environmental issues at global, national & regional level. 2. To aware students about environmental degradation & their effects to overcome it. 3. To impart students focus on environment-& human relations.

Semester -II

Subject	**Outcome**
Financial Accounting II	1. To understand the various accounting concepts like Branch accounts, Consignment Accounts etc. 2. To impart the knowledge of converting incomplete records into complete form.
Business Economics II	1.To understand the different Market structure its applications in real world 2. Learners will learn to take effective business decisions in day to day life & business activity.
Business Mathematics and Statistics II	1. To understand basic concepts Derivatives & its application in commerce & management. 2. To Learn the techniques of Correlations & Estimations in business using statistical techniques.
Commerce II	1. To make the students aware about Service sectors & their recent trends. 3. To impart the knowledge of E-commerce in today's world.
Business	1. Learner learns basic communication skills in business & day to day life.

Communication II	2 To develop skills of verbal communication applicable in business world. 3.To develop skills of drafting formal letters in learners.
Foundation Course II	1. It helps the students to upgrade their knowledge about Globalization & connected issues of Indian society. 2. To develop awareness regarding human rights. 3. To impart the skills to handle the stress & conflicts in day to day life.
Environmental Studies II	1. Learners will learn relevant techniques & tools uses to assess & analysis Environmental issues. 2. Learners will able to analyze various environmental movements & its management.

S.Y.B.Com
Course Outcome

Semester III

Subject	Outcome
Financial accounting III	1. Learners get the knowledge of various accounting concepts related with Partnership. 2. Learners get acquainted with methods used in Conversion of firms into joint stock company. 3.Learners get knowledge of various provisions of Companies Act 2013
Management accounting I	1. Learners understand various management accounting concepts & their applications. 2. Learners understand the various accounting analysis in management point of view. 3. Learners impart the knowledge of various types of budgeting and statements created in management accounting.
Business Economics III	1. To understand macroeconomic concepts & relating it with the contemporary issues. 2. Learners get acquainted with economic problems & issues. 3. To apply economic reasoning to problems of business.
Advertising I	1. Learners will understand the impulse of consumers to create demand by developing advertising & marketing Strategies. 2. To establish link between Business and marketing.
Commerce III	1.Learners get acquainted with different concepts of management & related theories &Principles 2. To establish relevance of commerce & marketing in modern competitive world.
Business Law I	1. Learner learns about various laws, Contract and Agreements applicable in Business world. 2. Learners get acquainted about various Partnership Contract used in Commerce world.

Foundation Course III	1. To make aware of various Rights their role in development of Indian Society. 2. To impart the knowledge of environment & science & their correspondence with present world.

Semester IV

Subject	**Outcome**
Financial accounting IV	1. Learners get the knowledge of profit prior to incorporation & their calculation. 2. Learners get acquainted with methods used in Conversion of firms into joint stock company. 3.Learners get knowledge of various provisions of Companies Act 2013
Auditing I	1. Learners understand various Auditing concepts & their applications. 2. Learners understand the Auditing techniques ,Importance of vouching & verification.
Business Economics IV	1. To understand the underlying concepts & practical tradeoffs entailed in public finance & policy alternatives. 2. Learners get acquainted with economic policy alternatives apply in business.
Advertising II	1. Learners will understand how to make various media more attractive by using various element of advertising. 2. Learners will come to know career opportunities in Advertising world.
Commerce IV	1.Learners get acquainted with different financial Concept & related Systems &Principles 2. To establish relevance of finance in modern competitive world.
Business Law II	1. Learner learns Indian companies Act 2013 their amendments 2. Learners get acquainted about Consumer Protection Act 1986 & Competition Act.
Foundation Course IV	1. To make awareness About competitive examination & development of soft skills in learner. 2. To make aware of environment & science & technology used in present world.

T.Y.B.Com

Course Outcome

Semester V

Subject	Outcome
Financial accounting V	1. Learner will be able to handle corporate accounts in actual world. 2. Learners get acquainted with the different types of Amalgamation & their Procedures. 3. Learners understand the accounting Concept apply in corporate world.
Cost accounting I	1. Learners will analyze techniques and methods of costing. 2. To Impart The Knowledge Of Basic Cost concepts, Elements of cost, Ascertainment of Material and Labour Cost.
Business Economics V	1. To expose the students to emerging economic issues at national level to understand policy measures. 2. To help the students in analyzing the present status of the Indian Economy.
Export Marketing I	1. Learners get acquainted with Foreign trade policy 2015-2020. 2. Learners understand the procedure for export & import & strong potentials of Export in development of nation.
Commerce V	1. Learners are capable to understand different facts of marketing in changing business scenario. 2. Learners get acquainted with marketing mix elements & its importance in Marketing .
Computer application & programming I	1. Learners get knowledge of computer application & its practical usage in day to day activities. 2. Learners learn Data communication, & Data Base management.
Direct & Indirect Taxation I	1. Learners understand direct taxation system, concepts & Acts applicable in India. 2. To understand the basic concepts and to acquire knowledge about direct Taxes especially with different heads of income applicable in India.

Semester VI

Subject	Outcome
Financial accounting VI	1. Learner will be able to understand Foreign currency fluctuations in business world. 2. Learners get acquainted with the limited liability Partnership accounting & their Procedures. 3. Learners understand the accounting Concept & applications of liquidation of company.
Cost accounting II	1. Learners will analyze accounting Procedures applicable in Process & Contract Costing. 2. To Impart The emerging concepts of costing in today's world.
Business Economics VI	1. To expose the students to emerging economic issues at global level to understand policy measures. 2 .To acquaint students with the emerging issues in policies of India's foreign trade.
Export Marketing II	1. Learners get acquainted with Export finance, procedure & documentations. 2. Learners understand the FOB calculation & its benefits in Export nation.
Commerce VI	1. Learners are capable to understand different facts of Human Resource Management to attainting organizational goal. 2. Learners get acquainted with recent challenges in Human Resource management.
Computer application & programming II	1. Learners get knowledge of Programming languages & its usage. 2. To make the students familiar with the basics of Operating System and business communication tools. 3. To make the students familiar with basics of Network, Internet and related concepts.
Direct & Indirect Taxation II	1. Learners understand Indirect taxation system, concepts & Acts applicable in India. 2. To understand the basic concepts and to acquire knowledge about Indirect Taxes especially Goods & Service Tax applicable in India.

B.Sc (Computer Science)

Programme Outcome

Three year Computer Science course prepares the students for a career in Software industry. It also motivates them towards further studies and research opportunities. It forms a strong foundation of Computer science in students. It Introduces the students to emerging trends in gradual way. It grooms the students for the challenges of ICT industry.

Specific Outcome

In the first year basic foundation of important skills required for software development is laid. Second year of this course is about studying core computer science subjects. The third year is the further advancement which covers

Course Outcome

FYBSc (Computer Science)

Semester I

Computer Organization and Design	To learn about how computer systems work, underlying principles and the basics of digital electronics needed for computers. Also to understand the basics of instruction set architecture for reduced and complex instruction sets, the basics of processor structure and operation and how data is transferred between the processor and I/O devices.
Programming with Python- I	Students will be able to develop logic for Problem Solving. Students will become familiar about the basic constructs of programming such as data, operations,conditions, loops, functions etc.Students will be able to apply the problem

	solving skills using syntactically simple language i.e.Python (version: 3.X or higher)
Free and Open-source Software	Upon completion of this course, students will have a good working knowledge of Open Sourceecosystem, its use, impact and importance.2) This course shall help student to learn Open Source methodologies, case studies with real lifeexamples.
Database Systems	Students will be able to evaluate business information problem and find the requirements of aproblem in terms of data.AlsoStudents will be able to design the database schema with the use of appropriate data types forstorage of data in database.Students will also be able to create, manipulate, query and back up the databases..
Discrete Mathematics	To provide overview of theory of discrete objects, starting with relations and partially ordered sets. Tostudy about recurrence relations, generating function and operations on them. To understand graphs and trees, which are widely used in software.Also to provide basic knowledge about models of automata theory and the corresponding formal languages.
Descriptive Statistics and Introduction to Probability	To enable learners to know descriptive statistical concepts and also to study probability concept required for Computer learners
Soft Skills Development	To know about various aspects of soft skills and learn ways to develop personality and also to understand the importance and type of communication in personal and professional environment.To provide insight into much needed technical and non-technical qualities in career planningand to learn about Leadership, team building, decision making and stress management

Semester II

Programming with C	Students will be able to write, compile and debug programs in C language and to use different data types in a computer program.Students will be able to design programs involving decision structures, loops and functions and to explain the difference between call by value and call by reference. Students will be able to understand the dynamics of memory by the use of pointers and will be able to use different data structures and create/update basic data files.
Programming with Python – II	Students will be able to understand how to read/write to files using python and to catch their own errors that happen during execution of programs. Students will get an introduction to the concept of pattern matching and the concepts of GUI controls and designing GUI applications. Students will be able to connect to the database to move the data to/from the application and know how to connect to computers read from URL and send email.
Linux	Upon completion of this course, students will have a good working knowledge of Linux, from botha graphical and command line perspective, allowing them to easily use any Linux distribution.This course shall help student to learn advanced subjects in compute r science practically and will be able to progress as a Developer or Linux System Administrator using the acquiredskill set.
Data Structures	To learn about Data structures, its types and significance in computing, to explore about Abstract Data types and its implementation and to program various applications using different data structure in Python
Calculus	Understanding of Mathematical concepts like limit, continuity, derivative, integration of functions and to appreciate real world applications which uses these concepts.Alsoto formulate a problem through Mathematical modeling and simulation.

Statistical Methods and Testing of Hypothesis	Enable learners to know descriptive statistical concepts and to study probability concept required for Computer learners
Green Technologies	To learn about green IT can be achieved in and by hardware, software, network communication and datacenter operations and also to understand the strategies, frameworks, processes and management of green IT

SYBSC

Semester III

Theory of Computation	Understand Grammar and Languages, Learn about Automata theory and its application in Language Design, Learn about Turing Machines and Pushdown Automata, Understand Linear Bound Automata and its applications
Core Java	Object oriented programming concepts using Java. Knowledge of input, its processing and getting suitable output.Understand, design, implement and evaluate classes and applets. Knowledge and implementation of AWT package.
Operating System	**:** To provide a understanding of operating system, its structures and functioning, Develop and master understanding of algorithms used by operating systems for various purposes.
OutcomeDatabase Management Systems	Master concepts of stored procedure and triggers and its use, Learn about using PL/SQL for data management, Understand concepts and implementations of transaction management and crash recovery
Combinatorics and Graph Theory	Appreciate beauty of combinatorics and how combinatorial problems naturally

	arise in many settings. Understand the combinatorial features in real world situations and Computer Science applications. Apply combinatorial and graph theoretical concepts to understand Computer Science concepts and apply them to solve problems
Physical Computing and IoT Programming	Enable learners to understand System On Chip Architectures, Introduction and preparing Raspberry Pi with hardware and installation, Learn physical interfaces and electronics of Raspberry Pi and program them using practical's , Learn how to make consumer grade IoT safe and secure with proper use of protocols
Web Programming	To design valid, well-formed, scalable, and meaningful pages using emerging technologies, Understand the various platforms, devices, display resolutions, viewports, and browsers that render websites To develop and implement client-side and server-side scripting language programs. To develop and implement Database Driven Websites. Design and apply XML to create a markup language for data and document centric applications.

Semester IV

Fundamentals of Algorithms	Understand the concepts of algorithms for designing good program, Implement algorithms using Python
Advanced Java	Understand the concepts related to Java Technology Explore and understand use of Java Server Programming
Computer Networks	Learner will be able to understand the concepts of networking, which are important for them to be known as a '*networking professionals*', Useful to proceed with industrial requirements and International vendor certifications

Software Engineering	Learner will be able to understand the concepts of software engineering, which are important for them to be known as a 'software engineers',Useful to proceed with industrial requirements and International vendor certifications
Linear Algebra using Python	**:** Appreciate the relevance of linear algebra in the field of computer science. Understand the concepts through program implementation , Instill a computational thinking while learning linear algebra.
Net Technologies	**:** Understand the .NET framework ,Develop a proficiency in the C# programming language , Proficiently develop ASP.NET web applications using C#, Use ADO.NET for data persistence in a web application
Android Developer Fundamentals	1) Understand the requirements of Mobile programming environment. 2) Learn about basic methods, tools and techniques for developing Apps 3) Explore and practice App development on Android Platform 4) Develop working prototypes of working systems for various uses in daily lives.

TYBSc (Computer Science)

Semester V

Artificial Intelligence	Student will understand concept of AI and different search algorithms used for solving problems
Software Testing and Quality Assurance	Student will Understand a variety of software metrics, and identify defects and managing those defects for improvement in quality for given software. Design SQA activities, SQA strategy, formal technical review report for software quality control and assurance.
Information and Network Security	In this course student will able to Understand a variety of generic security threats and vulnerabilities, and identify & analyze particular security problems for a given application. Understand various protocols for network security to protect against the threats in a network

Web Services	Student will understand the details of web services technologies like SOAP, WSDL, and UDDI. To learn how to design,implement and deploy web service client and server.
Game Programming	Student will study Graphics and gamming concepts with present working style of developers where everything remains on internet and they need to review it, understand it, be a part of community.

Semester VI

Cloud Computing	Student will study the comprehensive and in-depth knowledge of Cloud Computing concepts, technologies, architecture, implantations and applications.
Cyber Forensics	Student will Understand the procedures for identification, preservation, and extraction of electronic evidence, auditing and investigation of network and host system intrusions, analysis and documentation of information gathered
Information Retrieval	In this course student will be able to Understand the field of information retrieval and its relationship to search engines. It will give the learner an understanding to apply information retrieval models.
Data Science	The students should be able to understand & comprehend the problem and should be able to define suitable statistical method to be adopted.
Ethical Hacking	Student will be able to identify security vulnerabilities and weaknesses in the target applications. They will also know to test and exploit systems using various tools and understand the impact of hacking in real time machines.