LUCKNOW PUBLIC COLLEGE OF PROFESSIONAL STUDIES

BACHELOR OF BUSINESS ADMINISTRATION (BBA)

(SESSION 2019-2020)

BACHELOR OF BUSINESS ADMINISTRATION (BBA)

PROGRAMME OUTCOMES

The aim of the course is to build knowledge and understanding business among the student. The course seeks to give detailed knowledge about the subject matter by instilling them basic ideas about business operations and decision making. The course aims at making a conceptual orientation and equips the students with the business skills as well as prepares them for management applications. This course provides an understanding of the tasks and functions of management and acquaints the participants with the development in concept, theories and practices in the overall field of management.

Program Specific Outcomes (PSO):
- Ensure and understand professional augmentation taking place in the global as well as domestic business arena.
- To reduce the gap between industry and academia, with the right blend of theory and practice.
- To nurture their talent for becoming good leaders and assets for an organization.
- To achieve an in-depth knowledge and analytical skills which will enable them too effectively and efficiently carry out various Trade and Marketing operations of an organization in the emerging globalized environment.
- Develop Critical attitude necessary for "life-long learning" through this course.

SYLLABUS			
COURSE	**PAPER No**	**PAPER NAME**	**MARKS**
B.B.A. I SEMESTER	BBA 101	BUSINESS MATHEMATICS	100
	BBA 102	COMPUTER FUNDAMENTAL	100
	BBA 103	FINANCIAL ACCOUNTING	100
	BBA 104	MANAGERIAL ECONOMICS	100
	BBA 105	MARKETING FUNDAMENTALS	100
	BBA 106	PRINCIPLES OF MANAGEMENT	100

2.6.1 Teachers and students are aware of the stated programme and course outcomes of the programmes offered by the institution.				
B.B.A. II SEMESTER	BBA 201	BUSINESS COMMUNICATION	100	
	BBA 202	BUSINESS STATISTICS	100	
	BBA 203	FOREIGN TRADE OF INDIA	100	
	BBA 204	ENVIRONMENTAL STUDIES	100	
	BBA 205	FINANCIAL MATHEMATICS	100	
	BBA 206	INDIAN VALUE SYSTEM	100	
B.B.A. III SEMESTER	BBA 301	ADVERTISING MANAGEMENT	100	
	BBA 302	BANKING AND INSURANCE	100	
	BBA 303	BUSINESS ENVIRONMENT	100	
	BBA 304	MANAGEMENT ACCOUNTING	100	
	BBA 305	ORGANISATIONAL BEHAVIOUR	100	
	BBA 306	RESEARCH METHODLOGY	100	
	BBA 307	FRENCH	100	
B.B.A. IV SEMESTER	BBA 401	BUSINESS LAW	100	
	BBA 402	FINANCIAL MANAGEMENT	100	
	BBA 403	HUMAN RESOURCE MGMT	100	
	BBA 404	INFORMATION MANAGEMENT	100	
	BBA 405	OPEARTION MANAGEMENT	100	
	BBA 406	CONSUMER BEHAVIOUR	100	
B.B.A. V SEMESTER	BBA 501	E-COMMERCE	100	
	BBA 502	FINANCIAL SERVICES	100	
	BBA 503	INSURANCE AND RISK MANAGEMENT	100	
	BBA 504	RETAIL & RURAL MARKETING	100	
	BBA 505	TAXATION LAWS	100	
	BBA 506	MANAGING PERSONAL FINANCE	100	
B.B.A. VI SEMESTER	BBA 601	BUSINESS POLICY	100	
	BBA 602	COMPANY LAW	100	
	BBA 603	ENTREPRENEURSHIP	100	
	BBA 604	INTERNATIONAL BUSINESS	100	
	BBA 605	MARKETING OF SERVICES	100	
	BBA 606	PROJECT MANAGEMENT	100	

COURSE OUTCOMES (Co's)

2.6.1 Teachers and students are aware of the stated programme and course outcomes of the programmes offered by the institution.

SEMESTER I

THEORY
BUSINESS MATHEMATICS:
BBA 101`

> ➢ To define set theory, types of interest and discounting bills.
> ➢ To describe matrix concept and linear equations.
> ➢ To explain variables, constants, Algebraic functions and derivative functions.
> ➢ To define definite and indefinite simple functions.
> ➢ To know the basic concepts in matrix.
> ➢ Enable the student to determine integral calculus.

THEORY
COMPUTER FUNDAMENTALS:
BBA 102`

> ➢ Understand basic concepts and terminology of information technology.
> ➢ Have a basic understanding of personal computer and acquire knowledge about generation of computers and types of computers.
> ➢ Identify uses of spreadsheets in Managerial application.

THEORY
FINANCIAL ACCOUNTING:
BBA 103

> ➢ Students learn the basics of accounting concepts and preparation of Final Accounts, Accounting for Share capital, Financial statement analysis and application. To inculcate the ability to rectify the errors arising at different stages of the Accounting Process.
> ➢ Enable the students to prepare Bank reconciliation statements to identify and understand the timing difference between cash book accounting and pass book.
> ➢ Students learn the types of depreciation and method of calculating depreciation and accounting treatment for the same. Preparation of Accounting for Share capital is covered.

THEORY
MANAGERIAL ECONOMICS:
BBA 104

> ➢ To teach about the basic concepts of economics. Demand and supply, which is to be applied in making business decisions.
> ➢ Students will learn about basic concepts like demand and supply.
> ➢ Will understand the concept of production and consumption.
> ➢ Will learn about market structure.
> ➢ Students will attain knowledge of factors of distribution and gain knowledge about the concepts of national income.

THEORY
MARKETING FUNDAMENTALS:
BBA 105

> ➢ Students are introduced to the basics of marketing management, market orientation, marketing mix, and functions of marketing management.
> ➢ Emerging issues in marketing like business ethics in marketing, cyber marketing, and green marketing are covered.
> ➢ Students learn about Product mix, product life cycle, its importance, pricing policies and methods to fix pricing.
> ➢ The students exhibit strong understanding of the need for segmentation in business and factors influencing the same. Also, niche marketing is introduced as a concept.
> ➢ Methods of sales promotion like advertising, salesmanship and ethics in this area are covered.

THEORY
PRINCIPLE OF MANAGEMENT:
BBA 106

> ➢ Discuss and communicate the management evolution and how it will affect future managers.
> ➢ Observe and evaluate the influence of historical forces on the current practice of management.

- ➢ Identify and evaluate social responsibility and ethical issues involved in business situations and logically articulate own position on such issues.
- ➢ Explain how organizations adapt to an uncertain environment and identify techniques managers use to influence and control the internal environment.
- ➢ Practice the process of management's four functions: planning, organizing, leading, and controlling.
- ➢ Identify and properly use vocabularies within the field of management to articulate one's own position on a specific management issue and communicate effectively with varied audiences.
- ➢ Evaluate leadership styles to anticipate the consequences of each leadership style.
- ➢ Gather and analyze both qualitative and quantitative information to isolate issues and formulate best control methods.

SEMESTER II

THEORY
BUSINESS COMMUNICATION:
BBA 201

- ➢ Trough the study of this subject, students attempt to know about the importance of communication. Though a very simple word but communication is the life blood of the organization.
- ➢ The students are made aware of the modern technology used in communication and how useful it is to the business world.
- ➢ The students also get to know the art of writing applications and letters and in a way they get prepared to take on the business world.

THEORY
BUSINESS STATISTICS:
BBA 202

- ➢ Appraise the need for data analysis and formulate the statistical problem and solve it.
- ➢ Interpret the results of statistical analysis for improved managerial decision making.

➢ Apply analytical skills in both private and public business organizations in the country.

THEORY
FOREIGN TRADE OF INDIA:
BBA 203

➢ Identify the basic difference between inter-regional and international trade, understand how international trade has helped countries to acquire goods at cheaper cost and explain it through the various international trade theories.

➢ Show the benefits of international trade in a way how nations with strong international trade have become prosperous and have the power to control world economy and how global trade can be one of the major contributors of reducing poverty.

➢ Explain how restrictions to international trade would limit a nation in the services and goods produced within its territories and at the same time explain that a rise in international trade is essential for the growth of globalization.

➢ Show the importance of maintaining equilibrium in the balance of payments and suggests suitable measures to correct disequilibrium as well. Be aware of the changes in the composition as well as direction of foreign trade after international trade and know the causes and effects of deficits in the balance of payments, measures adopted to correct the deficits and identify the need for having trade reforms.

THEORY
ENVIRONMENTAL STUDIES:
BBA 204

➢ This course gives you an opportunity to learn about global trends that influence our environment and the living conditions and how different management systems and approaches that are used around the world to manage the environment.

➢ It offers an introduction to social impact strategy and social entrepreneurship, including key concepts, an overview of the field, and tools to get started as a change -maker.

➢ It explores the idea of how to become a stakeholder entrepreneur and create a business that makes money and makes the world a better place.

➢ It prepares you to meet the requests and demands of current and future decision - makers and in this course, you will analyze ethical challenges associated with environmental dilemmas and apply different decision making tools relevant to environmental management and regulation.

➢ It enables you to use design thinking to uncover new and creative solutions in the social sector.

THEORY
FINANCIAL MATHEMATICS:
BBA 205

➢ To understand basics of integration and its uses in the areas of mathematics.

➢ Use percentages, ratios, and proportions for business applications such as discounts, markups, and markdowns, and be able to differentiate which math methods should be used for different problems.

➢ Use simple and compound interest to do business calculations such as value of money, maturity value, promissory notes, present value, and future value and be able to differentiate which math method should be used for different problems.

➢ To apply basic terms of integration in solving practical problems field of as of business.

➢ To explain basic methods of business calculus, types and methods of interest account and their basic applications in practice.

THEORY
INDIAN VALUE SYSTEM:
BBA 206

➢ Role of Finance Function, define 'interest' distinguish between simple and compound interest and apply the formula to calculate compound interest. Techniques, practical applications of Compounding and Present Value Techniques.

➢ The difference between a compound amount and an annuity. Compute the future value of an ordinary annuity by using the formula or the table for annuities.

➢ Characteristics of fixed- income securities, interpreting financial market data, including stock and bond price quotations. The value of a bond with a finite maturity date, the yield to maturity of a bond.

➢ Features of variable income securities. Difference between new issue market and capital market. Methods of selling securities. Study of dividend model- zero growth models, non- constant growth dividend valuation model.

SEMESTER III

THEORY
ADVERTISING MANAGEMENT:
BBA 301

➢ The student will be able to understand the different types and rationale behind the advertising type and medium chosen.

➢ The student will understand how the process of Objective Setting and Budgeting is done for IMC.

➢ The student will be able to identify media alternatives for different marketing messages.

THEORY
BANKING OPERATIONS AND MANAGEMENT:
BBA 302

➢ To make them aware of banking rules and regulations.
➢ Students will learn about historical evolution of banking.
➢ They will get knowledge of different typesofbanks.
➢ They will become aware of operational aspects of banking.
➢ Will learn about negotiable instruments and basic norms.

THEORY
BUSINESS ENVIORNMENT:

BBA 303
- 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.
- Understand the definition of ethics and the importance and role of ethical behavior in the business world today.

THEORY
MANAGEMENT ACCOUNTING:
BBA 304
- Students will learn about the basics of management accounting. Difference between management accounting and other branches of accounting i.e. financial accounting, cost accounting etc.
- Will understand about the unit costing and C.V.P.analysis.
- They will become aware about marginal costing, process costing, contract costing, make and buy decisions etc.
- Students will attain the practical knowledge of standard costing and budgetary control.

THEORY
RESEARCH METHODOLOGY:
BBA 306
- The aim of the course is to provide participants with an introduction to research methods and report writing. Upon successful completion of the course you are expected to develop understanding on various kinds of research, objectives of doing research, research process, research designs and sampling.
- The aim of the course is to provide participants with an introduction to research methods and report writing. Upon successful completion of the course you are expected tohave basic knowledge on qualitative research techniques.
- The aim of the course is to provide participants with an introduction to research methods and report writing. Upon successful completion of the

course you are expected tohave adequate knowledge on measurement & scaling techniques as well as the quantitative data analysis.

➢ The aim of the course is to provide participants with an introduction to research methods and report writing. Upon successful completion of the course you are expected to Have basic awareness of data analysis-and hypothesis testing procedures

SEMESTER IV

THEORY
BUSINESS LAWS:
BBA 401

➢ Understand the basic concept of The Indian Contract Act, 1872, Essential elements of a valid contract. Students are explained about the offer & acceptance, consideration, capacity of parties, free consent legality of object & consideration, void agreements, discharge of contract, Indemnity & Guarantee, Bailment & pledge, law of negotiable Instruments.

THEORY
FINANCIAL MANAGEMENT:
BBA 402

On completion of this course, the students will be able to

➢ Students should be able to show analytical skills in short term and long term decision making.
➢ Explain the concept of fundamental financial concepts, especially time value of money.
➢ Apply capital budgeting projects using traditional methods.
➢ Analyze the main ways of raising capital and their respective advantages and disadvantages in different circumstances.
➢ Integrate the concept and apply the financial concepts to calculate ratios and do the capital budgeting.

THEORY
HUMAN RESOURCE MANAGEMENT:

BBA 403

➢ Through this course student will be able to explore various dimensions of Human Resource Management and will find new career opportunities in the same.

➢ It will provide hands on experience to work on industry assignments and gain practical knowledge.

➢ Case Study discussions will provide simulations to think as an HR strategist and design an appropriate solution.

THEORY
INFORMATION MANAGEMENT:
BBA 404

➢ Students will be made aware about the concept of information system, decision support system, knowledge base system, expert system.

➢ They will be made aware of data base management system.

➢ This subject will help them to apply technological concept in their daily lives which will enhance their entrepreneurial skills.

➢ It will also help them to learn about functional and cross functional information.

THEORY
OPRATION MANAGEMENT:
BBA 405

➢ At the end of the course the students can apply the concept of operations management in manufacturing and service sector and will be able to plan and implement production and service related decisions.

➢ At the end of the course the student will be able to plan production schedules and plan resources (material and machine) required for production.

➢ At the end of the course the students can design maintenance schedules in manufacturing units, identify and propose material handling equipments and implement industrial safety rules.

➢ At the end of the course the students will be able to apply the concepts of purchase, stores and inventory management and analyze and evaluate material requirement decisions.

➢ At the end of the course the students can measure performance related to productivity and will be able to conduct basic industrial engineering study on men and machines.

THEORY
CONSUMER BEHAVIOUR:
BBA 406

➢ The purpose of this course is to introduce students to consumers, consumer behavior in the market place and their impact on marketing strategy. Discussing the principal factors that influence consumers as individuals and decision makers with an application to the buying decision process.
➢ The course content will also address the importance of subculture and global consumer culture as marketing opportunities
➢ Be able to identify the dynamics of human behavior and the basic factors that influence the consumer's decision process.
➢ Be able to demonstrate how concepts may be applied to marketing strategy

SEMESTER V

THEORY
E- COMMERCE:
BBA 502

➢ Students learn the basics of e-commerce in IT and business.
➢ Learnt about business to business and business to consumer relationship.
➢ To learn about different networking concepts and type of networks.
➢ Students learn about TCP/IP protocol and basic components of internet.
➢ Students learn about marketing strategies, marketing segments.
➢ Students learn to advertise on web and evaluate e-commerce technologies.
➢ Introduction to EDI, supply chain management.
➢ Students learn the advantages and disadvantages of online payments.
➢ Basic features of internet security policies, type of threat, computer security are covered.
➢ Learn to communicate effectively using electronics.

2.6.1 Teachers and students are aware of the stated programme and course outcomes of the programmes offered by the institution.

THEORY

FINENCIAL SERVICES:

BBA 502

- ➢ To understand the concept of financial services, its types, its utility in a business and its significance. Also understand the concept of NBFCs.
- ➢ To understand the details of leasing with theoretical form and its accounting treatment as per AS-19.Concept of hire purchase its uses in business forms. Difference in leasing and hire purchase with instalment system.
- ➢ To understand the concept of factoring and their working, bill discounting concepts and applications. Credit cards its meaning, types and significance for business.
- ➢ To understand concept of merchant banking specially in the context of India, different advisory services available to business in India. Initial public offers how they work and how companies collect funds through IPOs.

THEORY

INSURANCE AND RISK MANAGEMENT:

BBA 503

- ➢ To Understand the Introduction of Insurance in General and History of Insurance in India. Basic Nature and Definition of Insurance. Comparison of Life Insurance with Other Forms of Insurance.
- ➢ To Understand the Principles of Contract and its Applicability to the valid Insurance Contract.
- ➢ To Understand the Principle of Life Insurance and its impact on Insurability. Use of Mortality Table and its Constructions with its kinds. Basic Elements in Computation of Premium.
- ➢ To Understand the Scope of Coverage of Fire Insurance, Marine Insurance and Motor Insurance.
- ➢ To Understand the Provision under Insurance Act 1938 and IRDA Act 1999.
- ➢ To Understand the Basic Concept of Risk, Classification of Risk, Process of Risk Management. Identification and Evaluation of Risk- Risk Analysis. Risk Control- Loss Prevention and its Importance. Risk Financing and Transfer of Risk.

2.6.1 Teachers and students are aware of the stated programme and course outcomes of the programmes offered by the institution.

THEORY
RURAL AND RETAIL MARKETING:
BBA 504

➢ Explore the various facets of rural marketing and develop an insight into rural marketing regarding different concepts and basic practices in this area.
➢ Identify the challenges and opportunities in the field of rural marketing for the budding managers and also expose the students to the rural market environment and the emerging challenges in the globalization of the economies.
➢ To acquaint the students with the appropriate concepts and techniques in the area of rural marketing.
➢ Apply adaptations to the rural marketing mix (4 A's) to meet the needs of rural consumers.
➢ Understand the concept and methodology for conducting the research in rural market.

THEORY
TAXATION LAWS:
BBA 505

➢ Students learn about the fundamentals of income tax and the scope of IT calculations and important terminologies. Students are taught about the different heads of income with its components. Student learns about computing total taxable salary, annual value of house property and computation under different circumstances.
➢ Topics related to allowable and non-allowable expenses and provisions relating to income from business / profession are dealt with. Students gain knowledge on assessment of income of individuals, company etc., and filing of income tax return and about revised return procedures.

THEORY
MANAGING PERSONAL FINANCE:
BBA 506

➢ To understand basics of personal finance
➢ To understand the methods to manage the personal finances
➢ To know the fundamentals to invest the financial resources

➢ To understand the methods to insure the resources and control one's financial future

SEMESTER VI

THEORY
BUSINESS POLICY:
BBA 601

➢ The main objective of this course is to let students have an experience of managing a company in the role of a key manager, such as general manager, vice-president, president or CEO, through the versatility ofmicrosmatic Simulation computer simulation.

➢ Micromatic Simulation is a powerful and user-friendly simulation that allows the instructor and his assistant (game administrator) to engage in active intervention to create an industry that can be formulated to become very close to real-life for your training.

➢ This particular simulation requires a lot of commitment of time and effort on part of the instructor in administering your managing of the company. However, it is worth his time, and you should make it worth yours.

➢ The aim of this course is to let students integrate and apply what they have learned in previous classes during their stay in the program. There is no emphasis on elaborate lecturing or formal teaching of new material, except where it becomes imperative to cover some concepts that students did not comprehend in their previous classes. Nevertheless, students may ask the professor for a review of any previously learned concept at which they do not feel comfortable.

THEORY
COMPANY LAW:
BBA 602

➢ Students will understand of the concepts Company Law.

- They will come to know the Process of formation and registration of company.
- They will understand the importance and of memorandum of association and Article of association.
- They will understand legal rules related to issue of Prospectus and shares.
- They will come to know the Process of winding up of company.

THEORY
ENTREPRENEURSHIP:
BBA 603

- Demonstrate a comprehension of the principles of banking law and its relationship to banks and customers.
- Demonstrate an awareness of law and practice in a banking context.
- Engage in critical analysis of the practice of banking law from a range of perspectives.
- Organize information as it relates to the regulation of banking products and services.

THEORY
INTERNATIONAL BUSINESS:
BBA 604

- Identify the basic difference between inter-regional and international trade, understand how international trade has helped countries to acquire goods at cheaper cost and explain it through the various international trade theories.
- Show the benefits of international trade in a way how nations with strong international trade have become prosperous and have the power to control world economy and how global trade can be one of the major contributors of reducing poverty.
- Explain how restrictions to international trade would limit a nation in the services and goods produced within its territories and at the same time explain that a rise in international trade is essential for the growth of globalization.
- Show the importance of maintaining equilibrium in the balance of payments and suggests suitable measures to correct disequilibrium as well. Be aware

of the changes in the composition as well as direction of foreign trade after international trade and know the causes and effects of deficits in the balance of payments, measures adopted to correct the deficits and identify the need for having trade reforms.
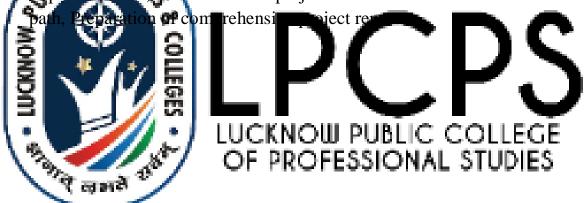
THEORY
MARKETING OF SERVICE:
BBA 605

➢ The course will help the students take a holistic view of the consumer; it will help equip them with knowledge of various models and frameworks to help understand consumer behavior and align the knowledge with formulation of appropriate marketing strategies.

➢ To develop an understanding of the theoretical and conceptual concepts of consumer behavior and apply them to real life marketing situations and practices.

➢ To explain the differences between goods and services and the resulting challenges and opportunities for service businesses.

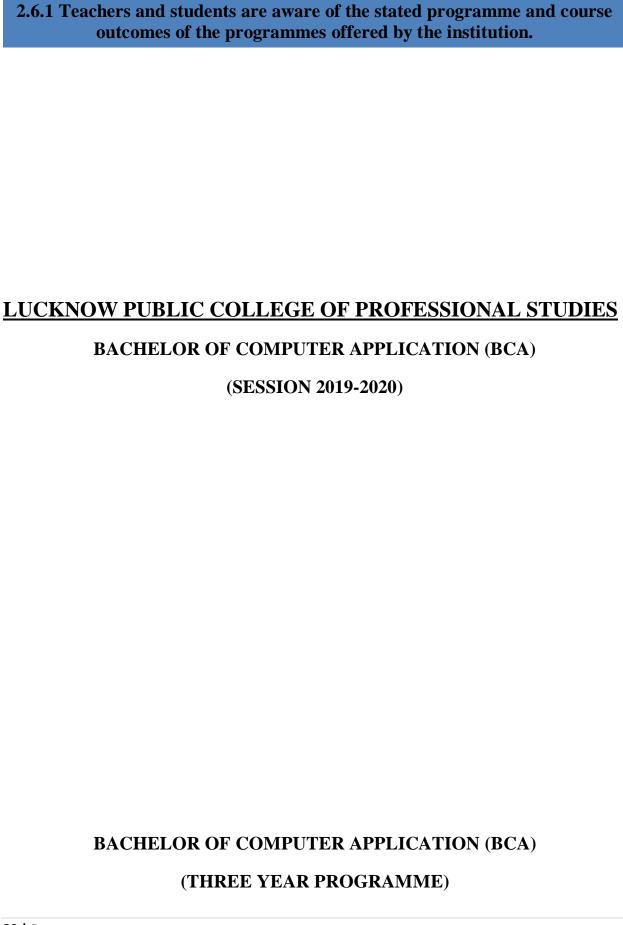➢ To introduce the expanded marketing mix for Services and the philosophy of customer focus for services.

THEORY
PROJECT MANAGEMENT:
BBA 606

➢ Generation & screening of project idea. Preliminary screening, project rating Index. Market& demand analysis. Collection of primary & secondary information.

➢ Technical Analysis, Manufacturing process / technology, Material inputs & utilities, Product Mix, Plant Capacity, Location& site, Machinery & Equipment, Structures & Civil work, Environmental aspects, Project Charts & Layouts, Project Time Lines.

➢ Cost of projects, Means of financing, Estimates of Sales & Production, Cost of Production, Working Capital Requirement& Financing, Projected income statement, Balance sheet and cash flow with multiyear projections, Consideration of alternative sources of finance.

2.6.1 Teachers and students are aware of the stated programme and course outcomes of the programmes offered by the institution.

➢ Forms of project organization, Project control & control charts, Human aspects of project management, Prerequisites for a successful project implementation, Introduction to project network & determination of critical path, Preparation of comprehensive project re

LUCKNOW PUBLIC COLLEGE OF PROFESSIONAL STUDIES

BACHELOR OF COMPUTER APPLICATION (BCA)

(SESSION 2019-2020)

BACHELOR OF COMPUTER APPLICATION (BCA)

(THREE YEAR PROGRAMME)

2.6.1 Teachers and students are aware of the stated programme and course outcomes of the programmes offered by the institution.

After Completing Bachelors in Computer Applications (BCA) students are able to improve their fundamental computer literacy, their basic understanding of operative systems and a working knowledge of software commonly used in academic and professional environment by using word processor, spreadsheet and other application software. Students will also develop skills to present ideas effectively and efficiently through professional presentations - Designing and delivering an effective presentation and developing the various IT skills to electronic databases. Student can use the Systems Analysis Design paradigm to critically analyze a problem and solve problems (programming, networking, and database and Web design) in the Information Technology environment. Function effectively on teams to accomplish a common goal. BCA program enables student to Develop IT oriented security issues and protocols and make them able to design a web page.

Programme Outcomes (PO):

➢ To develop skilled and professionally motivated technocrats, equipped with critical reasoning and ethical values that fosters scientific temperament with a sense of social responsibility.

➢ To produce knowledgeable and competent human resources who are employable in all walks of life.

➢ To create, identify and implement appropriate techniques, resources, and modern engineering and IT tools.

➢ To impart expertise required for planning, designing and building complex software systems as well as provide support to automated systems.

➢ To develop caliber in the students to tackle both personal and social challenges and improve the quality of life.

➢ Students after this course have the option to join Indian Civil Services as IAS, IFS software engineer etc.

➢ Science graduates can go to serve in industries or may opt for establishing their own industrial unit.

➢ After the completion of the B.C.A. degree there are various other options available for the science students. Often, in some reputed universities or colleges in India and abroad the students are recruited directly by big MNC's after their completion of the course.

➢ Apart from the research jobs, students can also work or get jobs in Marketing, Business & Other technical fields. B.C.A. graduates also recruited in the banking sector to work as customer service executives. Students can also find employment in government sectors.

Program Specific Outcomes (PSO):

➢ Ability to acquire knowledge in various fields of computer science, and to apply in industry, entrepreneurship and/or higher studies, for a thriving career.
➢ Understanding to incorporate knowledge of computing and technological advances appropriate to the program.
➢ Ability to develop software systems to enable the convenient use of the computing system and possess technical credentials.
➢ Ability to exercise the principles of management and strategic concepts required for teamwork as well as team management.
➢ To prepare broadly educated, ethical and responsible citizens.

SYLLABUS

DEPARTMENT OF COMPUTER APPLICATION(BCA) As Per LUCKNOW UNVERSITY SYLLABUS(2018 onwards)

SEMESTER	COURSE CODE	COURSE NAME	MARKS
SEMESTER-1	BCA-101	Essentials of Professional Communication	100
	BCA-102	Principal of Management	100
	BCA-103	Mathematics-I	100
	BCA-104	Computer Fundamentals and Programming in C	100
	BCA-105	Fundamentals of Environmental Sciences	100
	BCA106P	Computer Application Lab	100
	BCA107P	Programming in C Lab	50
	BCA108P	Professional Communication Lab	50
	BCA-GP	General Proficiency	50
SEMESTER-2	BCA-201	Mathematics-II	100
	BCA-202	Advanced Professional Communication	100
	BCA-203	Digital Electronics and Computer Organization	100
	BCA-204	Data Structure using C	100
	BCA-205	Accounting and Financial Management	100
	BCA-206P	Advanced Professional Communication Lab	50
	BCA-207P	Data Structure Lab	50
	BCA-208P	Digital Electronics and Computer Organization Lab	50
	BCA-GP	General Proficiency	50
SEMESTER-3	BCA-301	Computer Based Numerical and Statistical Techniques	100
	BCA-302	Object Oriented Programming using Java	100
	BCA-303	Operating System	100
	BCA-304	Management information System	100
	BCA-305	Computer Architecture	100
	BCA-306P	Computer Based Numerical and Statistical Techniques Lab	50
	BCA-307P	Object Oriented Programming & Java Lab	50
	BCA-308P	Operating System Lab	50
	BCA-GP	General Proficiency	50

2.6.1 Teachers and students are aware of the stated programme and course outcomes of the programmes offered by the institution.

SEMESTER-4	BCA-401	Discrete Mathematics	100
	BCA-402	Business Economics	100
	BCA-403	Computer Graphics and Multimedia systems	100
	BCA-404	Data Base Management System	100
	BCA-405	Software Engineering	100
	BCA-406P	Graphics and Multimedia System Lab	50
	BCA-407P	Data Base Management System Lab	50
	BCA-408P	Software Engineering Lab	50
	BCA-GP	General Proficiency	50
		OLD SYLLABUS	
SEMESTER-5	BCA-S301T	INTRODUCTION TO DBMS	100
	BCA-S302T	JAVA PROGRAMMING AND DYNAMIC WEBPAGE DESIGN	100
	BCA-S303	DATA COMMUNICATION & COMPUTER NETWORK	100
	BCA-S304	NUMERICAL METHODS	100
	BCA-S305	MINOR PROJECT	100
	BCA-S306	VIVA-VOICE ON SUMMER TRAINING	100
	BCA-S301P	COMPUTER LABORATORY AND PRACTICAL WORK OF DBMS	100
		COMPUTER LABORATORY AND PRACTICAL WORK OF JAVA PROGRAMMING & DYNAMIC WEBPAGE DESIGN	100
SEMESTER-6	BCA-S307	COMPUTER NETWORK SECURITY AND MANAGEMENT	100
	BCA-S308	INFORMATION SYSTEM: ANALYSIS DESIGN & IMPLEMENTATION	100
	BCA-S309	E-COMMERCE	100
	BCA-S310	KNOWLEDGE MANAGEMENT	100
	BCA-S311	MAJOR PROJECT	100
	BCA-S312	PRESENTATION/SEMINAR BASED ON MAJOR PROJECT	100

COURSE OUTCOMES (COs)

SEMESTER I

THEORY
ESSENTIAL OF PROFESSIONAL COMMUNICATION:
BCA-101

➢ Students shall be able to understand and communicate English when it is spoken in various contexts and modify language to convey ideas to the audience clearly and concisely.

➢ Students shall be able to speak intelligibly using appropriate word stress, sentence stress and elementary intonation patterns.

➢ Students shall be able to write well-presented business document in the required format (Reports, Proposal, Business Letter, Basic E-mail etiquettes).

➢ Students shall locate direct information with associative comprehension and convey ideas accurately with aspects of grammar and vocabulary.

THEORY
PRINCIPLE OF MANAGEMENT:
BCA-102

➢ The students will be able to identify, analyze and express one's own stance on social responsibility and ethics of business circumstances.

➢ The students will be able to cogitate on evolution, functions and principles of Management, and comprehensively grasp managers' tasks such as planning, decision-making, directing, negotiating and problem-solving.

➢ The students will be able to develop cognizance of the importance of human behavior and analyze the complexities associated with management of the group behavior in the organization.

➢ The students will be able to understand the traits, dimensions, and styles of effective leaders and, the relationship between strategic, tactical, and operational plans for effective Management.

THEORY

MATHEMATICS:

BCA-103

- ➢ Demonstrate competency in the areas that comprise the core of the mathematics major.
- ➢ Demonstrate the ability to understand and write mathematical proofs.
- ➢ Be able to use appropriate technologies to solve mathematical problems.
- ➢ Be able to construct appropriate mathematical models to solve a variety of practical problems.
- ➢ Obtain a full-time position in a related field or placement.

THEORY

COMPUTER FUNDAMENTAL & PROGRAMMING IN C:

BCA-104

Upon successful completion of this course, students will be able to understand

- ➢ Block diagram/components & Characteristics of Computer along with its generations.
- ➢ Various types of input & output devices
- ➢ number system along with their mutual conversion
- ➢ classification of computer language & concepts of language translator
- ➢ the basic terminology used in computer programming
- ➢ Understands the basic concepts of algorithm, flowchart, constant, variables, and data type, operators, & expression & be able to design & solve complex problems.
- ➢ Write, compile and debug programs in C language.
- ➢ Exercise different user defined data types to solve problems.
- ➢ Design programs involving decision structures, loops and functions.
- ➢ Study thoroughly the arrays, character arrays & strings
- ➢ Learn & write programs using predefined & user defined functions for breaking a problems into logical modules that can be solved structures, unions & pointers for solving computational problems.
- ➢ Explain the difference between call by value and call by reference
- ➢ Understand the dynamics of memory by the use of pointers and Structures.

2.6.1 Teachers and students are aware of the stated programme and course outcomes of the programmes offered by the institution.

THEORY

FUNDAMENTAL OF ENVIORNMENTAL SCIENCES:

BCA-105

- ➢ Appreciate concepts and methods from ecological and physical sciences and their application in environmental problem solving. Ecosystem Links between environmental components and their role.
- ➢ Basic Structure of atmosphere and their functions Current problems related issues Students will apply knowledge of the sciences within an interdisciplinary context in solving environmental issues such as environmental health, food and agriculture, energy, waste and pollution, climate change, management, and loss of biodiversity.
- ➢ Basic knowledge about water recourses, current problems related issues, water borne diseases, technologies of water treatment.
- ➢ Level of sound and their units, sources and effects of noise pollution, control measures.
- ➢ Concept of non-Conventional energy resources, types and various applications of renewable resources and current potentials of energy resources.

PRACTICAL

COMPUTER APPLICATION LAB:

BCA-106P

- ➢ To understand the concept of program and its development procedure.
- ➢ To understand the concept of algorithms and Flowcharts for solving problems
- ➢ To understand the use of the C programming language to implement various algorithms, and develops the basic concepts and terminology of programming in general.
- ➢ Introduces the more advanced features of the C language

PRACTICAL

PROGRAMMING IN C LAB:

BCA-107P

- ➢ Recognize and understand the syntax and construction of C programming code

- ➢ Know the steps involved in compiling, linking and debugging C code.
- ➢ Write the C code for a given algorithm.
- ➢ Understand using header files
- ➢ Acquire logical thinking, Implement the algorithms and analyze their complexity, Identify the correct and efficient ways of solving problems
- ➢ Read, understand and trace the execution of programs written in C language.
- ➢ Learn the methods of iteration or looping and branching
- ➢ Implement Programs with pointers and arrays, perform pointer arithmetic, and use the pre-processor.
- ➢ Develop conditional &iterative statements to write C program
- ➢ Understand proper use of user defined functions
- ➢ Implement real time applications using the power of C language features.

PRACTICAL
PROFESSIONAL COMMUNICATION LAB:
BCA-108P

- ➢ To learn the basics of English grammar
- ➢ To learn to create sentences in English and basic techniques for appearing the GD and Interviews.
- ➢ To learn basics of letter writing
- ➢ To learn to write different types of applications and report writing techniques.

SEMESTER II

THEORY
MATHEMATICS-II:
BCA-201

- ➢ Demonstrate competency in the areas that comprise the core of the mathematics major.
- ➢ Demonstrate the ability to understand and write mathematical proofs.
- ➢ Be able to use appropriate technologies to solve mathematical problems.
- ➢ Be able to construct appropriate mathematical models to solve a variety of practical problems.
- ➢ . Obtain a full-time position in a related field or placement.

THEORY

2.6.1 Teachers and students are aware of the stated programme and course outcomes of the programmes offered by the institution.

ADVANCED PROFESSIONAL COMMUNICATION:

BCA-202

- ➢ 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.

- ➢ Presentation skills training courses provide strategies to plan, structure and deliver powerful presentations. Learn how to structure presentations in order to deliver effective messages as well as receive the coaching to dramatically improve your personal presentation. This specific program is one of the leading presentation skills training courses developed to help people engage audiences.

- ➢ A group discussion among students is being organized to see and evaluate their thinking skills, listening abilities and how they are communicating their thoughts. One should learn to control the conversation through listening attentively and then having the perseverance to mould it towards his/her own direction.

- ➢ Develop, exhibit and accurate sense of self and nurture a deep understanding of personal motivation. Develop an understanding of and practice personal and professional responsibility.

- ➢ To practice and develop writing processes pertaining to invention, revision, organization, drafting through multiple drafts, editing, and adjusting for rhetorical context (purpose, audience, persona). To 4 discuss and share writing and reading with one another and develop a shared vocabulary for talking about writing.

THEORY

DIGITAL ELECTRONICS AND COMPUTER ORGANIZATION:

BCA-203

- ➢ Convert different type of codes and number systems which are used in digital transmission and computer systems.

- ➢ Apply the codes and number systems converting circuits and Compare different types of logic families which are the basic unit of different types of logic gates in the domain of economy, performance and efficiency.
- ➢ Analyze different types of digital electronic circuit using various mapping and logical tools and know the techniques to prepare the most simplified circuit using various mapping and mathematical methods.
- ➢ Design different types of with and without memory element digital electronic circuits for particular operation, within the real time of economic, performance, efficiency, user friendly and environmental constraints.
- ➢ Assess the nomenclature and technology in the area of various memory devices used and apply the memory devices in different types of digital circuits for real world application.

THEORY
DATA STRUCTURE USING C:
BCA-204

- ➢ Understand the concept of Dynamic memory management, data types, algorithms, Big O notation. Understand basic data structures such as arrays .Link List its types & various operations that can be performed on link list. Students will be able to understand array&Linked list implementation of stacks and queues. Basic operation of Stack & queue. Analysis of recursive Algorithms& their types.
- ➢ Concept of tree its terminology, various tree representation techniques. Implementation of Tree traversal. Binary Search Trees Balanced Search Trees: AVL, RBT, Splay-Heaps: Binary heap. Various type of searching techniques. Apply Algorithm for solving problems like sorting, searching, insertion and deletion of data. Describe the hash function and concepts of collision and its resolution methods. Representation –Graph & its types, Adjacency & Incidence matrix. Spanning Tree, Minimum cost spanning tree. Graph Traversal algorithm. Shortest path algorithms: Unweight shortest path, Dijikstra's algorithm. Solve problem involving graphs, trees and heaps.

2.6.1 Teachers and students are aware of the stated programme and course outcomes of the programmes offered by the institution.

THEORY

ACCOUNTING AND FINANCIAL MANAGEMENT:

BCA-205

- ➢ Demonstrate the role of accounting in business in economic world.
- ➢ Explain the principles of accounting and book keeping.
- ➢ Apply accounting rules in determining financial results and preparation of financial statement.
- ➢ Rectify errors caused during preparation of Final accounts.
- ➢ Use software in preparation of Financial Statements.

PRACTICAL

ADVANCE PROFESSIONAL COMMUNICATION LAB:

BCA-206P

- ➢ Comprehend conversations and speeches.
- ➢ Speak with clarity and confidence, thereby enhancing their employability skills.
- ➢ Identify his/her creative self, and express effectively the same in writing.
- ➢ Explain the advantages of teamwork and how the tasks could be completed effectively when done as a cohesive unit.
- ➢ Realize that selecting goal is a fundamental component to long-term success of an individual.
- ➢ Enable students to understand different aspects of leadership and evaluate in their own strengths.
- ➢ Be more organized and disciplined.

PRACTICAL

DATA STRUCTURE LAB:

BCA-207P

- ➢ Be able to design and analyze the time and space efficiency of the data structure.
- ➢ Be capable to identity the appropriate data structure for given problem.
- ➢ Have practical knowledge on the applications of data structures.

PRACTICAL

DIGITAL ELECTRONICS AND COMPUTER ORGANIZATION LAB: BCA-208P

➢ Understand the computer structure with its components, instruction cycle and interrupts.

➢ Recognize the internal and external memory with its characteristics and different models.

➢ Understand the I/O modules, I/O channels and processes. Understand the DMA concept.

➢ Study advanced architecture of system with parallel processing models and RISC and CISC.

SEMESTER III

THEORY

COMPUTER BASED NUMERICAL AND STATISTICAL TECHNIQUES: BCA-301

➢ On completion of Course the student will be able to getFamiliar with calculation and interpretation of errors in numerical method. The numerical methods to find out solution of transcendental & algebraic equations using different methods under different conditions. Methods to find solution of simultaneous equations by various methods

➢ On completion of Course the student will be able to getunderstands the concepts of finite differences. Gains knowledge about to interpolation for equal & unequal intervals .Relationship between different operators.

➢ On completion of Course the student will be able to getnumerical Integration by trapezoidal & Simpson's rule. Distinguish methods of Taylor series, Euler's, Modified Euler's and RungeKutta methods to find solutions of differential equations.

➢ On completion of Course the student will be able to get various methods involved for Testing the hypothesis

THEORY

OBJECT ORIENTED PROGRAMMING USING JAVA:

BCA-302

➢ Upon completion of this course, students should be able to understanding of the principles and practice of object oriented analysis and design in the construction of robust, maintainable programs which satisfy their requirements. The concept of OOP as well as the purpose and usage principles of inheritance, polymorphism, encapsulation and method overloading.

➢ Upon completion of this course, students should be able to identify classes, objects, members of a class and the relationships among them needed for a specific problem.

➢ Able to use class and proper class protection mechanism to provide security.

➢ Ability to implement, compile, test and run Java programs comprising more than one class, to address a particular software problem.

➢ Demonstrate the ability to use simple data structures like arrays in a Java program. To demonstrate the ability to understand and use Exception handling and file handling mechanism. Arrange the concrete and abstract classes in an appropriate hierarchy.

➢ Explain the fundamental concepts and features of Java Programming language. Use and create Packages and Interfaces in a Java program Implements the Multithreading concepts

THEORY

OPERATING SYSTEM:

BCA-303

➢ Understand the basic working process of an operating system.

➢ Understand the importance of process and scheduling.

➢ Understand the issues in synchronization and memory management.

THEORY

MANAGEMENT INFORMATION SYSTEM:

BCA-304

➢ Students would be able to understand the usage of MIS in organizations and the constituents of the MIS.

➢ The student would understand the classifications of MIS, understanding of functional MIS and the different functionalities of these MIS. This would be followed by case study on Knowledge management.

➢ This module leads to linking MIS to business strategy and the areas in which MIS would lead to strategic advantage. This would be followed by case study and guest lecture.

➢ The student learns the functions and issues at each stage of system development. Further different ways in which systems can be developed are also learnt.

➢ This module provides understanding about emerging MIS technologies like ERP, CRM, SCM and trends in enterprise applications.

THEORY
COMPUTER ARCHITECTURE:
BCA-305

➢ The student should understand the major architectural styles and appreciate the compromises that they encapsulate.

➢ They should be able to read outline descriptions of real processors and understand in which way their designs fit into the frameworks described in the course.

➢ They should also be able to understand the impact of design choices in programming in the context of a specific architecture.

PRACTICAL
COMPUTER BASED NUMERICAL AND STATISTICAL TECHNIQUE LAB:
BCA-306P

➢ Modeling a system or situation (using technology, if appropriate) in order to solve the problems using multiple approaches.

➢ Implementing the logic for finding the roots of transcendental equation using C Language.

➢ Implementing the logic for developing the C program for equal & unequal Interpolation methods.

➢ Implementing the logic for numerical Integration in C language

➢ Judge if the results are reasonable, and then interpret and clearly communicate the results

PRACTICAL

OBJECT ORIENTED PROGRAMMING JAWA LAB:

BCA-307P

- ➢ Implement Object Oriented programming concepts using basic syntaxes of control Structures, strings and function for developing skills of logic building activity.
- ➢ Identify classes, objects, members of a class and the relationships among them needed for a finding the solution to specific problem**.**
- ➢ Demonstrates how to achieve reusability using inheritance, interfaces and packages and describes faster application development can be achieved.
- ➢ Demonstrate understanding and use of different exception handling mechanisms and concept of multithreading for robust faster and efficient application development.

PRACTICAL

OPRATING SYSTEM LAB:

BCA-308P

- ➢ To make students able to implement CPU scheduling algorithms (like FCFS, RR, SJF, Priority) and Bankers algorithm used for deadlock avoidance and prevention.
- ➢ Students will also be able to implement page replacement (like FIFO, LRU, and Optimal) and memory management algorithms (like Sequential, Indexed, Linked File Allocation and Paging Memory Technique).

SEMESTER IV

THEORY

DISCRETE MATHEMATICS:

BCA-401

- ➢ Be able to reason at multiple levels of detail and abstraction, being aware, in particular, of the applicability and limitations of tools from mathematics and theoretical computer science.
- ➢ Recognize the context in which a computer system may function, including its interactions with people and the physical world.
- ➢ Able to communicate with, and learn from, experts from different domains throughout their careers.

➢ Possess a solid foundation that allows and encourages them to maintain relevant skills as the field evolves.

➢ To be able to manage their own career development and advancement.

➢ Manage their own learning and development, including managing time, priorities, and progress.

➢ Have developed interpersonal communication skills as part of their project experience.

➢ Work effectively both individually and as members of teams.

➢ Make effective presentations to a wide range of audiences about technical problems and their solutions.

➢ Encompass an appreciation of the interplay between theory and practice.

THEORY
BUSINESS ECONOMICS:
BCA-402

➢ Develop an understanding of the applications of managerial economics.

➢ Interpret regression analysis and discuss why it's employed in decision-making.

➢ Discuss optimization and utility including consumer behaviour.

➢ Assess the relationships between short-run and long-run costs.

➢ Analyze perfectly competitive markets including substitution.

➢ Explain uniform pricing and how it relates to price discrimination and total revenue.

THEORY
COMPUTER GRAPHICS AND MULTIMIDIA SYSTEMS:
BCA-403

➢ Students will demonstrate an understanding of contemporary graphics hardware.

➢ Students will create interactive graphics applications in C++ using one or more graphics.

➢ Students will create interactive graphics applications in C++ using one or more graphics application programming interfaces.

➢ Students will write program functions to implement graphics primitives.

➢ Students will write programs that demonstrate geometrical transformations.

2.6.1 Teachers and students are aware of the stated programme and course outcomes of the programmes offered by the institution.

THEORY
DATA BASE MANAGEMENT SYSTEM:
BCA-404

- Understand, appreciate and effectively explain the underlying concepts of database Technologies.
- Design and implement a database schema for a given problem-domain.
- Normalize a database and Populate and query a database using SQL DML/DDL commands.
- Declare and enforce integrity constraints on a database.
- Concept of transaction and concurrency.

THEORY
SOFTWARE ENGINEERING:
BCA-405

- Understand the importance of the stages in the software life cycle.
- Understand the various process models.
- Be able to design software by applying the software engineering principles.

PRACTICAL
GRAPHICS AND MULTI MEDIA SYSTEM LAB:
BCA-406P

- To develop the programs for computer graphics using C language.
- Demonstrate simple 2D animations using animation software (Like Dreamweaver 8.0, Flash Player 8.0)
- Prepare simple scenes using image editing software. (like Photoshop)

PRACTICAL
DBMS LAB:
BCA-407P

- Demonstrate an understanding of the relational data model.
- Transform an information model into a relational database schema and to use a data definition language and/or utilities to implement the schema using a DBMS.

➤ Formulate, using relational algebra, solutions to a broad range of query problems.
➤ Formulate, using SQL, solutions to a broad range of query and data update problems.

PRACTICAL
SOFTWARE ENGINEERING LAB:
BCA-408P

➤ Create models for software applications.
➤ Use the different UML notations for designing software.

SEMESTER V

THEORY
INTRODUCTION TO DBMS:
BCA-S301T

➤ Identify the basic concepts and various data model used in database design ER modeling concepts and architecture use and design queries using SQL.
➤ Apply relational database theory and be able to describe relational algebra expression, tuple and domain relation expression fro queries.
➤ Recognize and identify the use of normalization and functional dependency, indexing and hashing technique used in database design.
➤ Recognize/ identify the purpose of query processing and optimization and also demonstrate the basic of query evaluation.
➤ Apply and relate the concept of transaction, concurrency control and recovery in database.

THEORY
JAVA PROGRAMMING AND DYNAMIC WEBPAGE DESIGN:
BCA-S302T

➤ Learn basic concepts Java Programming Language.
➤ Acquire knowledge of control structures.
➤ Familiarize in Java Programming.
➤ Create wide range of Applications and Applets using Java.

➢ Ability to work with I/O Streams

THEORY
DATA COMMUNICATION & COMPUTER NETWORK:
BCA-S303

➢ Understand the overview of networks OSI model and Physical Layer.
➢ Obtain the knowledge about error deduction and correction in Data Link Layer.
➢ Obtain the knowledge about packet switching network and addressing in Network Layer.
➢ Acquire the knowledge about TCP in Transport Layer.
➢ Ability to understand client/Server programming, WWW and Email using Application Layer.

THEORY
NUMERICAL METHODS
BCA-S304

➢ This course is an introduction to a broad range of numerical methods for solving mathematical problems that arise in Science and Engineering.
➢ The goal is to provide a basic understanding of the derivation, analysis, and use of these numerical methods, along with a rudimentary understanding of finite precision arithmetic and the conditioning and stability of the various problems and methods.
➢ This will help you choose, develop and apply the appropriate numerical techniques for your problem, interpret the results, and assess accuracy.
➢ The problems cover (i) systems of linear equations, linear least squares problems, and eigenvalue calculation; (ii) interpolation, approximation, and integration of functions; (iii) initial values problems governed by ordinary differential equations; (iv) nonlinear scalar equations.
➢ Such methods include techniques for simple optimization, interpolation from the known to the unknown, linear algebra underlying systems of equations, ordinary differential equations to simulate systems, and stochastic simulation under random influences.

2.6.1 Teachers and students are aware of the stated programme and course outcomes of the programmes offered by the institution.

THEORY
MINOR PROJECT:
BCA-S305

 ➤ Understanding of how practices impact on different selected groups of students (potential withdrawers; actual withdrawers; disabled students; low participation and ethnic minority groups).
 ➤ Recommendations and model of practice for institution and sector.
 ➤ Student tool to aid identification, articulation and measurement of activities that contribute to Belonging and Intimacy.
 ➤ Longitudinal view of the student experience from 1st to final year including key decision-making episodes.
 ➤ Integrated data set related to retention and methodology for continued analysis.

THEORY
VIVA-VOCE ON SUMMER TRAINING:
BCA-S306

 ➤ To offer the opportunity for the young students to acquire on job the skills, knowledge, attitudes, and perceptions along with the experience needed to constitute a professional identity.
 ➤ To provide means to immerse students in actual supervised professional experiences.
 ➤ To give an insight into the working of the real organizations.
 ➤ To appreciate the linkages among different functions and departments.
 ➤ To develop perspective about business organizations in their totality.

PRACTICAL
COMPUTER LABORATORY AND PRACTICAL WORK OF DBMS:
BCA-S301P

 ➤ Design and implement a database schema for given problem.
 ➤ Capable to design and build a GUI application.
 ➤ Apply the normalization techniques for development of application software to realistic problems.
 ➤ Formulate queries using SQL, DML/DDL/DCL commands.

➤ To design and build a simple database system and demonstrate competence with the fundamental tasks involved with modeling, designing, and implementing a DBMS.

PRACTICAL

COMPUTER LABORATORY AND PRACTICAL WORK OF JAVA PROGRAMMING & DYNAMIC WEBPAGE DESIGN:

BCA-S301P

➤ Identify classes, objects, members of a class and relationships among them needed for a specific problem.

➤ Write Java application programs using OOP principles and proper program structuring.

➤ Demonstrate the concepts of polymorphism and inheritance .

➤ Write Java programs to implement error handling techniques using exception handling.

➤ Gain knowledge about basic Java language syntax and semantics to write Java programs and use concepts such as variables, conditional and iterative execution methods etc.

SEMESTER VI

THEORY

COMPUTER NETWORK SECURITY AND MANAGEMENT:

BCA-S307

➤ Students will be able to identify some of the factors driving the need for network security.

➤ Students can identify and classify particular examples of attacks.

➤ Students will able define the terms vulnerability, threat and attack.

➤ They may identify physical points of vulnerability in simple networks.

➤ Students can compare and contrast symmetric and asymmetric encryption systems and their vulnerability to attack, and explain the characteristics of hybrid systems.

THEORY

INFORMATION SYSTEM: ANALYSIS DESIGN &IMPLEMENTATION:

BCA-S308

- ➢ Students will be able to understand basic terms used in information system.
- ➢ To write a C Programme for a given algorithm.
- ➢ To use different data structures and update basic data files.
- ➢ To trace out the error and resolve it using debugging and develop logical and analytical thinking.

THEORY

E-COMMERCE:

BCA-S309

- ➢ To understand the Concept of E-commerce and Business Strategy in Electronic Age and different models of E-Commerce.
- ➢ Administer and Maintain B2B E-Business sites.
- ➢ Understand the Internet Architecture and Electronic Payment System.
- ➢ Demonstrate the knowledge of Legal and Regulatory policy issues in E-commerce.
- ➢ Determine the protection methods from public policy issues.
- ➢ Evaluate E-commerce models and identify the requirements for starting up and operating E-business sites.

THEORY

KNOWLEDGE MANAGEMENT:

BCA-S310

- ➢ Remember different knowledge management concepts.
- ➢ Create an understanding of data mining and knowledge discovery.
- ➢ Understand the use of one of the approaches of MIS i.e. Executive information system for developing the strategic information in an organization.
- ➢ Evaluate different approaches of MIS and take business decisions for different organizations.
- ➢ Analyze the relationship between information, tacit knowledge, explicit knowledge and organizational knowledge.

2.6.1 Teachers and students are aware of the stated programme and course outcomes of the programmes offered by the institution.

THEORY

MAJOR PROJECT:

BCA-S311

> ➢ It makes the student confident in designing an Online Project with advanced technologies of their choice.
> ➢ Students are trained to meet the requirements of the industry.
> ➢ Students will able to develop a project professionally.
> ➢ Students will be able to prepare a SRS report.
> ➢ To be able to develop good presentation skills.

LUCKNOW PUBLIC COLLEGE OF PROFESSIONAL STUDIES

(BACHELOR OF COMMERCE) B.COM

(SESSION 2019-2020)

(BACHELOR OF COMMERCE) B.COM

The objective of the B.Com. programme at the University of Lucknow is to familiarize students with principles and concepts in the discipline of Commerce. The student will gain in-depth knowledge of accounting, finance, business law, marketing, tax and costing. This program aims to provide students with specific knowledge and skills relevant to their career. The programme aims to make students aware of the new and emerging trends in the field of Commerce.

Programme Outcomes (PO):

This programme offers great career options and opportunities for students by providing them with relevant core and specific knowledge skills in the discipline of Commerce.

➢ This programme would provide qualified graduates to the corporate sector, banking sector, insurance sector, financing service sector to meet their employment requirements.
➢ Students can gain specialization in the field of Accounting, Cost Accounting, Finance and Taxation and acquire application-oriented skills.
➢ Students can independently initiate their own businesses as well as avail of self-employment opportunities.
➢ This programme imparts skills to students to sharpen their decisions making abilities both at personal & professional level.
➢ Students will gain thorough knowledge in the field of finance and commerce and stand out in any organization. Students will develop an attitude for working efficiently and effectively in the business environment.

Program Specific Outcomes (PSO):

After completion of the course the students will acquire an in-depth understanding of the core and new disciplines of the commercial world.

➢ Students can become efficient managers in the field of Banking and Insurance.
➢ Students can acquire practical skills and take up jobs as Accountants, Management Accountants, Audit Assistants and Executives in multinational companies.

2.6.1 Teachers and students are aware of the stated programme and course outcomes of the programmes offered by the institution.

➢ After undergoing special training students may register to operate in the Stock markets.

➢ Students can excel in different professional exams like C.A., C.S., CMA& MBA.

➢ After clearing the requisite exam students can qualify for various Government jobs.

➢ After undergoing a specialized course, students can become Tax and Financial Consultants.

➢ Students can go for higher education and research in the field of finance and commerce.

2.6.1 Teachers and students are aware of the stated programme and course outcomes of the programmes offered by the institution.

COURSE	PAPER No	PAPER NAME	MARKS
		SYLLABUS	
B.COM I SEMESTER	101	FINANCIAL ACCOUNTING	100
	102	BUSINESS ORGANISATION	100
	103	MICRO ECONOMICS-CONCEPT, CONSUMPTION & PRODUCTION	100
	104	CURRENCY, BANKING AND EXCHANGE	100
	105	ESSENTIAL OF MANAGEMENT	100
	106	BUSINESS COMMUNICATION	100
B.COM II SEMESTER	201	COMPANY ACCOUNTS	100
	202	BUSINESS LAWS	100
	203	MICRO ECONOMICS -EXCHANGE & DISTRIBUTION	100
	204	BANKING OPERATIONS	100
	205	HUMAN BEHAVIOUR AT WORK	100
	206	CONCEPTS IN VALUATION	100
B.COM III SEMESTER	301	BUSINESS FINANCE	100
	302	PRINCIPLES AND PRACTICE OF MARKETING	100
	303	STATISTICAL METHODS	100
	304	PUBLIC FINANCE	100
	305	SELLING AND ADVERTISING	100
	306	INTRODUCTION OF INTERNATIONAL BUSINESS	100
B.COM IV SEMESTER	401	COST ACCOUTING	100
	402	CONTEMPORARY AUDIT	100
	403	FOREIGN TRADE OF INDIA	100
	404	EXPORT-IMPORT PROCEDURES & DOCUMENTATION	100
	405	MANAGING HUMAN RESOURCES	100
	406	INFORMATION SYSTEM & E-COMMERCE	100
B.COM 3 YEAR	PAPER-1	INSURANCE LAW & ACCOUNTS	100
	PAPER-2	INCOME TAX LAW & ACCOUNTS	100
	PAPER-3	CONTEMPORARY AUDIT	100
	PAPER-4	INDIAN ECONOMY STRUCTURE	100
	PAPER-5	TRADE OF INDIA	100
	PAPER-6	MACRO ECONOMICS	100
	PAPER-7	APPLIED & BUSINESS STATISTICS	100
	PAPER-8	MARKETING. PRACTICE & FINANCE	100

COURSE OUTCOMES (COs)

SEMESTER I

THEORY
FINANCIAL ACCOUNTING:
PAPER-01

- ➢ To understand the concept, meaning and definition of Accounting with current Accounting Principles, Accounting Concepts and Conventions and understand the meaning of Accounting Standards, IFRS and its use and future of IFRS in India.
- ➢ To understand the concept of income, revenue and capital expenditure, preparation of final accounts, Books of Non-profit making organisations and depreciation accounting.
- ➢ To understand the accounting of hire purchase system and instalment system, accounting of branch and lease accounting according to AS-19.
- ➢ To understand the Basics and accounting of Royalty Account, Insurance Account, Account and Voyage Account.

THEORY
BUSINESS ORGANISATION:
PAPER-02

- ➢ The students will be able to understand basics about business organization and its various forms.
- ➢ The students will be able to understand the social responsibility of business towards the various stakeholders.
- ➢ The students will be able to get knowledge about computation and fixation of remuneration of labour and incentive plans.
- ➢ The students will be able togain insight about features of stock exchanges, commodity exchanges and their working as well as regulation.
- ➢ The students will be able togain knowledge of the new pattern of business operations and organizations i.e., e-Business, LLP, OPC.

- The students will be able tounderstand the various elements of organization.
- The students will be able toacquaint themselves with the global changes in the business arena.

THEORY
MICRO ECONOMICS:
PAPER-03

- After studying all materials and resources presented in the course, the student will be able toexplain the role of scarcity, specialization, opportunity cost and cost/benefit analysis in economic decision-making.
- After studying all materials and resources presented in the course, the student will be able to identify the determinants of supply and demand; demonstrate the impact of shifts in both market supply and demand curves on equilibrium price and output.
- After studying all materials and resources presented in the course, the student will be able tosummarize the law of diminishing marginal utility; describe the process of utility maximization.
- After studying all materials and resources presented in the course, the student will be able tocalculate supply and demand elasticities, identify the determinants of price elasticity of demand and supply, and demonstrate the relationship between elasticity and total revenue.
- After studying all materials and resources presented in the course, the student will be able todescribe the production function and the Law of Diminishing Marginal Productivity; calculate and graph short-run and long-run costs of production.
- After studying all materials and resources presented in the course, the student will be able torelate to real world business scenario through study of various market forms.
- After studying all materials and resources presented in the course, the student will be able tostudy the factors affecting distribution of income through an analysis of various factor payments.
- After studying all materials and resources presented in the course, the student will be able togain in-depth insight and equip them to analyze the

real economic situations more effectively with the help of practical problems using elementary mathematics.

THEORY
CURRENCY, BANKING AND EXCHANGE:
PAPER-04

➢ After studying all materials and resources presented in the course, the student will be able tohave a sound theoretical base in various areas of banking and exchange.
➢ After studying all materials and resources presented in the course, the student will be able tounderstand the channel for flow of money in the economy.
➢ After studying all materials and resources presented in the course, the student will be able to analyses the role and importance of credit in the economy.
➢ After studying all materials and resources presented in the course, the student will be able toget the insight knowledge about exchange rate and exchange control.

THEORY
ESSENTIALS OF MANAGEMENT:
PAPER-05

➢ Upon successful completion of this course the students will be able tomap the evolution of 'Management' as a discipline and as a process that helps in the analysis of internal and external environment.
➢ Upon successful completion of this course the students will be able tounderstand of the various aspects of Planning and decision making, and of Authority and Responsibility in a formal organization
➢ Upon successful completion of this course the students will be able toorganize, motivate and lead in an organization
➢ Upon successful completion of this course the students will be able tounderstand Control functions and make simple applications.

2.6.1 Teachers and students are aware of the stated programme and course outcomes of the programmes offered by the institution.

THEORY
BUSINESS COMMUNICATION:
PAPER-06

➢ Through the study of this subject, students attempt to know about the importance of communication. Though a very simple word but communication is the life blood of the organization.

➢ The students are made aware of the modern technology used in communication and how useful it is to the business world.

➢ The students also get to know the art of writing applications and letters and in a way they get prepared to take on the business world.

SEMESTER II

THEORY
COMPANY ACCOUNTS:
PAPER-01

➢ The student will be able tounderstand the features and accounting treatment of Shares and Debentures.

➢ The student will be able toknowledge about accounting entries related to Redemption of Shares and Debentures.

➢ The student will be able toprepare of Company's Final Accounts.

➢ The student will be able toacquire knowledge of accounting procedure adopted during Amalgamation and Absorption of companies.

➢ The student will be able toacquire conceptual knowledge of Internal and External reconstruction of companies and their accounting treatment.

➢ The student will be able toknowledge regarding accounting treatment and procedure adopted at the time of winding up of companies.

2.6.1 Teachers and students are aware of the stated programme and course outcomes of the programmes offered by the institution.

THEORY
BUSINESS LAWS:
PAPER-02

➢ The students will be able to understand the nature and meaning of contracts, forms of contracts and essentials of a valid contract.
➢ The students will be able togain insight into various kinds of contract
➢ The students will be able togain in-depth knowledge of Sales of Goods Act and Negotiable Instruments Act.
➢ The students will be able tounderstanding the rights, duties and responsibilities as a vendor and as a consumer.
➢ The students will be able tohave knowledge of the fundamentals of Consumer Protection Act.
➢ The students will be able tokeep updated about the amendments in these laws and regulations.

THEORY
MICRO ECONOMICS-EXCHANGE AND DISTRIBUTION:
PAPER-03

➢ To teach about the concept of supply and factors affecting the supply and also teach regarding different types of market structure.
➢ Students will learn about elasticity of supply and perfect competition.
➢ Students will also be able to learn about the imperfect competition like monopoly, duopoly, oligopoly, and monopolistic competition.
➢ Students will also be made aware of factor pricing like wages, rent, interest and profit.

THEORY
BANKING OPERATIONS:
PAPER-04

➢ Demonstrate a comprehension of the principles of banking law and its relationship to banks and customers.

- Demonstrate an awareness of law and practice in a banking context.
- Engage in critical analysis of the practice of banking law from a range of perspectives.
- Organize information as it relates to the regulation of banking products and services.

THEORY
HUMAN BEHAVIOUR AT WORK:
PAPER-05

- Understanding human behavior in the organization is critical to the achievement of its goals and its long-term success. In this light, there is much to gain from studying organizational behavior (OB). Specifically, the study of organizational behavior can help to become an effective future manager.

THEORY
CONCEPTS IN VALUATION:
PAPER-06

- Role of Finance Function, define 'interest' distinguish between simple and compound interest and apply the formula to calculate compound interest. Techniques, practical applications of Compounding and Present Value Techniques.
- The difference between a compound amount and an annuity. Compute the future value of an ordinary annuity by using the formula or the table for annuities.
- Characteristics of fixed- income securities, interpreting financial market data, including stock and bond price quotations. The value of a bond with a finite maturity date, the yield to maturity of a bond.
- Features of variable income securities. Difference between new issue market and capital market. Methods of selling securities. Study of dividend model- zero growth models, non- constant growth dividend valuation model.

SEMESTER III

THEORY
BUSINESS FINANCE:
PAPER-01

➢ Students are introduced to the concept Business Finance, its functions and role of finance manager. The concept of capital structure planning and factors influencing capital structure are learnt.

➢ Also, various theories of capital structure and leverage concept are dealt with. Students learn about the cost of capital and equity and also about preference capital cost and cost of debt. Retained earnings are also introduced to the students.

➢ Students learn about the dividend policies and factors affecting dividend payment. Also, provision of company law on dividend payment and concepts of bonus issue and rights share are demonstrated.

➢ The concept of working capital is learnt along with the factors influencing working capital and the determinants to calculate working capital.

THEORY
PRINCIPLES AND PRACTICE OF MARKETING:
PAPER-02

➢ The students will be able tohave knowledge about marketing and its functions.

➢ The students will be able tounderstand what is a product, its classifications and product life cycle

➢ The students will be able togain knowledge about the mechanism of price determination of a product in various markets.

➢ The students will be able tounderstand the need and significance of distribution channels

➢ The students will be able togain insight of the concept of advertising and how it affects the buying habits of a consumer.

➢ The students will be able tounderstand and trap the psyche of consumer in order to market a product

THEORY
STATISTICAL METHODS:
PAPER-03

➢ Upon successful completion of this course, students will be able to:
➢ Calculate and interpret the correlation between two variables.
➢ Calculate the simple linear regression equation for a set of data.
➢ Employee the principles of linear regression and correlation, including least square method, predicting a particular value of Y for a given value of X and significance of the correlation coefficient.
➢ Know the association between the attributes.
➢ Know the construction of point and interval estimators.
➢ Evaluate the properties of estimators.

THEORY
PUBLIC FINANCE:
PAPER-04

➢ Will be taught regarding revenue, expenditure and taxation system in INDIA.
➢ Will learn about maximum social advantage theory.
➢ Students will understand the concept of public expenditure.
➢ Will understand the concept of taxation.
➢ Will know about fiscal federalism.

THEORY
SELLING AND ADVERTISING:
PAPER-05

➢ To understand the concept, role and importance of selling and salesperson.
➢ To understand the selling process and methods to motivate and remunerate salespersons.

➢ To understand advertising and its various aspects and the process of Advertising Design.
➢ To know about Advertising Media, its Planning and Effectiveness.

THEORY
INTRODUCTION OF INTERNATIONAL BUSINESS:
PAPER-06

➢ Understand the advantages and disadvantages of international business. Concept of MNC and TNC.
➢ Understand the role of WTO in world trade. Understand the benefits of economic integration and meaning of trade creation and diversion.
➢ Understand the Major Regional Trade Agreements and its benefit (like European Union, SAARC, NAFTA, ASEAN, SAFTA, and BRICS.
➢ Understand the different form of financial institutions like IMF and WORLD BANK. Understand the different form of foreign investment. Understand the role and benefits of EPZs, SEZs.

SEMESTER IV

THEORY
COST ACCOUNTING:
PAPER-01

➢ Understand various costing systems and management systems Analyze and provide recommendations to improve the operations of organizations through the application of Cost and Management accounting techniques
➢ Evaluate the costs and benefits of different conventional and contemporary costing systems Differentiate methods of schedule costs as per unit of production Differentiate methods of calculating stock consumption
➢ Identify the specifics of different costing methods Analyze cost-volume-profit techniques to determine optimal managerial decisions.
➢ Apply cost accounting methods for both manufacturing and service industry.

2.6.1 Teachers and students are aware of the stated programme and course outcomes of the programmes offered by the institution.

THEORY
CONTEMPORARY AUDIT:
PAPER-02

- Through the study of this subject, the students are introduced to the importance of Auditing. They are made to understand the types of audit, process of audit and audit programs.
- The students understand the Vouching and verification of assets and liabilities. They come to know about the appointment, powers, duties and liabilities of the company auditor.
- The students also understand Accounting Standards, special audit of banking companies, educational institutions, insurance companies and non- profit Organizations.

THEORY
FOREIGN TRADE OF INDIA:
PAPER-03

- In this paper students' knowledge regarding India's foreign trade will be upgraded.
- They will be taught about the concept of trade- national and international.
- They will also be made aware regarding the problems faced by India during international trade.
- Historical background of foreign trade of India will also be taught to the students. Role of WTO, GATT, and UNCTAD etc. in foreign trade of India will be explored by the students.
- Corrective measures to improve international trade will also be studied so that BOP of the country can be increased.

THEORY
EXPORT-IMPORT PROCEDURES AND DOCUMENTATION:
PAPER-04
- Understand the benefits of foreign trade, balance of payment and foreign trade policy of India.

- Understand the documentation process of foreign trade. Understand the policy framework of export and import. Understand how to minimise the risk involved in export and import with proper understanding of method of payment, insurance etc.
- Understand the export and import procedure of export and import.
- Understand the import documentation process and institutional support for foreign trade. Understand government policies which promote trade activity. Understand SEZ, EOU, FTZ EPZ & etc.

THEORY
MANAGING HUMAN RESOURCES:
PAPER-05

- To develop the understanding of the concept of human resource management and to understand and apply Human Resource Management. Ability to Draft HR planning. Ability to Design Job Description and Job Specifications.
- Ability to recruit Select and interview job candidates and to train them using various methods of training. Implement Management Development Techniques.
- Ability to appraise the Performance of the employees and apply the factors determining pay rates to implement Employee benefits and Welfare measures.
- Ability to implement the practices related to employee integration to implement methods of Industrial Democracy. Ability to implement participative management in organizations.

THEORY
INFORMATION SYSTEMS AND E-COMMERCE:
PAPER-06

- Students learn the basics of e-commerce in IT and business.
- Learnt about business to business and business to consumer relationship.
- To learn about different networking concepts and type of networks.

- Students learn about TCP/IP protocol and basic components of internet.
- Students learn about marketing strategies, marketing segments.
- Students learn to advertise on web and evaluate e-commerce technologies.
- Introduction to EDI, supply chain management.
- Students learn the advantages and disadvantages of online payments.
- Basic features of internet security policies, type of threat, computer security are covered.
- Learn to communicate effectively using electronics.

YEAR-3

THEORY
INSURANCE LAW AND ACCOUNTS:
PAPER-01

- Graduates will demonstrate knowledge of the legal and ethical environment impacting business organizations and exhibit an understanding and appreciation of the ethical implications of decisions.
- Graduates will demonstrate an understanding of and appreciation for the importance of the impact of globalization and diversity in modern organizations.
- Graduates will demonstrate an ability to engage in critical thinking by analyzing situations and constructing and selecting viable solutions to solve problems.
- Graduates will demonstrate an ability to work effectively with others.
- Graduates will demonstrate knowledge of current information, theories and models, and techniques and practices in all of the major business disciplines including the general areas of Accounting and Finance, Information Technologies, Management, Marketing, and Quantitative Analysis.

THEORY
INCOME TAX LAW AND ACCOUNTS:
PAPER-02
- Know about various basic concepts used in Income tax Act.

- Impart knowledge on the provisions of Income tax law and practice and make students Compute the assessment practices under the various heads of income.
- Enable students to develop experience in identifying tax issues and applying the income tax Law to arrive at reasoned solutions to problems.
- Described about the provisions of salary income, House property & business or profession and their computation.
- Exemplify professional judgments and advice on issues relating to tax payable by Individuals, and companies and other business structures in order to calculate an amount of tax payable or advice on a dispute that may alter the amount of tax payable.

THEORY
CONTEMPORARY AUDIT:
PAPER-03

- Acquire the basic knowledge of auditing, objectives of auditing, audit program, audit note book, working paper, voucher, vouching, verification, valuation, reserves & provisions, audit report & investigation.
- Understand the importance and limitations of the auditing, internal control, internal check and various modes of appointment of an auditor, qualities of an auditors, qualification and disqualification of an auditor, significance of vouching, causes & reasons for depreciation, reserves & provisions, objectives of investigation.
- Develop the application skills related to vouching of cash book, trading and impersonal ledger accounts, verification & valuation of assets and liabilities, responsibilities of an auditor while verification and valuation of assets & liabilities, reasons & usage of creating various reserves.
- Develop the analytical skills in conducting share capital and share transfer audit, Vouching Vs Verification Vs Valuation, provisions of companies act regarding investigation, contents and types of audit report, discussions of various case laws.
- Evaluate the methods of depreciation, Rights, duties & liabilities of an auditor, various types of auditing.

➢ Gain practical exposure in preparation of audit programme, audit report & procedures for conducting electronic auditing and acquire the jobs in auditor office.

THEORY
INDIAN ECONOMIC STRUCTURE:
PAPER-04

➢ The paper analyses important issues in Indian Economy and Public Finance in the context of the India's economic development. Given the predominance of working population and with children in the age group 0-14 constituting over 40 per cent of the population, government finance has a critical role not only in protecting life and property but also in creating physical infrastructure to expand economic activities to generate employment opportunities and in providing social infrastructure to empower them to get productively employed. The analysis public spending, however, shows that spending on education and healthcare is woefully inadequate and expenditures on interest payments, subsidies and transfers have crowded outspending on physical and social infrastructures.

THEORY
MARKETING, PRACTICE AND FINANCE:
PAPER-05

➢ Students are introduced to the basics of marketing management, market orientation, marketing mix, and functions of marketing management.
➢ Emerging issues in marketing like business ethics in marketing, cyber marketing, and green marketing are covered.
➢ Students learn about Product mix, product life cycle, its importance, pricing policies and methods to fix pricing.
➢ The students exhibit strong understanding of the need for segmentation in business and factors influencing the same. Also, niche marketing is introduced as a concept.

➢ Methods of sales promotion like advertising, salesmanship and ethics in this area are covered.

THEORY
MACRO- ECONOMICS:
PAPER-06

After completion of the course the students will be able to

➢ Define and explain the process of calculating national income, identify its components, demonstrate circular flow of income, analyze the various income identities with government and international trade, define the concept of green accounting
➢ Understand Say's law of market, classical theory of employment and Keynes objection to the classical theory; demonstrate the principle of effective demand and income determination.
➢ Explain the meaning of consumption function, relationship between APC and MPC, consumption and income, concept of multiplier and analyze the theories of absolute and relative income hypotheses.
➢ Understand the relationship between investment and savings, demonstrate investment multiplier, and understand the meaning of MEC and MEI.
➢ Illustrate the meaning of interest, analyze the various theories

THEORY
TRADE OF INDIA:
PAPER-Optional Paper
On completion of the course, students are able to
➢ To able to understand international trade theories.
➢ To able to understand gains from international trade & trade policy.
➢ To able to understand concept of BOP & BPT.
➢ To able to understand concept of exchange rates.

THEORY
APPLIED & BUSINESS STATISTICS:
PAPER-Optional Paper

- ➢ Upon successful completion of this course, students will be able to:
- ➢ Calculate and interpret the correlation between two variables.
- ➢ Calculate the simple linear regression equation for a set of data.
- ➢ Employee the principles of linear regression and correlation, including least square method, predicting a particular value of Y for a given value of X and significance of the correlation coefficient.
- ➢ Know the association between the attributes.
- ➢ Know the construction of point and interval estimators.
- ➢ Evaluate the properties of estimators.

THEORY
LAW AND PRACTICE OF BANKING:
PAPER-Optional Paper

- ➢ Acquire fundamental knowledge of the term Banker, Customer, Promissory note, Cheque, Pledge, Hypothecation.
- ➢ Understand the concepts of Banking, Relationship between a banker and a customer, Duties of a banker, crossing, marking and endorsing cheque.
- ➢ Develop the application skills of writing, crossing cheques, Opening a bank account, Using ATM, Debit Card and a Credit card.
- ➢ Analysis the different types of loans and advances available to a customer, the function of banking system and the recent development in Banking.
- ➢ Evaluate the duties of a banker, the recent trends in banking system.

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YEAR-3

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INSURANCE LAW AND ACCOUNTS:
PAPER-01

➢ Graduates will demonstrate knowledge of the legal and ethical environment impacting business organizations and exhibit an understanding and appreciation of the ethical implications of decisions.

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➢ Described about the provisions of salary income, House property & business or profession and their computation.

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THEORY
CONTEMPORARY AUDIT:
PAPER-03

➢ Acquire the basic knowledge of auditing, objectives of auditing, audit program, audit note book, working paper, voucher, vouching, verification, valuation, reserves & provisions, audit report & investigation.

➢ Understand the importance and limitations of the auditing, internal control, internal check, various modes of appointment of an auditor, qualities of an auditors, qualification and disqualification of an auditor, significance of vouching, causes & reasons for depreciation, reserves & provisions, objectives of investigation.

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➢ Develop the analytical skills in conducting share capital and share transfer audit, Vouching Vs Verification Vs Valuation, provisions of companies act regarding investigation, contents and types of audit report, discussions of various case laws.

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➢ Explain the meaning of consumption function, relationship between APC and MPC, consumption and income, concept of multiplier and analyze the theories of absolute and relative income hypotheses.

➢ Understand the relationship between investment and savings, demonstrate investment multiplier, and understand the meaning of MEC and MEI.

➢ Illustrate the meaning of interest, analyze the various theories

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- Develop the application skills of writing, crossing cheques, Opening a bank account, Using ATM, Debit Card and a Credit card.
- Analysis the different types of loans and advances available to a customer, the function of banking system and the recent development in Banking.
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LUCKNOW PUBLIC COLLEGE OF PROFESSIONAL STUDIES

BACHELOR OF COMMERCE B.COM (HONOURS)

(SESSION 2019-2020)

BACHELOR OF COMMERCE B.COM (HONOURS)

Programme Outcomes (PO):

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

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

➢ The all-inclusive outlook of the course offer a number of values based and job oriented courses ensures that students are trained into contemporary services. In advanced accounting courses beyond the introductory level, affective development will also progress to the valuing and organization levels.

Program Specific Outcomes (PSO):

➢ 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

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

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

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

➢ Learners will gain thorough systematic and subject skills within various disciplines of commerce, business, accounting, economics, finance, auditing and marketing.

➢ Learners will be able to recognize features and roles of businessmen, entrepreneur, managers, consultant, which will help learners to possess knowledge and other soft skills and to react aptly when confronted with critical decision making.

➢ Learners will be able to prove proficiency with the ability to engage in competitive exams like CA, CS, ICWA and other courses.

➢ Learners will acquire the skills like effective communication, decision making, problem solving in day to day business affaires

➢ Learners will involve in various co-curricular activities to demonstrate relevancy of foundational and theoretical knowledge of their academic major and to gain practical exposure.

➢ Learners can also acquire practical skills to work as tax consultant, audit assistant and other financial supporting services.

➢ Learners will be able to do higher education and advance research in the field of commerce and finance.

SYLLABUS (NEW)

	PAPER CODE	PAPER NAME	MARKS
SEMESTER-I	BCH-101	FINANCIAL ACCOUNTING	100
	BCH-102	FINANCIAL MATHEMATICS	100
	BCH-103	FOREIGN TRADE OF INDIA	100
	BCH-104	PRINCIPLES OF ECONOMICS	100
	BCH-105	ESSENTIALS OF MANAGEMENT	100
	BCH-106	INDIAN ECONOMY & PUBLIC FINANCE	100
SEMESTER-II	BCH-201	HUMAN RESOURCE MANAGEMENT	100
	BCH-202	BANKING OPERATIONS MANAGEMENT	100
	BCH-203	MANAGEMENT INFORMATION SYSTEM	100
	BCH-204	BUSINESS COMMUNICATION & OFFICE MANAGEMENT	100
	BCH-205	STATISTICAL METHODS	100
	BCH-206	BUSINESS ENVIRONMENT	100
	BCH-207	Comprehensive Viva- Voce	100
SEMESTER-III	BCH-301	COST ACCOUNTING	100
	BCH-302	BUSINESS LAWS	100
	BCH-303	OPERATIONS MANAGEMENT	100
	BCH-304	MARKETING MANAGEMENT	100

	BCH-305	INTERNATIONAL FINANCE	100
	BCH-306	BUSINESS ECONOMICS	100
SEMESTER-IV	BCH-401	MANAGEMENT ACCOUNTING	100
	BCH-402	ORGANIZATIONAL BEHAVIOUR	100
	BCH-403	COMPANY LAWS & SECRETARIAL PRACTICES	100
	BCH-404	OPERATIONS RESEARCH	100
	BCH-405	INCOME TAX LAW AND ACCOUNTS	100
	BCH-406	INTERNATIONAL BUSINESS	100
	BCH-407	Comprehensive Viva – Voce	100
		6 -8 WEEKS SUMMER INTERNSHIP	

SYLLABUS (OLD)

SEMESTER-V	BCH-501	MANAGEMENT ACCOUNTING	100
	BCH-502	FOREIGN TRADE PROCEDURES AND DOCUMENTATION	100
	BCH-503	INDUSTRIAL LAWS	100
	BCH-504	INSURANCE AND RISK MANAGEMENT	100
	BCH-505	ENTREPRENEURSHIP DEVELOPMENT	100
	BCH-506	BUSINESS FINANCE	100
SEMESTER-V			
	BCH-601	OPERATIONS RESEARCH	100
	BCH-602	BUSINESS POLICY	100
	BCH-603	TAX PLANNING AND MANAGEMENT	100
	BCH-604	MANAGEMENT INFORMATION SYSTEM	100
	BCH-605	AUDITING - PRINCIPLES & PRACTICE	100
	BCH-606	ORGANIZATIONAL BEHAVIOUR	100

COURSE OUTCOMES (COs)

SEMESTER I

THEORY
FINANCIAL ACCOUNTING:
BCH-101

➢ To understand the concept, meaning and definition of Accounting with current Accounting Principles, Accounting Concepts and Conventions and understand the meaning of Accounting Standards, IFRS and its use and future of IFRS in India.

➢ To understand the concept of income, revenue and capital expenditure, preparation of final accounts, Books of Non-profit making organisations and depreciation accounting.

➢ To understand the accounting of hire purchase system and instalment system, accounting of branch and lease accounting according to AS-19.

➢ To understand the Basics and accounting of Royalty Account, Insurance Account, Account and Voyage Account.

THEORY
FINANCIAL MATHEMATICS:
BCH-102

➢ At the end of the course, students should be able to understand basic mathematical concepts and techniques.

➢ At the end of the course, students should be able toapply basic mathematical concepts and techniques for solving business problems.

THEORY
FOREIGN TRADE OF INDIA:
BCH-103

➢ On completion of the course, students are ableto understand international trade theories.

➢ On completion of the course, students are able to understand gains from international trade & trade policy.

- ➢ On completion of the course, students are able to understand concept of BOP & BPT.
- ➢ On completion of the course, students are able to understand concept of exchange rates.

THEORY
PRINCIPLES OF ECONOMICS:
BCH-104

- ➢ On completion of the course, students are able tounderstand the definitions of economics. Understand the concept of utility.
- ➢ On completion of the course, students are able tounderstand the concept of demand analysis and elasticity. Understand the meaning and properties of indifference curve analysis.
- ➢ On completion of the course, students are able tounderstand the concept of production, cost and revenue. Understand the concept of market (perfect competition, monopoly & monopolistic competition).
- ➢ On completion of the course, students are able tounderstand the theory of distribution (rent, wages, interest, and profit).

THEORY
ESSENTIALS OF MANAGEMENT:
BCH-105

- ➢ Through the study of this subject, the students are introduced to the importance of Management. They learn about the evolution of management and its applicability in both professional and personal life.
- ➢ They are also made to understand the process and importance of planning, delegation, decentralization. They understand the role of Line and Staff and how is it useful at work. Students are introduced to different leadership styles and Motivation theories.

2.6.1 Teachers and students are aware of the stated programme and course outcomes of the programmes offered by the institution.

THEORY
INDIAN ECONOMY & PUBLIC FINANCE:
BCH-106

➢ The paper analyses important issues in Indian Economy and Public Finance in the context of the India's economic development. Given the predominance of working population and with children in the age group 0-14 constituting over 40 per cent of the population, government finance has a critical role not only in protecting life and property but also in creating physical infrastructure to expand economic activities to generate employment opportunities and in providing social infrastructure to empower them to get productively employed. The analysis public spending, however, shows that spending on education and healthcare is woefully inadequate and expenditures on interest payments, subsidies and transfers have crowded outspending on physical and social infrastructures.

SEMESTER II

THEORY
HUMAN RESOURCE MANAGEMENT:
BCH-201

➢ To develop the understanding of the concept of human resource management and to understand and apply Human Resource Management. Ability to Draft HR planning. Ability to Design Job Description and Job Specifications.
➢ Ability to recruit Select and interview job candidates and to train them using various methods of training. Implement Management Development Techniques.
➢ Ability to appraise the Performance of the employees and apply the factors determining pay rates to implement Employee benefits and Welfare measures.

➢ Ability to implement the practices related to employee integration to implement methods of Industrial Democracy. Ability to implement participative management in organizations.

THEORY
BANKING OPERATIONS MANAGEMENT:
BCH-202

➢ To get acquainted with the changed role of banking post 1991 Reforms.
➢ To know the lending and borrowing rates along with the various mandatory reserves.
➢ To know the procedural compliances by bank's functionality.

THEORY
MANAGEMENT INFORMATION SYSTEM:
BCH-203

➢ Upon completion of this course, students will be able to Relate the basic concepts and technologies used in the field of management information systems.
➢ Upon completion of this course, students will be able tocompare the processes of developing and implementing information systems.
➢ Upon completion of this course, students will be able tooutline the role of the ethical, social, and security issues of information systems.
➢ Upon completion of this course, students will be able totranslate the role of information systems in organizations, the strategic management processes, with the implications for the management.
➢ Upon completion of this course, students will be able toapply the understanding of how various information systems like DBMS work together to accomplish the information objectives of an organization.

THEORY
BUSINESS COMMUNICATION & OFFICE MANAGEMENT:
BCH-204

➢ Students will be able to communicate their ideas through different modes and mediums.

➢ Students will be able to handle job opportunities successfully.

THEORY
STATISTICAL METHODS:
BCH-205

➢ Upon successful completion of this course, students will be able to calculate and interpret the correlation between two variables.

➢ Upon successful completion of this course, students will be able to calculate the simple linear regression equation for a set of data.

➢ Upon successful completion of this course, students will be able to employee the principles of linear regression and correlation, including least square method, predicting a particular value of Y for a given value of X and significance of the correlation coefficient.

➢ Upon successful completion of this course, students will be able to know the association between the attributes.

➢ Upon successful completion of this course, students will be able to know the construction of point and interval estimators.

➢ Upon successful completion of this course, students will be able to evaluate the properties of estimators.

THEORY
BUSINESS ENVIRONMENT:
BCH-206

➢ On completion of this course, learners will be able to familiarize with the nature of business environment and its components.

➢ On completion of this course, learners will be able tostudents will be able to demonstrate and develop conceptual framework of business environment and generate interest in international business.

➢ On completion of this course, learners will be able to understand the definition of ethics and the importance and role of ethical behavior in the business world today

SEMESTER III

THEORY
COST ACCOUNTING:
BCH-301

- ➢ To Understand the Introduction of Cost Accounting, Objective, Nature, Function, Difference between Accounting and Financial, classification of cost, understand the concept of material, labour, overheads, valuation of Inventory and losses and their treatment.
- ➢ To understand the theoretical and practical aspects of labour cost and overheads. Practical problems related with machine hour rates. How to prepare cost sheet, statement of cost and its application on tender price.
- ➢ To understand the concepts of contract costing and job costing with numerical problems. Different aspects and problems related with process costing. Real life problems and uses of operating costing. Concept and problems concern with activity based costing.
- ➢ Accounting for Managerial Decision- Fixation of Selling Price, Exploring new Market, Make or Buy, Product- Mix, Sales- Mix, Operate or Shut Down. To Understand the Concepts of Absorption Costing, Marginal Costing and Standard Costing and its Applications. To understand the basics of Responsibility Accounting and Applications of Responsibility Accounting. How to reconcile cost accounting outcomes with financial profit or loss. Theoretical concepts and real life uses of cost audit, cost control and cost reduction.

THEORY
BUSINESS LAWS:
BCH-302
- ➢ Students learn the legal aspects of general contract and special contracts.
- ➢ Basics of Indian contract Act, types of contracts, offer and acceptance are understood.
- ➢ Performance of contract and discharge of contract are covered.
- ➢ To understand the rights and duties of an agent and principal.
- ➢ Meaning of indemnity and guarantee, bailment and pledge, creation of Agency along with rights, duties and liabilities and Termination are covered.

➢ Sale of goods act including formation of contract of sale and rights of an unpaid seller are learnt.
➢ To enable the students to learn the contracts in day to day life for business and profession.

THEORY
OPERATIONS MANAGEMENT:
BCH-303

➢ They will aware about the functions of operations management.
➢ They will learn about the plant location: requisites of plant location and material handling.
➢ They will learn about methods of work measurement and production planning and control.
➢ They will learn about the techniques of inventory management, quality control and materials management.

THEORY
MARKETING MANAGEMENT:
BCH-304

➢ Students are introduced to the basics of marketing management, market orientation, marketing mix, and functions of marketing management.
➢ Emerging issues in marketing like business ethics in marketing, cyber marketing, and green marketing are covered.
➢ Students learn about Product mix, product life cycle, its importance, pricing policies and methods to fix pricing.
➢ The students exhibit strong understanding of the need for segmentation in business and factors influencing the same. Also, niche marketing is introduced as a concept.
➢ Methods of sales promotion like advertising, salesmanship and ethics in this area are covered.

THEORY
INTERNATIONAL FINANCE:
BCH-305

- ➢ International Finance is a monetary transaction that occurs between two or more countries. This sounds simple enough but in reality, transacting across national borders raises issues of currency exchange rates and the exploitation of developing economies. International finance is a way to analyze the economic status of the countries you may wish to do business with, judge the foreign markets, compare inflation rates and pay bills in a foreign currency. Without international finance, you would not be able to compare currency exchange to figure out the cost of doing business abroad.

THEORY
BUSINESS ECONOMICS:
BCH-306

- ➢ Students will learn how markets organize core economic activities, such as production, distribution, and consumption, and the growth of productive resources.
- ➢ Students will learn about the determinants of macroeconomic conditions (national output, employment, and inflation), causes of business cycles, and interactions of monetary and fiscal policy.
- ➢ Students will learn to apply economic theories and methodologies in analyzing economic issues in various sub-fields of applied microeconomics and international economics

SEMESTER IV

THEORY
MANAGEMENT ACCOUNTING:
BCH-401

- ➢ To apply managerial accounting and its objectives in a way that demonstrates a clear understanding of ethical responsibilities.
- ➢ To prepare various costing schedules where an analysis of cost classification, behaviour, and type is completed.

- ➢ To apply and analyse different types of activity-based management tools through the preparation of estimates.
- ➢ To analyse cost-volume-profit techniques to determine optimal managerial decisions.
- ➢ To prepare a master budget and demonstrate an understanding of the relationship between the components.
- ➢ To perform cost variance analysis and demonstrate the use of standard costs in flexible budgeting.
- ➢ To outline and apply management tools and techniques such as the balanced scorecard, operational performance measures, quality, and environmental cost management.
- ➢ To prepare analyses of various special decisions, using relevant costing and benefits.

THEORY
ORGANIZATIONAL BEHAVIOUR:
BCH-402

- ➢ Learners will be equipped with skills to analyze their personal reflections to impact their personal and professional lives Better understanding that people are important dimension of organizations which would lead to organizational effectiveness They will have basic understanding of human behavior at workplace and strategic role of HRM in making a learning organization. Learners will understand the HR dynamics of contemporary organizations in a changing environment. They will become adaptable to changes with conducive and diverse culture and know the best places to work.

THEORY
COMPANY LAWS & SECRETARIAL PRACTICES:
BCH-403

- ➢ To make the students understand about company law.
- ➢ To make the students understand about companies and its types.
- ➢ To equip the students with proper knowledge about secretarial duties regarding share market

➢ To provide knowledge about convening and conduct of shareholder's meetings
➢ To facilitate knowledge about qualification, appointment and duties of Directors
➢ To provide idea about winding up of companies and certificates required for formation of company.

THEORY
OPERATIONS RESEARCH:
BCH-404

➢ A complete understanding about various functions and disciplines of Operations Management. Incorporating various Japanese techniques in day to day working.

THEORY
INCOME TAX LAW AND ACCOUNTS:
BCH-405

➢ To Understand the Basic Concept of Income, Agricultural Income, Casual Income, and Residential Status with better understanding of basic terms of Income tax Act 1961,
➢ To understand the different Heads of the Income Tax and its Applications with different case studies.
➢ To understand the methods of computation of Total Income and Tax Liability of An Individual, HUF and Firm.
➢ To understand the concept of Deemed Income, Clubbing of Income, Set – off and Carry Forward of Losses.
➢ To Understand the Procedure of Assessment and the Structure of Income Tax Authorities with their Powers and Duties

THEORY
INTERNATIONAL BUSINESS:
BCH-406

➢ Identify the basic difference between inter-regional and international trade, understand how international trade has helped countries to acquire goods at cheaper cost and explain it through the various international trade theories.

- Show the benefits of international trade in a way how nations with strong international trade have become prosperous and have the power to control world economy and how global trade can be one of the major contributors of reducing poverty.
- Explain how restrictions to international trade would limit a nation in the services and goods produced within its territories and at the same time explain that a rise in international trade is essential for the growth of globalization.
- Show the importance of maintaining equilibrium in the balance of payments and suggests suitable measures to correct disequilibrium as well. Be aware of the changes in the composition as well as direction of foreign trade after international trade and know the causes and effects of deficits in the balance of payments, measures adopted to correct the deficits and identify the need for having trade reforms.

SEMESTER V

THEORY
MANAGEMENT ACCOUNTING:
BCH-501
Upon successful completion of this course students will be able to:

- Apply management accounting and its objectives in facilitating decision making.
- Apply and analyze different types of activity-based management tools through the preparation of estimates.
- Analyze cost-volume-profit techniques to determine optimal managerial decisions.
- Perform cost variance analysis and demonstrate the use of standard costs in flexible budgeting.
- Prepare analyses of various special decisions, using relevant management techniques.
- Calculate various accounting ratios, reports and relevant data.
- Prepare a master budget and demonstrate an understanding of the relationship between the components.

➢ Prepare Cash Flow and Funds Flow statements this helps in planning for intermediate and long-term finances.

THEORY
FOREIGN TRADE PROCEDURES AND DOCUMENTATION:
BCH-502

On completion of this course, the students will be able to:

➢ Explain the concepts in trade documentation in international business with respect to foreign trade.

➢ Apply the current business phenomenon and to evaluate the global business environment in terms of economic, social and legal aspects.

➢ Analyze the principle of international business and strategies adopted by firms to expand globally.

➢ Integrate concept in international business concepts with functioning of global trade.

THEORY
INDUSTRIAL LAWS:
BCH-503

➢ The successful completion of this course shall enable the student to understand the basics of the industrial relations and the parties involves in it.

➢ The successful completion of this course shall enable the student to understand the role and responsibility of trade union and their origin.

➢ The successful completion of this course shall enable the student to understand the negotiable rights and the way by which they can negotiate, to understand workers' participation in management.

➢ The successful completion of this course shall enable the student to understand the rules and regulation of the organization, grievance redressal, machinery and standing order ACT 1946.

➢ The successful completion of this course shall enable the student to understand the industrial dispute Act, 1947 and authorities under the Act.

2.6.1 Teachers and students are aware of the stated programme and course outcomes of the programmes offered by the institution.

THEORY
INSURANCE AND RISK MANAGEMENT:
BCH-504
On successful completion of the course students will be able to:
- Evaluate the growth and Development of Insurance Business.
- Understand the working and functioning of the Insurance Sector.
- Study the inter-relationship between Insurance & Risk Management.
- Analyze the Role of Insurance Business Intermediaries.
- Obtain an overview of Regulatory Framework of Insurance Sector.

THEORY
ENTREPRENEURSHIP DEVELOPMENT:
BCH-505

- Demonstrate a comprehension of the principles of banking law and its relationship to banks and customers.
- Demonstrate an awareness of law and practice in a banking context.
- Engage in critical analysis of the practice of banking law from a range of perspectives.
- Organize information as it relates to the regulation of banking products and services.

THEORY
BUSINESS FINANCE:
BCH-506
- Students are introduced to the concept Business Finance, its functions and role of finance manager. The concept of capital structure planning and factors influencing capital structure are learnt.
- Also, various theories of capital structure and leverage concept are dealt with. Students learn about the cost of capital and equity and also about preference capital cost and cost of debt. Retained earnings are also introduced to the students.

➢ Students learn about the dividend policies and factors affecting dividend payment. Also, provision of company law on dividend payment and concepts of bonus issue and rights share are demonstrated.

➢ The concept of working capital is learnt along with the factors influencing working capital and the determinants to calculate working capital.

THEORY
FOREIGN LANGUAGE (FRENCH):
BCHNC-507

➢ Learning French prepares you to work in a global community, where French is the official language of more than 30 countries and of many agencies, including NATO, INTERPOL and the United Nations. The language and culture of France also are beneficial to students interested in international business, politics, the medical field and humanitarian organizations. Art, literature and culinary arts also benefit from understanding the rich traditions of French-speaking countries.

SEMESTER VI

THEORY
OPERATIONS RESEARCH:
BCH-601

➢ Solve linear programming problems using appropriate techniques and optimization solvers, interpret the results obtained.

➢ Determine optimal strategy for Minimization of Cost of shipping of products from source to Destination/ Maximization of profits of shipping products using various methods, finding initial basic feasible and optimal solution of the Transportation problems.

➢ Optimize the allocation of resources to Demand points in the best possible way using various techniques and minimize the cost or time of completion of number of jobs by number of persons.

➢ Model competitive real-world phenomena using concepts from game theory. Analyze pure and mixed strategy games.

➢ Formulate Network models for service and manufacturing systems, and apply operations research techniques and algorithms to solve these Network problems.

THEORY
BUSINESS POLICY:
BCH-602

➢ Develop skills related to making sense of complex business situations, including problem finding/definition as well as creating a workable strategic recommendation.
➢ Understand the political implications – internal, local, and global – and the subsequent process of persuading others of the viability of plausible problem interpretations and solutions.
➢ Comprehend the contextual implication of strategy, i.e., how decisions impact different parts of the organization internally as well as the global consequences.
➢ Explicitly recognize the implication of strategic decisions within a defensible ethical framework as well as address issues of corporate social responsibility.
➢ Develop written and oral communication skills.

THEORY
TAX PLANNING AND MANAGEMENT:
BCH-603

➢ Students will get working knowledge regarding legitimate way of tax planning under different financial/ managerial decisions after taking into consideration the impact of Direct Tax Laws.

THEORY
MANAGEMENT INFORMATION SYSTEM:
BCH-604

➢ Upon completion of this course, students will be able to relate the basic concepts and technologies used in the field of management information systems.

➢ Upon completion of this course, students will be able tocompare the processes of developing and implementing information systems.

➢ Upon completion of this course, students will be able tooutline the role of the ethical, social, and security issues of information systems.

➢ Upon completion of this course, students will be able totranslate the role of information systems in organizations, the strategic management processes, with the implications for the management.

➢ Upon completion of this course, students will be able toapply the understanding of how various information systems like DBMS work together to accomplish the information objectives of an organization.

THEORY
AUDITING - PRINCIPLES & PRACTICE:
BCH-605

➢ Demonstrate an understanding of the nature and scope of auditing and related services.

➢ Describe and discuss the regulatory framework of auditing and related services.

➢ Show understanding and explain the ethical standards of an auditor.

➢ Explain the stages of an audit and methods of gathering audit evidence.

➢ Show understanding and be able to interpret different types of audit reports.

THEORY
ORGANIZATIONAL BEHAVIOUR:
BCH-606

➢ Learners will be equipped with skills to analyze their personal reflections to impact their personal and professional lives Better understanding that people are important dimension of organizations which would lead to organizational effectiveness They will have basic understanding of human behavior at workplace and strategic role of HRM in making a learning organization. Learners will understand the HR dynamics of contemporary organizations in a changing environment. They will become adaptable to changes with conducive and diverse culture and know the best places to work.

LUCKNOW PUBLIC COLLEGE OF PROFESSIONAL STUDIES

BACHELOR OF SCIENCE B. Sc (PCM)

(SESSION 2019-2020)

2.6.1 Teachers and students are aware of the stated programme and course outcomes of the programmes offered by the institution.

BACHELOR OF SCIENCE B. Sc (PCM)

Bachelor of Science (B. Sc) offers theoretical as well as practical knowledge on different subject areas. These subject areas include Physics, Chemistry, Mathematics and other fields depending on the specialization & combinations a student opts for this programme course is most beneficial for students who have a strong interest and background in Science and Mathematics. The course is also beneficial for students who wish to pursue multi and inter-disciplinary science careers in future. It is also the gateway for post-graduation in research in topics pertaining to science.

Programme Outcomes (PO):

➢ This course forms the basis of science and comprises of the subjects like physics, chemistry and mathematics.

➢ It helps to develop scientific temper and thus can prove to be more beneficial for the society as the scientific developments can make a nation or society to grow at a rapid pace, especially in medicine, engineering & research.

➢ After the completion of this course students have the option to go for higher studies i.e., M. Sc and then do some research for the welfare of mankind.

➢ After higher studies students can join as scientist and can even look for professional job-oriented courses.

➢ This course also offers opportunities for serving in Indian Army, Indian Navy and Indian Air Force as officers.

➢ Students after this course have the option to join Indian administrative Services such as IAS, IFS, Allied services IPS etc.

➢ Science graduates can go to serve in industries or may opt for establishing their own industrial unit.

➢ After the completion of the B. Sc degree there are various other options available for the science students. Often, in some reputed universities or colleges in India and abroad the students are recruited directly by big MNC's after their completion of the course.

➢ Apart from the research jobs, students can also work or get jobs in Marketing, Business & Other technical fields. Science graduates also get recruited in the banking sector working as customer service executives. Students can also find employment in various government sectors.

2.6.1 Teachers and students are aware of the stated programme and course outcomes of the programmes offered by the institution.

Program Specific Outcomes (PSO):

➤ B.Sc. student is able to concentrate on Chemistry, Physics and Mathematics.
➤ A student will demonstrate a scientific knowledge of the core physics principles in Mechanics, Electromagnetism, Modern Physics, and Optics.
➤ He is able to demonstrate basic manipulative skills in algebra, geometry, trigonometry, and beginning calculus.
➤ The student will determine the appropriate level of technology for use in:

a) Experimental design and implementation.

b) Analysis interpretation of experimental data.

c) Numerical and mathematical methods in problem solutions.

➤ He will be able to apply the underlying unifying structures of mathematics (i.e., sets, relations and functions, logical structure) and establish the relationships among them.
➤ He can investigate and apply mathematical problems and solutions in a variety of contexts related to science, technology, business and industry, and illustrate these solutions using symbolic, numeric, or graphical methods.
➤ The student will acquire knowledge of Chemical Thermodynamics, Kinetics, Electrochemistry, Atomic Structure, Organic Chemistry, Spectroscopy and Skill in Industrial Chemistry.
➤ He will gain knowledge of Geography in Indian Context and also Global Geography. He will know about forests, mountains, lakes, rivers, soil & environment pollution
➤ A non-medical student can join Indian Air Force, Indian Navy and can also go for other competitive exams. He can go for higher studies in Mathematics, Chemistry and Physics.
➤ He can join as a scientist in research institutes of immense knowledge having a great scope for growth and development. He can prove to be an asset for the society by producing something more innovative schemes.
➤ Banking sector is another good option for students of science with good mathematical background.

2.6.1 Teachers and students are aware of the stated programme and course outcomes of the programmes offered by the institution.

SYLLABUS

COURSE		PAPER No.	PAPER NAME	MARKS	CREDITS
YEAR-1	SEM-I	**PHYSICS**			
		PAPER-1	MECHANICS AND WAVE MOTION	100	4
		PAPER-2	CIRCUIT FUNDAMENTAL AND BASIC ELECTRONICS	100	4
		CHEMISTRY			
		PAPER-1	INORGANIC CHEMISTRY	100	4
		PAPER-2	ORGANIC CHEMISTRY	100	4
		MATHEMATICS			
		PAPER-1	DIFFRENTIAL CALCULUS	100	4
		PAPER-2	INTEGRAL CALCULUS	100	4
	SEM-II	**PHYSICS**			
		PAPER-1	OPTICS	100	4
		PAPER-2	PRACTICAL PHYSICS	100	4
		CHEMISTRY			
		PAPER-1	PHYSICSL CHEMISTRY	100	4
		PAPER-2	PRACTICAL CHEMISTRY	100	4
		MATHEMATICS			
		PAPER-1	MATRICES & DIFFERENTIAL EQUATIONS	100	4
		PAPER-2	GEOMETRY	100	4
YEAR-2	SEM-III	**PHYSICS**			
		PAPER-1	ELECTRICITY AND MAGNETISM	100	4
		PAPER-2	PRACTICAL PHYSICS	100	4
		CHEMISTRY			
		PAPER-1	PHYSICAL CHEMISTRY	100	4
		PAPER-2	PRACTICAL CHEMISTRY	100	4
		MATHEMATICS			
		PAPER-1	ALGEBRA	100	4
		PAPER-2	MATHEMATICAL METHODS	100	4
	SEM-IV	**PHYSICS**			
		PAPER-1	THERMAL PHYSICS AND ELEMENTARY STATISTICAL MECHANICS	100	4
		PAPER-2	ELEMENTS OF MODERN PHYSICS	100	4
		CHEMISTRY			
		PAPER-1	INORGANIC CHEMISTRY	100	4
		PAPER-2	ORGANIC CHEMISTRY	100	4
		MATHEMATICS			
		PAPER-1	DIFFERENTIAL EQUATIONS	100	4
		PAPER-2	MECHANICS	100	4
YEAR-3		**PHYSICS**			
		PAPER-1	ELEMENTS OF RELERIVISTIC, CLASSICAL AND STATISTICAL MECHANICS	75	
		PAPER-2	SOLID STATE AND NUCLEAR PHYSICS	75	
		PAPER-3	ELECTRONICS	75	

	PAPER-4	PRACTICAL PHYSICS	75	
	CHEMISTRY			
	PAPER-1	PHYSICAL CHEMISTRY	75	
	PAPER-2	INORGANIC CHEMISTRY	75	
	PAPER-3	ORGANIC CHEMISTRY	75	
	PAPER-4	PRACTICAL CHEMISTRY	75	
	MATHEMATICS			
	PAPER-1	ANALYSIS	75	
	PAPER-2	LINEAR AND ABSTRACT ALGEBRA	75	
	PAPER-3	NUMERICAL ANALYSIS	75	
	PAPER-4	DIFFRENTIAL GEOMETRY AND TENSOR ANALYSIS	75	

COURSE OUTCOMES

SEMESTER- I

THEORY
MECHANICS & WAVE MOTION
PAPER CODE:

➢ Understand the Frame of reference, collision, forces with different kinds and examples, linear equation of motion, simple harmonic motion and conservation laws.

➢ Understand the application of frame of reference, forces and collisions.

➢ Understand the different laws of mechanics like Newton's laws of motion, Gravitational law of Newton, Elastic law (Hook's Law), elastic constants relation.

➢ Understand the different SHM like Free vibration, Damped vibration and Forced vibration with certain conditions.

➢ Understand the Kepler's Law of planetary motion, orbital and escape velocity, geostationary satellite, orbit.

➢ Understand the stationary wave, progressive wave with kinds and examples and also their applications.

THEORY
CIRCUIT FUNDAMENTALS AND BASIC ELECTRONICS
PAPER CODE:

➢ Analyse the current voltage characteristic of diode and transistor. Analyse DC circuit and relate AC models of Semi- conductor devices with their physical operation

➢ Design and analyse of electronic circuits.. It helps in evaluating frequency response to understand the operation of Circuits.
➢ It makes understand the use of Inductor, Capacitor in AC and DC circuits

THEORY
DIFFERENTIAL CALCULUS:
PAPER CODE:
A student will be able to:
➢ Define, graph, compute limits of, differentiate, and integrate transcendental functions,
➢ Examine various techniques of integration and apply them to definite and improper integrals,
➢ Define, graph, compute limits of, differentiate, integrate and solve related problems involving functions represented parametrically or in polar coordinates,
➢ Distinguish between the concepts of sequence and series, and determine limits of sequences and convergence and approximate sums of series.
➢ Define, differentiate, and integrate functions represented using power series expansions, including Taylor series, and solve related problems.

THEORY
INORGANIC CHEMISTRY:
PAPER CODE:PAPER-1
➢ Understand about orbitals their shape, electron filling pattern in orbital's, electronic configuration and effective nuclear charge. Periodic properties of the elements.
➢ Will be able to understand the different type of bonding in molecules their shape and structure. Hydrogen bonding and other weak interaction forces.
➢ Understand about the various parameters of ionic solids their stability and band theory. Properties of s block elements and noble gases.
➢ Understand about the p block elements their configuration hybridization and shapes of their compounds.

THEORY
ORGANIC CHEMISTRY:
PAPER CODE:PAPER-2

➢ Understand structure bonding hybridization different type of forces, basics of mechanism of organic reactions and different type of reactions.

➢ Will be able to understand the geometrical isomerism, optical isomerism, configuration of compounds and confirmation of compounds.

➢ Understand the preparation of alkanes, alkenes and alkynes, physical properties and chemical reactions including reaction mechanism.

➢ Understand the nature of arenes their aromaticity, aromatic electrophilic substitution reaction. Preparation, properties and chemical reaction of aryl halides.

SEMESTER- II

THEORY
MATRICES &DIFFERENTIAL EQUATIONS
PAPER CODE:

A student will be able to:

➢ Solve a system of linear equations by row-reducing its augmented form.

➢ Perform the matrix operations of addition, multiplication and transposition and express a system of simultaneous linear equations in matrix form.

➢ Determine whether or not a given matrix is invertible and if it is, find its inverse.

➢ Evaluate the determinant of 2 x 2 or 3 x 3 matrixes and use the determinant to determine whether or not a given 2 x 2 matrix is invertible.

➢ Solve differential equations of first order using graphical, numerical, and analytical methods.

➢ Solve and apply linear differential equations of second order (and higher).

➢ Solve problems in ordinary differential equations, dynamical systems, stability theory, and a number of applications to scientific and engineering problems.

➢ Demonstrate their ability to write coherent mathematical proofs and scientific arguments needed to communicate the results obtained from differential equation models.

➢ Demonstrate their understanding of how physical phenomena are modelled by differential equations and dynamical systems.

➢ Implement solution methods using appropriate technology, and

➢ Investigate the qualitative behaviour of solutions of systems of differential equations and interpret in the context of an underlying model.

THEORY
GEOMETRY
PAPER CODE:

➢ Understand the general equation of second degree, system of conics and polar equation of conics and tracing of conics.

➢ Understand the projection and direction cosine, plane and straight line in three dimensions.

➢ Understand the sphere, cone, cylinder and its properties.

➢ Understand coincides, paraboloids, plane sections of coincides, generating lines, confocal coincides and reduction of second degree equations.

THEORY
OPTICS
PAPER CODE:

➢ Understand the basic parameters of optical phenomena happening around us, it gives clear understanding of day to day optical phenomena like Reflection, Refraction and Diffraction and Polarization

➢ Will be able to understand the use of optical Instruments like optical fibre, use of microscope and telescope ,Lasers, Polarimeters

➢ Understand the experiments based on Newton's Ring, Stoke's Law, Michelson Interferometer, Fabry-Perot and Jones Matrix.

THEORY
PHYSICAL CHEMISTRY:
PAPER CODE:PAPER-3

➢ Students would gain knowledge regarding the basic of computers and mathematical concepts of log, permutation and combination, differential and integration of some relevant functions.

➢ Student would gain understanding of gaseous state, critical phenomenon, liquid state, solid state, colloidal state and liquid crystals.

➢ It would help students recognize the importance of chemical kinetics and catalysis.

➢ Understand the problems related to electrode potential, Nerst equation, electrochemical series its significance, reversible and irreversible cells, concentration cells with and without transport, Potentiometric titrations.

PRACTICAL
PRACTICAL CHEMISTRY
PAPER CODE:

➢ Understand the reaction rates of hydrolysis of esters in presence of acidic medium.

➢ Understand the distribution of a chemical between polar and non-polar solvents.

➢ Understand the preparation of sols and also able to compare the precipitating powers.

➢ Understand the determination of percentage composition of given binary mixture by viscosity method and surface tension method.

➢ Understand the heat of solution and heat of neutralization.

➢ Understand the sublimation, crystallization and identification of an organic compound.

SEMESTER III

THEORY
ELECTRICITY & MAGNETISM:
PAPER CODE:

➢ Understand the basic different parameters of electricity, magnetism and dielectric. These parameters are able to calculate the electric field and magnetic field and also able to understand their related problems.

➢ Understand the intensity and potential of different conducting and non conducting bodies in different mediums.

➢ Understand the concepts of different type of electric and magnetic laws in electrical and magnetic circuits.

➢ Understand the problems related to Ampere's law, Bio- Savert's law, Fleming's left and right hand rules, Faraday's law, Poisson equation, Laplace equation.

PRACTICAL
PRACTICAL PHYSICS
PAPER CODE:

➢ Electronic practical prepare the students to be well versed with the electronic equipments used in various fields of medical, education and engineering.

➢ Students after studying theory can now implement it practically. It teaches them how to use diode, transistor, to find magnetic field, ballistic galvanometer and many more.

THEORY
PHYSICAL CHEMISTRY:
PAPER CODE:PAPER-4

➢ Understand the basic parameters of thermodynamics and able to calculate w, q, dU and dH also able to understand entropy related problems.

➢ Will be able to calculate the efficiency of Carnot Engines, Claperyon-Clausius equation and spontaneity and equilibrium in ideal gas and mixing of gases.

➢ Understand the concepts of different type of conductivity of electrolytes, Kohlrausch's law and transport number.

➢ Understand the problems related to electrode potential, Nerst equation, electrochemical series its significance, reversible and irreversible cells, concentration cells with and without transport, Potantiometric titrations.

PRACTICAL
PRACTICAL CHEMISTRY
PAPER CODE:

➢ Understand the reaction rates of hydrolysis of esters in presence of acidic medium.
➢ Understand the distribution of a chemical between polar and non polar solvents.
➢ Understand the preparation of sols and also able to compare the precipitating powers.
➢ Understand the determination of percentage composition of given binary mixture by viscosity method and surface tension method.
➢ Understand the heat of solution and heat of neutralization.
➢ Understand the sublimation, crystallization and identification of an organic compound.

THEORY
MATHEMATICAL MATHODS:
PAPER CODE:

➢ Understand the limit, continuity and differentiability, technique of maxima & minima of two variables and Jacobians.
➢ Understand the Laplace transforms with application as well as Fourier series, Fourier transforms and Fourier integrals etc.
➢ Understand the calculus of variation with fixed boundaries only.

THEORY
ALGEBRA:
PAPER CODE:

A student will be able to:

➢ Assess properties implied by the definitions of groups and rings,
➢ Use various canonical types of groups (including cyclic groups and groups of permutations) and canonical types of rings (including polynomial rings and modular rings),

- ➢ Analyze and demonstrate examples of subgroups, normal subgroups and quotient groups,
- ➢ Analyze and demonstrate examples of ideals and quotient rings,
- ➢ Use the concepts of isomorphism and homomorphism for groups and rings, and Produce rigorous proofs of propositions arising in the context of abstract algebra.

SEMESTER IV

THEORY
THERMAL PHYSICS AND ELEMENTARY STATISTICAL MECHANICS:
PAPER CODE:
A student will be able to**:**

- ➢ Understand and use basic terms for the description of the motion of particles, vector functions and the fundamental laws of Newtonian mechanics.
- ➢ Solve mechanics problems in one dimension that involve one or more of the forces of gravity, friction and air resistance.
- ➢ Understand the concept of virtual work, stable and unstable equilibrium, catenary of uniform strength.
- ➢ Apply Newton's second law in vector form to problems in more than one dimension
- ➢ Solve problems relating to the motion of a projectile in the absence of air resistance.
- ➢ Understand the concept of Kinematics and Kinetics by vel. & acc. Along radial and transverse directions.
- ➢ Study of S.H.M., motion under law of forces, motion in resisting medium, constrained motion, motion on smooth and rough plane curve by a particle.
- ➢ Understand the concept of motion of a particle in different coordinate system

THEORY
ELEMENTS OF MODERN PHYSICS:
PAPER CODE:

- ➢ Understand the Inadequacies of classical mechanics, new form to understand physics by Einstein explanation on Light wave, de-broglie wave concepts, plank's hypothesis and Heisenberg's uncertainty principle

- Understand the mathematical concepts by Schrodinger, calculation of eigenvalues, Normalization of wave function, Vector model.
- Understand the atomic model by Rutherford, Bohr, Gerlach and Pauli's exclusion principle.
- Understand the most important phenomena in physics as Zeeman effect, Hydrogen spectrum, Photoelectric effect and Compton Scattering
- Understand the experiments of Davisson and Germerexperiment, Hertz experiment, Stern-Gerlach experiment.

THEORY
DIFFERENTIAL EQUATIONS:
PAPER CODE:

- Understand the second order linear differential equations, use of known solution to find another solution, undetermined coefficient and variation of parameters.
- Understand the series solutions of differential equations, power series methods, Bessel, Legendre, Hyper geometric functions and there properties .
- Understand the orthogonality of functions, Sturm-Liouville's problem and orthogonality of Bessel, Legendre, Hyper geometric functions .
- Understand linear system, homogeneous linear system with constant coefficient and non linear differential equation.

THEORY
MECHANICS:
PAPER CODE:
A student will be able to:

- Understand and use basic terms for the description of the motion of particles, vector functions and the fundamental laws of Newtonian mechanics.
- Solve mechanics problems in one dimension that involve one or more of the forces of gravity, friction and air resistance.
- Understand the concept of virtual work, stable and unstable equilibrium, catenary of uniform strength.
- Apply Newton's second law in vector form to problems in more than one dimension

➢ Solve problems relating to the motion of a projectile in the absence of air resistance.

➢ Understand the concept of Kinematics and Kinetics by vel. & acc. Along radial and transverse directions.

➢ Study of S.H.M., motion under law of forces, motion in resisting medium, constrained motion, motion on smooth and rough plane curve by a particle.

➢ Understand the concept of motion of a particle in different coordinate system.

THEORY
INORGANIC CHEMISTRY:
PAPER CODE:PAPER-5

➢ Chemistry of transition and inner-transition elements. These insights are important as they help in the rational selection of the cations of these elements for tailor-made syntheses of newer complexes.

➢ Concepts of coordination chemistry and their applications.

➢ Importance of different acid-base concepts which forms the basis of rational ligand designing and coordination complex formation for specific bio-inorganic, materials and optoelectronic applications.

➢ Importance and different chemical aspects of non-aqueous solvents which now-a-days are gaining importance in varied targeted syntheses of drugs and materials for technological applications.

THEORY
ORGANIC CHEMISTRY:
PAPER CODE:PAPER-6

➢ The preparation and chemical reactions of Alcohols and Epoxides -Alcohols Dihydric alcohols: (Ethylene Glycol) Trihydricalcohols :(Glycerol).

➢ Understanding the order of reactivity of different carboxylic acid derivatives and the reactivity of different carboxylic acid derivatives.

➢ Able to recognize structures of acid halides, esters, amides, acid anhydrides.

➢ Able to write down structure of phenol and phenoxide ion and chemical reactions of phenols.

➢ Know the mechanism of named reactions of carbonyl compounds and condensation reactions as well as their use in food and pharmaceuticals.

YEAR-3

THEORY
ELEMENTS OF RELATIVISTIC AND CLASSICAL MECHANICS
PAPER CODE:

- ➢ Understand the frame of reference (Earth), different transformation equations, special theory of relativity given by Einstein, D' Alembert Principle, LaGrange and Hamiltonian equation.
- ➢ Understand the variation of mass with velocity, energy mass equivalence formula, rigid body problems and their solutions.
- ➢ Understand the reduced mass, inadequacy of classical mechanics, phase space, Inverse square Kepler's law, Liouville's theorem, ensembles, connection between different ensembles, thermodynamic quantities and classification of orbits.
- ➢ Understand the Maxwell Boltzmann statistics, Maxwell velocity distribution law, Fermi – Dirac and Bose – Einstein statistics, electron gas, Vander Wall's gas and Plank's oscillator.

THEORY
SOLID STATE AND NUCLEAR PHYSICS
PAPER CODE:

- ➢ Understand the classification of crystal structure, Primitive vectors, lattice constant, miller indices, point groups and space groups, crystal structure of NaCl, CsCl, ZnS and Diamond.
- ➢ Understand the Packing fraction, Reciprocal lattice, spacing between lattice planes, Diffraction pattern in crystal structure, Brag's Law.
- ➢ Understand the lattice vibration, Laue method, Powder method, Band theory of solids, concept of holes, Bloch theorem.
- ➢ Grasp the knowledge about basic nuclear properties and nuclear models for a better understanding of nuclear reaction dynamics.
- ➢ Analyze quantum mechanical phenomena in nuclear physics and develop an understanding of quantum mechanics also.

➢ Comprehend the general understanding of phenomena like nuclear fusion and fission and develop the skills required for solving basic problems in nuclear physics at different nuclear energy ranges.

➢ Develop the basic understanding of accelerator physics and particle detectors.

➢ Acquire and apply basic nuclear physics knowledge in subjects such as medicinal, archaeology, geology, and other multidisciplinary fields of Physics and Chemistry.

THEORY
ELECTRONICS
PAPER CODE:

➢ The student will understand about Utility of Zener Diode and Uni-junction Transistor.

➢ The student will be able to understand basic electronic devices and their applications.

➢ The student will be able to learn Transistor biasing.

➢ The student will understand the concept of frequency response, bandwidth and audio amplifiers..

➢ The student will be able to Feedback circuits.

➢ The student will be able to get the importance of amplitude modulation and demodulation.

➢ The student will understand the applications of various Logic Gates and Special Photonic Devices.

PRACTICAL
PRACTICAL PHYSICS
PAPER CODE:

➢ The student will get an introduction to the discipline of optics and its role in daily life.

➢ The optics course will give the student a basic knowledge of interference, diffraction and polarization.

➢ The student will be able to analyze and calculate interference between light waves and application of the theory to various interferometers along with their practical applications.

➢ The student would know the conditions for near and far-field diffraction and be able to calculate the far-field diffraction from gratings and simple aperture functions.

➢ The student would understand how the polarization of light changes at reflection and transmission at interfaces.

THEORY
PHYSICAL CHEMISTRY:
PAPER CODE:PAPER-7

➢ After the completion of the semester student will acquire knowledge of introductory quantum mechanics, dipole moment and photochemistry. He will also be get familiar with dilute solutions, colligative properties and experimental methods of determining various colligative properties. He will learn the third law of thermodynamics, distribution law, phase rule and their derivation.

THEORY
INORGANIC CHEMISTRY:
PAPER CODE: PAPER-8

➢ Inorganic polymers viz. silicones which find applications in materials pharmaceutical industries and surgery too. Phosphagens which in last couple of years had witnessed significant development as emerging smart materials.

➢ Class-a and class-b donor-acceptors, symbiotic relationship.

➢ Organometallic and bioinorganic concepts which in any of the previous semesters have not been accounted.

➢ Semi-modern concepts of metal ligand bonding in coordination complexes.

➢ Theories of electronic absorption and magnetic properties of coordination complexes The fine tuning these two very important parameter lead to the design and fabrication of compound, metal-organic frameworks, coordination polymers for optoelectronic and single-molecular magnets (SMM).

2.6.1 Teachers and students are aware of the stated programme and course outcomes of the programmes offered by the institution.

THEORY
ORGANIC CHEMISTRY:
PAPER CODE:PAPER-9

➢ The organometallic compounds such as Grignard reagent which have been widely used on both laboratory and commercial scale and is one of the most common organometallic reagents used for the formation of carbon–carbon bonds. Organ Sulphur compounds which have therapeutic use and pharmacology.

➢ Understanding Carbohydrate, its classification and use in the food industry etc.

➢ Understand Protein, amino acid and peptides. Chemical structure of RNA and DNA.

➢ Determination of saponification value, acid value and iodine value of oil. Synthetic detergent.

➢ Various polymers, their method of polymerization and their use in industry.

➢ Nuclear magnetic resonance, interpretation of nmr spectra of simple organic molecule.

PRACTICAL
PRACTICAL CHEMISTRY:
PAPER CODE:

➢ Student will be able to synthesize different type of coordination compounds in laboratory like potassium trioxalatoferrate (III), $K_3[Fe(C_2O_4)_3]$, Ni-DMG complex, $[Ni(DMG)_2]$, copper tetra-ammine complex, $[Cu(NH_3)_4]SO_4$, cis- and trans-bisoxalatodiaqua chromate (III) ion.

➢ Students will be able to verify Beer-Lambert law for $KMnO_4/K_2Cr_2O_7$ and determine the concentration of the given solution.

➢ Students will be able to determine of Fe^{3+} content by thiocyanate method and Separation and estimation of Mg(II) and Zn(II). Chromatographic separation of metal ions

➢ Students will be able to separate and identify the mixture of two organic compounds and one step preparation.

➢ Students will be able to determine the strength of the given acid conductometrically using standard alkali solution.

➢ Students will be able to determine the solubility and solubility product of a sparingly soluble electrolyte conductometrically.

➢ Students will be able to determine the ionization constant of a weak acid conductometrically.

➢ Students will be able to verify law of refraction of mixtures (e.g. of glycerol and water) using Abbe's refractometer.

➢ Students will be able to determine the specific rotation of cane sugar solution by polarimeter.

➢ Students will be able to determine of molecular weight of a non-volatile solute by Rast method/Beckmann freezing point method.

➢ Students will be able to determine the apparent molecular weight of nonvolatile solute at different concentration and determine Van't Hoff factor by ebullioscopy.

THEORY
ANALYSIS:
PAPER CODE:

➢ Understand the metric space, converges of series of arbitrary terms, uniform convergence of series of sequences and series of functions, Power series etc.

➢ Understand complex number as ordered pairs, Geometric representation of complex numbers and analytic function.

➢ Understand complex integration, Cauchy's Integral formula and mapping by elementary functions etc.

➢ Understand Residues theorem and expansion in series and singularities etc.

THEORY
LINEAR & ABSTRACT ALGEBRA
PAPER CODE:

➢ The fundamental concept of Rings, Fields, subrings, integral domains and the corresponding morphisms.

➢ The concept of linear independence of vectors over a field, the idea of basis and the dimension of a vector space.

➢ Basic concepts of linear transformations, the Rank-Nullity Theorem, matrix of a linear transformation and the change of basis.

➢ Automorphisms for constructing new groups from the given group.

➢ Group actions, Sylow theorems and their applications to check no simplicity.
➢ Compute inner products and determine orthogonality on vector spaces.

THEORY
NUMERICAL ANALYSIS
PAPER CODE:

➢ Understand solution of system of equations using various methods.
➢ Solution of linear and non-linear equations.
➢ Learns about boundary value problems and characteristic value problems.
➢ To describe matrix concept and linear equations.
➢ Identifies numerical differentiation.
➢ Evaluate numerical integrations.
➢ Understand the concept of difference equations.
➢ Distinguish methods of Taylor series, Euler's, Modified Euler's and RungeKutta methods to find solutions of differential equations.
➢ Estimates the numerical solutions of first order differential equations.

THEORY
DIFFERENTIAL GEOMETRY & TENSIOR ANALYSIS:
PAPER CODE:

This course gives students basic knowledge of classical differential geometry of curves and surfaces.Among other students will learn and understand the particular interest of some curves and surfaces such as the catenary, the tractrix , the cycloid,   the surfaces of constant Gaussian curvature and the minimal surfaces. After   successful completion of the course students will be able to:

➢ Calculate the curvature and torsion of a curve.
➢ Find the moving trihedron of a curve and write its intrinsic and canonical equations.
➢ Find the osculating surface and the osculating curve at any point of a given curve.
➢ Calculate the first and the second fundamental forms of a surface.
➢ Calculate the Gaussian curvature, the mean curvature, the curvature lines, the asymptotic lines, the geodesics of a surface.

Use efficiently the mathematical tool of tensor calculus in the study of surfaces.

➢ Symmetric and antisymmetric tensors. Tensor fields. Stress and strain tensors. Hooke's law. Navier-Stokes equation.

LUCKNOW PUBLIC COLLEGE OF PROFESSIONAL STUDIES

BACHELOR OF ARTS IN JOURNALISM AND MASS COMMUNICATION (BAJMC)

(SESSION 2019-2020)

BACHELOR OF ARTS IN JOURNALISM AND MASS COMMUNICATION (BAJMC)

Bachelor of Journalism and Mass Communication (BJMC) provides opportunity to students to study variety of subjects in the field of mass communications ranging from print, online, web to broadcast media. This course has divided into six semesters in duration of 3 years; BJMC gives hands on training in reporting, writing, creative writing broadcasting, films and critical thinking in order to create media professionals who are at par with the media industry. We at LPCPS provides highly professional environment such as community radio station, Newsroom studio to the broadcast media aspirants. We also provide highly equipped media lab for editing and designing news for electronic as well as print media.

Program Specific Outcomes (PSO)

1. Students will acquire a functional knowledge of the underlying principles and recent emerging trends of the media industry.
2. The course is solid foundation program which follows an all-encompassing theoretical and hands-on approach in communication and media.
3. The ability to report in depth, using a wide variety of sources to provide context, accuracy, and balance.
4. The ability to embrace convergent media by shooting video, making photographs, and writing for and posting to the web.
5. An understanding of the roles and duties of journalism in society, and recognition of the legal and more implications of their work.

SYLLABUS: 2016-2021		
BAJMC – I SEMESTER		
S.No.	**PAPER**	**PAPER TITLE**
B01	**I**	LANGUAGE & CULTURAL STUDIES
B02	**II**	INTRODUCTION TO MASS-COMMUNICATION
B02	**III**	PRACTICAL /VIVA-VOICE

2.6.1 Teachers and students are aware of the stated programme and course outcomes of the programmes offered by the institution.

	BAJMC – II SEMESTER	
S.No.	PAPER	PAPER TITLE
B04	I	ROLE OF SOCIAL SCIENCES IN MASS-COMMUNICATION
B05	II	INTRODUCTION TO JOURNALISM
B06	III	PRACTICAL / VIVA –VOICE

	BAJMC – III SEMESTER	
S.No.	PAPER	PAPER TITLE
B07	I	MESSAGE & MASS-MEDIA AUDIENCE
B08	II	BASICS OF REPORTING & EDITING
B09	III	PRACTICAL / VIVA VOICE

	BAJMC – IV SEMESTER	
S.No.	PAPER	PAPER TITLE
B13	I	BASICS OF ADVERTISING & PUBLIC RELATIONS
B14	II	NEW MEDIA
B15	III	PRACTICAL / VIVA VOICE

	BAJMC – V SEMESTER	
S.No.	PAPER	PAPER TITLE
B10	I	COMPUTER APPLICATION
B11	II	PHOTOGRAPHY
B12	III	PRACTICAL / VIVA VOICE

	BAJMC – VI SEMESTER	
S.No.	PAPER	PAPER TITLE
B16	I	WRITING FOR RADIO & TV
B17	II	MASS – MEDIA & CONTEMPORARY SOCIAL ISSUES
B18	III	PRACTICAL / VIVA VOICE

COURSE OUTCOMES

FIRST SEMESTER

THEORY
LANGUAGE AND CULTURAL STUDIES
PAPER CODE: B O1

➢ Let your studies lead you to an understanding of other cultures as well. These cultural studies classes focus on literature, gender issues, art history, popular culture and other subjects, as seen through the lens of language.

➢ The course of Language and Culture Studies offers students a wide variety of opportunities for communication and intellectual stimulation beyond the typical classroom setting. The one-on-one relationships that develop between student and professor, between student and student, and between student and other speakers of foreign languages are benchmarks of the program and an enduring source of personal and professional satisfaction.

➢ The curriculum in language and culture studies is not limited to courses in foreign languages, but also includes a rich array of classes, taught in English, focusing on topics such as the civilization and literary traditions of foreign cultures.

THEORY
INTRODUCTION TO MASS COMMUNICATION
PAPER CODE: B O2

➢ Students would be able to introduce themselves to the theories of communication.
➢ Students would be able to inculcate the knowledge of Communication models.
➢ Students would be able to develop the knowledge of basic elements of communication.
➢ Students would be able to acquaint themselves with the various types of communication.
➢ Students would be able to strengthen the 7Cs of communication.

THEORY
INTRODUCTION TO MASS COMMUNICATION
PAPER CODE: B O3

➢ Students will be able to write stories in Hindi and English.

- ➢ Students will be able to write about social, economic and political issues.
- ➢ Students will be able for discussion and presentation on social, economic and political issues.

SECOND SEMESTER

THEORY
ROLE OF SOCIAL SCIENCES IN MASS COMMUNICATION
PAPER CODE: B O4

- ➢ Students would be able to understand the sociological concept and theories.
- ➢ Students would be able to understand the importance of sociology.
- ➢ Students would be able to create understanding of the human society.
- ➢ Students would be able to develop the knowledge of Indian culture and Society.
- ➢ Students would be able to inculcate the knowledge of current socio-cultural issues.

THEORY
INTRODUCTION TO JOURNALISM
PAPER CODE: B05

- ➢ Understand the concept of journalism and develop as an academic subject. Develop an understanding about state and "press as a fourth state of democracy." Understand the history of printing as well as journalism in Indian and global scenario.
- ➢ Develop a sight about India in different language classification. Understand the role of newspaper (with a special reference of regional language newspaper) in Indian freedom struggle and development of modern India.
- ➢ Understand Journalism as a profession and its professional ethics and values. Gain knowledge about the different professional, statutory and constitutional bodies of press and media in India and Globe. Understand the working of different audience feedback measurement agencies like IRS, NRS, NBA, ABC and TAM.

PRACTICAL AND VIVA
PAPER CODE: B06

- ➢ Students will be able to have understanding of the world in historical, economic, political and contemporary context with the collection of different news agencies' news.

- Students will be having the understanding of different news agencies i.e. PTI, UNI, BHASHA, VARTA working from India and abroad for the collection and distribution of news.
- Students would be able to familiarize themselves with the basics of news writing editing and different forms of news formats published in the newspaper.

THIRD SEMESTER

THEORY
MASSAGE AND MASS MEDIA AUDIENCE
PAPER CODE: BO7

- Students will have the knowledge about the elements of effective communication skills.
- Students will be able to have the understanding of impactful writing and communication for media.
- Students would be able to understand the significance of speech communication.
- Students would learn the definitions and basic concepts of media research, media feedback and audience behavior.
- Students would know the difference between communication research, media research and social research.

THEORY
BASICS OF REPORTING AND EDITING
PAPER CODE: BO8

- Understand the meaning and definition of reporting. Difference types of reporting, its sources and news value.
- Understand to writing style of news writing. Elements of news writing- headline, crosser, captions lead and body. Understand the Methods of interview and will be able to take interview for platforms of media.
- Understand the structure of media organization. Gain knowledge of proof reading symbol. Practice on cultural, political, data, intercultural, educational and environmental reporting.

PRACTICAL
PAPER CODE: B09

➢ Based on the theory paper of Message and mass media audience and Basics of Reporting and Editing, this practical paper deal with the understanding of students on various kinds of beat reporting. Scientific reporting, Development reporting, Inter cultural reporting, Data journalism and Economic Reporting. This also includes Research based market feedback system.

➢ Students are also supposed to make posters on several issues including development and social agendas of society.

FOURTH SEMESTER

THEORY
BASICS OF ADVERTISING & PUBLIC RELATIONS
PAPER CODE: B13

➢ Students would learn development of advertising and basic concepts.

➢ Students would be able to know about role and importance of advertising in media.

➢ Students will have the knowledge of self-employment.

➢ Students would know about advertising agencies.

➢ Students would know about the advertising industry and its functioning.

THEORY
NEW MEDIA
PAPER CODE: B14

➢ Understand the basic concept of New Media and different platform of new media. Creating blog as well as other social media address.

➢ Understand the basic topic of debate and discussion on social media and other academic world.

➢ Prepare an institutional house journal including the articles, photographs, stories and views. Prepare a V-Log with the help of short digital stories on various social, political and economical issues.

➢ Understand the working of a Public relation officer in Government and public sector. Understand the work of PRO during crisis with the help of different cases.

PRACTICAL AND VIVA-VOCE
PAPER CODE: B15

➢ Students will learn to create their blogs. They will be able to make their presence in social media and express their thoughts in public domain.

➢ Students will be able to publish journals and other magazines.

FIFTH SEMESTER

THEORY
COMPUTER APPLICATIONS
PAPER CODE: B10

➢ The most important aspect of computer science is problem solving, an essential skill for life. Students study the design, development and analysis of software and hardware used to solve problems in a variety of business, scientific and social contexts. Because computers solve problems to serve people, there is a significant human side to computer science as well Computer software and media applications degree programs involve the study of software engineering and computer programming.

➢ In the 21st century, technology plays a huge role in all facets of life, we always turn to computers to access information, create and express ourselves, communicate and collaborate, and track the achievement of learning outcomes. And as a part of smart city technology we must understand all factors of it.

➢ Information and communication technology provides more opportunities to communicate and collaborate. With Learning Management Systems such as Blackboard, many courses have an online space to participate in discussion threads and forums, chats, and video conferences. Collaborative functions in office applications allow us to view revisions and add comments in real time, making the process of relaying feedback more efficient.

2.6.1 Teachers and students are aware of the stated programme and course outcomes of the programmes offered by the institution.

THEORY
PHOTOGRAPHY
PAPER CODE: B11

➢ Introduction to Photoshop covering the basics of editing, fixing blemishes, colour correcting, and selective edits.

➢ Understand the concept of camera working, Parts of camera and different models of camera with the special reference of Single lens reflex camera (SLR) and twin lens reflex camera (TLR).

➢ Understand the role of light in photography. A better understanding about reflector and filter and also learn about the colour temperature and its relevance in photography.

➢ Understand the basic information of digital photography and digitalization of photo prints in different manner. Develop the sense of aesthetics of photography with the power of visual and composition.

PRACTICAL AND VIVA-VOCE
PAPER CODE: B12

➢ Learner would learn the concepts and importance of photography.

➢ Learner would be able to understand photo coverage and photo Journalism.

➢ Learner would know the different tools and techniques of newspaper designing.

➢ Learner would be to ready to join any media organization as photo Journalist or sub editor.

SIXTH SEMESTER

THEORY
WRITING FOR RADIO AND & TV
PAPER CODE: B16

➢ Students will be able to understand the working pattern of radio and television media platforms during this course.

➢ Students will be able to have understanding of electronic media content creation and basic techniques of broadcasting.

➢ Students will be able to cover events using mobile phones and write radio news stories, radio news bulletin, TV bulletin and produce for broadcasting.

➢ Students will be able to conduct interview for TV and radio and make promos and jingles for both media.

➢ Students will have the basic knowledge of various audio and video editing tools and hands-on experience on different software like Adobe premiere, etc.

THEORY
MASS MEDIA AND CONTEMPORARY SOCIAL ISSUES
PAPER CODE: B17

➢ Understand the issues related to women in media. Observation of women characters portrait by media in film, television and advertising industry. Understand the role of media in any women related issues.

➢ Understand the concept of consumerism in India as well as the role of media in consumerism. Understand the role of advertising industry with respect to consumerism.

➢ Understand the relation between media and environment. Develop an understanding of environmental related issues as a media student. Gain knowledge about Globalization and theory of "Global Village." Basic understanding about human right issues and the role of media to protect these civil rights.

PRACTICAL AND VIVA-VOCE
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➢ Students will be able to prepare contents of news, talk shows script of radio play, radio features and interview.

➢ Students will be able to write the content on current social issues.