

# LUCKNOW PUBLIC COLLEGE OF PROFESSIONAL STUDIES

BACHELOR OF BUSINESS ADMINISTRATION (BBA)
(SESSION 2017-2018)

# **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 to 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		
	BBA 101	BUSINESS MATHEMATICS	100		
I E <b>R</b>	BBA 102	COMPUTER FUNDAMENTAL	100		
B.B.A. I SEMESTER	BBA 103	FINANCIAL ACCOUNTING	100		
	BBA 104	MANAGERIAL ECONOMICS	100		
	BBA 105	MARKETING FUNDAMENTALS	100		
	BBA 106	PRINCIPLES OF MANAGEMENT	100		
	BBA 201	BUSINESS COMMUNICATION	100		
<b>×</b>	BBA 202	BUSINESS STATISTICS	100		
B.B.A. II SEMESTER	BBA 203	FOREIGN TRADE OF INDIA	100		
B.A	BBA 204	ENVIRONMENTAL STUDIES	100		
B.	BBA 205	FINANCIAL MATHEMATICS	100		
<b>S</b> 2	BBA 206	INDIAN VALUE SYSTEM	100		
	BBA 200	INDIAN VALUE STSTEM	100		
E R	BBA 301	ADVERTISING MANAGEMENT	100		
ST	BBA 302	BANKING AND INSURANCE	100		
B.B.A. III SEMESTER	BBA 303	BUSINESS ENVIRONMENT	100		
$\mathbf{SE}$	BBA 304	MANAGEMENT ACCOUNTING	100		
Ħ	BBA 305	ORGANISATIONAL BEHAVIOUR	100		
Ą.	BBA 306	RESEARCH METHODLOGY	100		
B.E	BBA 307	FRENCH	100		
	BBA 401	BUSINESS LAW	100		
. 🕿	BBA 402		100		
.A. IV ESTER		FINANCIAL MANAGEMENT			
B.A. IV AESTEI	BBA 404	HUMAN RESOURCE MGMT INFORMATION MANAGEMENT	100		
B.E SEM	BBA 404 BBA 405	OPEARTION MANAGEMENT	100		
<b>S</b> 2	BBA 406	CONSUMER BEHAVIOUR	100		
	BBA 400	CONSUMER BEHAVIOUR	100		
	BBA 501	E-COMMERCE	100		
B.B.A. V SEMESTER	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 (COs)**

# **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:**

- > 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:**

- ➤ 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

# 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:

- ➤ 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:**

- > 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 types of banks.
- ➤ 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**

# **ORGANISATIONAL BEHAVIOUR:**

# **BBA 305**

> Become effective leaders by addressing the human side of enterprise.

- ➤ Understand individual behavior in organizations, including attitudes, job satisfaction, emotions, personality, values, perception, decision making, and motivational theories.
- ➤ Understand group behavior in organizations, including communication, leadership, power and politics, conflict, and negotiations.
- ➤ Understand the organizational system, including organizational structures, culture, human resources, and change.

# 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:**

- ➤ 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:**

- 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 501**

- > 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.

# **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.

# **THEORY**

**RURAL AND RETAIL MARKETING:** 

- 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:**

- > 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 of micromatic 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:

- > 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:**

- ➤ 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:**

- ➤ 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.

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 report.



# LUCKNOW PUBLIC COLLEGE OF PROFESSIONAL STUDIES

BACHELOR OF COMPUTER APPLICATION(BCA)
(SESSION 2017-2018)

# **BACHELOR OF COMPUTER APPLICATION (BCA)**

# (THREE YEAR PROGRAMME)

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						
SEMES	COURSE	COURSE NAME	MAR			
TER	CODE		KS			
	BCA-S101T	COMPUTER FUNDAMENTAL & OFFICE	100			
		AUTOMATION				
	BCA-S102T	PROGRAMMING PRINCIPLE & ALGORITHM	100			
2	BCA-S103T	PRINCIPLE OF MANAGEMENT	100			
I E	BCA-S104T	BUSINESS COMMUNICATION	100			
S	BCA-S105T	MATHEMATICS –I	100			
$ \Xi $	BCA-S101P	COMPUTER LABORATORY AND PRACTICAL	100			
SEMESTER-1		WORK OF OFFICE				
		COMPUTER LABORATORY AND PRACTICAL				
		WORK OF PROGRAMMING PRINCIPLE &				
		ALGORITHM				
	BCA-S106T	C PROGRAMMING C PROGRAMMING	100			
~	BCA-S107	DIGITAL ELECTRONICS & COMPUTER	100			
<b>\frac{1}{2}</b>		ORGANIZATION				
SEMESTER-2	BCA-S108	MIS (MANAGEMENT INFORMATION	100			
ES		SYSTEM)				
$ \Xi $	BCA-S109	FINANCIAL ACCOUNTING & MANAGEMENT	100			
SE	BCA-S110	MATHEMATICS II	100			
	BCA-S106P	COMPUTER LABORATORY AND PRACTICAL	100			
		WORK OF C PROGRAMMING				
	BCA-S201T	OBJECT ORIENTED PROGRAMMING USING	100			
<b>6</b>		C++				
SEMESTER-3	BCA-S202T	DATA STRUCTURE USING C & C++	100			
	BCA-S203	COMPUTER ARCHITECTURE & ASSEMBLY	100			
		LANGUAGE				
	BCA-S204	BUSINESS ECONOMICS	100			
	BCA-S205	ELEMENTS OF STATISTICS	100			
	BCA-S201P	COMPUTER LABORATORY AND PRACTICAL	100			
		WORK OF OOPS				

		COMPUTER LABORATORY AND PRACTICAL	
		WORK OF DS	
SEMESTER-4	BCA-S206T	COMPUTER GRAPHICS & MULTIMEDIA	100
		APPLICATION	
	BCA-S207	OPERATING SYSTEM	100
	BCA-S208	SOFTWARE ENGINEERING	100
	BCA-S209	OPTIMIZATION TECHNIQUES	100
N N	BCA-S210	GRAPH THEORY	100
<b>E</b>	BCA-S206P	COMPUTER LABORATORY AND PRACTICAL	100
		WORK OF COMPUTER GRAPHICS &	
		MULTIMEDIA APPLICATION	
	BCA-S301T	INTRODUCTION TO DBMS	100
	BCA-S302T	JAVA PROGRAMMING AND DYNAMIC	100
		WEBPAGE DESIGN	
10	BCA-S303	DATA COMMUNICATION & COMPUTER	100
<b>8-5</b>		NETWORK	
SEMESTER-5	BCA-S304	NUMERICAL METHODS	100
	BCA-S305	MINOR PROJECT	100
W	BCA-S306	VIVA-VOICE ON SUMMER TRAINING	100
SE	BCA-S301P	COMPUTER LABORATORY AND PRACTICAL	100
		WORK OF DBMS	100
		COMPUTER LABORATORY AND PRACTICAL	
		WORK OF JAVA PROGRAMMING &	
		DYNAMIC WEBPAGE DESIGN	
SEMESTER-6	BCA-S307	COMPUTER NETWORK SECURITY AND	100
		MANAGEMENT	
	BCA-S308	INFORMATION SYSTEM: ANALYSIS DESIGN	100
		& IMPLEMENTATION	
	BCA-S309	E-COMMERCE	100
	BCA-S310	KNOWLEDGE MANAGEMENT	100
	BCA-S311	MAJOR PROJECT	100
	BCA-S312	PRESENTATION/SEMINAR BASED ON	100
		MAJOR PROJECT	

# **COURSE OUTCOMES (COs)**

# **SEMESTER I**

# **THEORY**

# COMPUTER FUNDAMENTAL & OFFICE AUTOMATION

# BCA-S101T

- ➤ They can classify the computers in different categories based on their capabilities.
- They will be able to discuss an understanding of the importance of algorithms in the development of computer applications.
- ➤ They may identify computer hardware and peripheral devices.
- > They will be able to manage the files.

# **THEORY**

# PROGRAMMING PRINCIPLE & ALGORITHM:

# BCA-S102T

- > They will be able to understand basic terms used in programming.
- ➤ They will be able to design an algorithmic solution for a given problem.
- > They will be able to write a C programe for a given algorithm.
- > They will be able to use different data structures and update basic data files.
- ➤ They will be able to trace out the error and resolve it using debugging and develop logical and analytical thinking.

# **THEORY**

# PRINCIPLE OF MANAGEMENT:

# BCA-S103T

- ➤ 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 and communicate the traits, dimensions, styles of effective leaders and, the relationship between strategic, tactical, and operational plans for effective Management.

# **THEORY**

# **BUSINESS COMMUNICATION:**

# BCA-S104T

- > They will be able to identify key principles in business communication.
- ➤ They can discuss different processes and considerations involved in writing in business.
- They can create various types of business reports.
- ➤ They will be able to create a presentation using slides.
- > They will recruit and select new employees.

# **THEORY**

# **MATHEMATICS-I:**

# BCA-S105T

- ➤ 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.

# **PRACTICAL**

COMPUTER LABORATORY AND PRACTICAL WORK OF OFFICE COMPUTER LABORATORY AND PRACTICAL WORK OF PROGRAMMING PRINCIPLE AND ALGORITHM:

# BCA-S101P

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

- ➤ It helped us to know that to code is like learning how to read and write in a different medium, thus, enabling us with creative and expressive power.
- > Students will be made familiar with logic building and systematic programming
- > Students will be made aware of and apply appropriate coding skills for different requirements or scenarios.
- ➤ With the help of the lab, students will be able to practice and learn planning by thinking through the steps necessary to achieve our end goal.
- ➤ It will help students to gain an ability to move past debugging, frustrations and continue to find solutions to help complete their projects.

# **SEMESTER II**

# **THEORY**

# **C PROGRAMMING:**

# BCA-S106T

- ➤ Understand the difference between object oriented programming and procedural oriented language and data types in C.
- ➤ Program using C features such as composition of objects, Operator overloading, inheritance, Polymorphism etc.
- ➤ Simulate the problem in the subjects like Operating system, Computer networks and real world problems.

# **THEORY**

# DIGITAL ELECTRONICS AND COMPUTER ORGANIZATION: BCA-S107

- ➤ 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**

# MIS (MANAGEMENT INFORMATION SYSTEM):

# **BCA-S108**

- > 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**

# FINANCIAL ACCOUNTING & MANAGEMENT:

# **BCA-S109**

- > 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.

# **THEORY**

# **MATHEMATICS-II:**

# **BCA-S110**

- ➤ 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.

# **PRACTICAL**

# COMPUTER LABORATORY AND PRACTICAL WORK OF C PROGRAMMING:

# BCA-S106P

- ➤ To impart adequate knowledge on the need of programming languages and problem solving techniques.
- ➤ To develop an in-depth understanding of functional and logical concepts of C Programming.
- Acquire logical thinking, Implement the algorithms and analyze their complexity, Identify the correct and efficient ways of solving problems.
- > Implement real time applications using the power of C language features.

# **SEMESTER III**

# **THEORY**

# **OBJECT ORIENTED PROGRAMMING USING C++:**

# BCA-S201T

> Understand the difference between the top-down and bottom-up approach.

- ➤ Describe the object-oriented programming approach in connection with C++.
- ➤ Apply the concepts of object-oriented programming.
- ➤ Illustrate the process of data file manipulations using C++.
- ➤ Apply virtual and pure virtual function & complex programming situations.
- ➤ Ability to design and develop Object Oriented systems.

# **THEORY**

# DATA STRUCTURE USING C & C++:

# BCA-S202T

- ➤ Understanding the linear and non-linear data structures, sorting and searching operations, File structures.
- Analyze the performance of Stack, Queue, and Lists.
- Analyze the performance of Trees, Graphs, Searching and Sorting techniques.
- ➤ Implement all the applications of Data structures in a high-level language.
- ➤ Design and apply appropriate data structures for solving computing problems.

# **THEORY**

# **COMPUTER ARCHITECTURE & ASSEMBLY LANGUAGE:**

#### **BCA-S203**

- ➤ Understand the theory and architecture of central processing unit.
- Analyze some of the design issues in terms of speed, technology, cost, performance.
- ➤ Design a simple CPU with applying the theory concepts.
- ➤ Use appropriate tools to design verify and test the CPU architecture.
- ➤ Learn the concepts of parallel processing, pipelining and inter processor communication.

#### **THEORY**

# **BUSINESS ECONOMICS:**

### **BCA-S204**

> 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**

#### **ELEMENTS OF STATISTICS:**

### **BCA-S205**

- ➤ Describe and discuss the key terminology, concepts tools and techniques used in business statistical analysis.
- Critically evaluate the underlying assumptions of analysis tools.
- ➤ Understand and critically discuss the issues surrounding sampling and significance.
- ➤ Discuss critically the uses and limitations of statistical analysis.
- ➤ Solve a range of problems using the techniques covered.
- ➤ Conduct basic statistical analysis of data.

# **PRACTICAL**

# COMPUTER LABORATORY AND PRACTICAL WORK OF OOPS:

# BCA-S201P

- ➤ Describe the procedural and object-oriented paradigm with concepts of streams, classes, functions, data and objects.
- ➤ Understand dynamic memory management techniques using pointers, constructors, destructors, etc
- ➤ Describe the concept of function overloading, operator overloading, virtual functions and polymorphism.
- ➤ Classify inheritance with the understanding of early and late binding, usage of exception handling, generic programming.
- > Demonstrate the use of various OOPs concepts with the help of programs.

# **PRACTICAL**

#### COMPUTER LABORATORY AND PRACTICAL WORK OF DS:

# BCA-S201P

- ➤ Understand the concept of Dynamic memory management, data types, algorithms, Big O notation.
- ➤ Understand basic data structures such as arrays, linked lists, stacks and queues.
- ➤ Describe the hash function and concepts of collision and its resolution methods.
- > Solve problem involving graphs, trees and heaps.
- ➤ Apply Algorithm for solving problems like sorting, searching, insertion and deletion of data.

# **SEMESTER IV**

# **THEORY**

# COMPUTER GRAPHICS & MULTIMEDIA APPLICATION:

### BCA-S206T

- ➤ Be able to identify computer Graphics and Tools.
- ➤ Be familiar with Multimedia applications.
- ➤ Understand Graphical formula in 3-D to 2-Dimensional objects.
- > To follow a series of stages collectively known as Graphics Pipeline.
- ➤ Primary role is to render the digital content in a human comprehensible form on a computer screen.

# **THEORY**

#### **OPERATING SYSTEM:**

# **BCA-S207**

- ➤ To understand the basic components of a computer operating system, and the interactions among the various components.
- ➤ The course will cover an introduction on the policies for scheduling, deadlocks, memory management, synchronization, system calls, and file systems.
- ➤ Responsible for allocating resources to users and processes.

- ➤ Some operating systems implement significant OS functionality in user-mode, e.g. User-mode such as Linux.
- ➤ Program execution, Access to I/O devices Display, disk, network, printer, keyboard, camera, etc. Controlled access to files Access protection, System access User authentication.

# **THEORY**

### **SOFTWARE ENGINEERING:**

# **BCA-S208**

- Enables students to embrace problem solving and learning as a natural aspect of their work.
- ➤ Enhances value and is valued by their professional teammates.
- ➤ Gain to have broad and deep knowledge of the technical issues that they face.
- ➤ Basic knowledge and understanding of the analysis and design of complex systems.
- ➤ To develop methods and procedures for software development that can scale up for large systems and that can be used consistently to produce high-quality software at low cost and with a small cycle of time.

# **THEORY**

# **OPTIMIZATION TECHNIQUES:**

# **BCA-S209**

- Ability to apply the theory of optimization methods and algorithms to develop and for solving various types of optimization problems.
- ➤ Ability to go in research by applying optimization techniques in problems of Engineering and Technology.
- The purpose of optimization is to achieve the "best" design relative to a set of prioritized criteria or constraints (In equations).
- ➤ Enrich about maximizing factors such as productivity, strength, reliability, longevity, efficiency, and utilization.
- ➤ The decision making process about Information System, Industry-Engineering and Manufacturing Systems, Multicriteria Decision Making and Operations and Supply Chain Management.

# **THEORY**

### **GRAPH THEORY:**

### **BCA-S210**

- > Describe the origin of Graph Theory.
- ➤ Illustrate different types of graph theory.
- Explain independent sets and covering sets and some basic theorems.
- ➤ Discuss degree sequences and operations on graphs.
- Explain connectedness and components and some theorems.
- > Characterize tree.
- ➤ Derive some properties of planarity and Euler's formula.
- Find chromatic number and chromatic polynomials for graphs.
- > Prove fivecolortheorems.
- > Explain basic properties of directed graphs.

# **PRACTICAL**

# COMPUTER LABORATORY AND PRACTICAL WORK OF COMPUTER GRAPHICS & MULTIMEDIA APPLICATION:

# BCA-S206P

- ➤ Using OpenGL for Graphics.
- ➤ Programming User-interface issues.
- ➤ Concepts of 2D & 3D object representation.
- > Implementation of various scan & clipping algorithms.
- ➤ Visibility detection & 3D viewing Implementation of a project based on learned concepts

# **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.

# 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.

## **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 2017-2018)

## (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.
- ➤ 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.

SYLLABUS					
COURSE	PAPER No	PAPER NAME	MARKS		
YEAR	PAPER-1	MICRO ECONOMICS	100		
	PAPER-2	CURRENCY AND BANKING	100		
	PAPER-3	ESSENTIAL OF MANAGEMENT	100		
B.COM 1	PAPER-4	OFFICE MANAGEMENT	100		
	PAPER-5	ACCOUNTING	100		
	PAPER-6	BUSINESS ORGANISATION	100		
×	PAPER-1	STATISTICAL METHODS	100		
B.COM 2 YEAR	PAPER-2	PUBLIC FINANCE	100		
	PAPER-3	BUSINESS LAW	100		
	PAPER-4	COST ACCOUNTING	100		
	PAPER-5	COMPANY LAW & SECRETARIAL	100		
	PAPER-6	SELLING & ADVERTISING	100		
×	PAPER-1	INSURANCE LAW & ACCOUNTS	100		
B.COM 3 YEAR	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)**

#### YEAR-1

# THEORY MICRO ECONOMICS: PAPER-01

- ➤ Understand the definitions of economics with difference between microeconomics and macroeconomics. Understand the method of analysis in economics.
- ➤ Understand the concept of Utility, demand and elasticity. Understand the meaning and properties of indifference curve analysis and consumer equilibrium.
- ➤ Understand the concept of production in short and long run. Understand the producer's behaviour.
- ➤ Understand the concept of cost of production. Understand the cost analysis in short run and long run.

#### **THEORY**

## **CURRENCY AND BANKING:**

#### PAPER-02

Students will be taught about types of money and banks.

- ➤ Will learn about monetary standard.
- ➤ Will get knowledge regarding credit creation.
- ➤ Will learn about types of banks.
- ➤ Will get knowledge regarding foreign exchange rate determination.

### **THEORY**

# **ESSENTIAL OF MANAGEMENT:**

### PAPER-03

- ➤ 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.

# THEORY OFFICE MANAGEMENT: PAPER-04

- > Students will be able to support management in office administration.
- > Students will be able to prepare business documents.
- > Students will be able to manage business records.
- > Students will be able to demonstrate business communication skills.
- > Students will be able to utilize appropriate office technology.

# THEORY ACCOUNTING: PAPER-05

- Acquire the knowledge in accounting, system of maintenance of accounts, journal, ledger and different types of subsidiary books.
- Familiarize the concept of accounting equation, types of accounts, golden rules of accounting, trial balance and final accounts.
- ➤ Develop the application skills in preparation of ledger accounts and final accounts.
- ➤ Analyze the assets and liabilities in the balance sheet.
- > Evaluate the financial position of a business.

# THEORY BUSINESS ORGANISATION: PAPER-06

- > To understand the basic concept of business and markets
- > To understand the different forms of an organization
- > To know various business combinations and methods to remunerate labors
- > To understand organization process and organization structure

### YEAR-2

# THEORY STATISTICAL METHODS: PAPER-01

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-02

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 BUSINESS LAW: PAPER-03

- > 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 COST ACCOUNTING: PAPER-04

➤ 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**

### **COMPANY LAW AND SECRETARIAL PRACTICE:**

## **PAPER-05**

- ➤ Summarize Procedure for incorporation of the company.
- ➤ Analyze Sources of raising capital.
- ➤ Evaluate Role and importance of Company Secretary and key managerial personnel.
- ➤ Discuss Matters to be stated in the prospectus.
- ➤ Define DMAT and Re-mat of securities.
- > Describe Membership in a company.

## **THEORY**

## **SELLING AND ADVERTISING:**

# **PAPER-Optional Paper**

> 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**

### **BUSINESS MATHEMATICS:**

## **PAPER-Optional Paper**

- > 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.

#### 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, 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, analyse 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.



# LUCKNOW PUBLIC COLLEGE OF PROFESSIONAL STUDIES

**BACHELOR OF COMMERCE B.COM (HONOURS)** 

(SESSION 2017-2018)

# **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 value 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**

	PAPER CODE	PAPER NAME	MARKS			
SEMESTER- I	BCH-101	FINANCIAL ACCOUNTING	100			
	BCH-102	FINANCIAL MATHEMATICS	100			
	BCH-103	OFFICE MANAGEMENT	100			
	BCH-104	PRINCIPLES OF ECONOMICS	100			
	BCH-105	ESSENTIALS OF MANAGEMENT	100			
	BCH-106	INDIAN ECONOMY	100			
SEMESTER- II	BCH-201	SPECIALIZED ACCOUNTING	100			
	BCH-202	PUBLIC FINANCE	100			
	BCH-203	INDUSTRIAL PSYCHOLOGY	100			
	BCH-204	BUSINESS COMMUNICATION	100			
	BCH-205	BUSINESS STATISTICS	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	HUMAN RESOURCE MANAGEMENT	100
	BCH-306	COMPUTER APPLICATIONS	100
	•		
	BCH-401	CORPORATE ACCOUNTING	100
1,	BCH-402	DIRECT TAX LAWS AND ACCOUNTS	100
SEMESTER. IV	BCH-403	CORPORATE LAWS	100
	BCH-404	BUSINESS ECONOMICS	100
IES.	BCH-405	BANKING OPERATIONS MANAGEMENT	100
E	BCH-406	SECRETARIAL PRACTICES	100
$\mathbf{\Sigma}$	BCH-407	COMPREHENSIVE VIVA – VOCE	100
	BCH-501	MANAGEMENT ACCOUNTING	100
٠,	BCH-502	FOREIGN TRADE PROCEDURES AND	100
ER		DOCUMENTATION	
SEMESTER- V	BCH-503	INDUSTRIAL LAWS	100
	BCH-504	INSURANCE AND RISK MANAGEMENT	100
E	BCH-505	ENTREPRENEURSHIP DEVELOPMENT	100
$\mathbf{S}$	BCH-506	BUSINESS FINANCE	100
	BCH-506	FOREIGN LANGUAGE(FRENCH)	100
SEMESTER- VI	BCH-601	OPERATIONS RESEARCH	100
	BCH-602	BUSINESS POLICY	100
	BCH-603	TAX PLANNING AND MANAGEMENT	100
	BCH-604	MANAGEMENT INFORMATION	100
		SYSTEM	
	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 to apply basic mathematical concepts and techniques for solving business problems.

# THEORY OFFICE MANAGEMENT: BCH-103

➤ On completion of the course, students are able to identify skills and competencies of an office manager.

- ➤ On completion of the course, students are able to describe different forms of organizations.
- ➤ On completion of the course, students are able to develop processes for office operations.
- ➤ On completion of the course, students are able to identify components of office management roles and procedures and team dynamics.
- ➤ On completion of the course, students are able to communicate finding using business software applications (MS Office: Word, Excel, and PowerPoint).

# 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.

# THEORY INDIAN ECONOMY: BCH-106

➤ For the students to appreciate the working of the Indian economy, its key drivers, on-going challenges and understand the policy options to tackle these challenges.

### **SEMESTER II**

# THEORY SPECIALIZED ACCOUNTING: BCH-201

➤ The objective of this course -is to expose students to accounting issues and practices such as maintenance of company accounts and handling accounting adjustments for example :- Accounts of General Insurance Companies, Accounts of Banking Companies, Accounts of Public Utility concerns, Double Accounts System, Royalty accounts, Investment accounts.

# THEORY PUBLIC FINANCE: BCH-202

Students successfully completing this unit will have the ability to

- ➤ Differentiate between public finance and private finance.
- Explain tax and non- tax revenue, differentiate between direct and indirect tax, explain shifting of taxation and effects of taxation.
- ➤ Describe the effects of taxation on production, distribution and economic stability, role of public expenditure in developing country.
- > Explain the types of public debt and how debt is repaid.

- > Explain the main objectives of fiscal policy.
- > Describe the government budget.

# THEORY INDUSTRIAL PSYCHOLOGY: BCH-203

- > Students will be able to learn and apply different scientific management techniques.
- > Students will be able to analyze the existing job and design suitable jobs to provide certain amount of challenge and job satisfaction.
- > Students will be able to analyze and resolve the real life conflict.
- > Student will have sufficient knowledge to undertake behavioral research projects in the organizations.
- > Students will have the ability to work in group and communicate effectively.
- > Students will be able to design suitable test procedure to test special ability and personality traits of the different candidates.

# THEORY BUSINESS COMMUNICATION: BCH-204

- ➤ To be familiar with the complete course outline/Course Objectives/Learning Outcomes/ Evaluation Pattern & Assignments
- ➤ To participate in an online learning environment successfully by developing the implication-based understanding of Paraphrasing, deciphering instructions, interpreting guidelines, discussion boards & Referencing Styles.
- > To demonstrate his/her ability to write error free while making an optimum use of correct Business Vocabulary & Grammar.
- ➤ To distinguish among various levels of organizational communication and communication barriers while developing an understanding of Communication as a process in an organization.

- > To draft effective business correspondence with brevity and clarity.
- > To stimulate their Critical thinking by designing and developing clean and lucid writing skills.
- > To demonstrate his verbal and non-verbal communication ability through presentations.

### **THEORY**

## **BUSINESS STATISTICS:**

### **BCH-205**

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

- ➤ Describe and discuss the key terminology, concepts tools and techniques used in business statistical analysis.
- > Critically evaluate the underlying assumptions of analysis tools.
- ➤ Understand and critically discuss the issues surrounding sampling and significance.
- ➤ Discuss critically the uses and limitations of statistical analysis.
- > Solve a range of problems using the techniques covered.
- ➤ Conduct basic statistical analysis of data.

### **THEORY**

## **BUSINESS ENVIRONMENT:**

- ➤ 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 to students 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:**

- > 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:**

- > 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**

## **HUMAN RESOURCE MANAGEMENT:**

## **BCH-305**

- ➤ 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**

# **COMPUTER APPLICATIONS:**

- ➤ 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.

### **SEMESTER IV**

# THEORY CORPORATE ACCOUNTING: BCH-401

- ➤ Construct the financial statements of company within the frame work of India.
- ➤ Devise a plan for Redemption of Preference shares
- ➤ Reconstruct the capital structure in the financial statement of Joint stock company ltd.
- Evaluate the Restructuring of capital structure of public company ltd.
- ➤ Develop the procedure involved in Amalgamation of companies.
- > Develop the procedure involved in Absorption of companies.
- > Illustrate the implication of unethical accounting practices on the society.

## **THEORY**

### **DIRECT TAX LAWS AND ACCOUNTS:**

#### **BCH-402**

After conclusion of study the students will be able to: Differentiate between direct and indirect tax assessment. Define the procedure of direct tax assessment. In order to familiarize the different know-how and heads of income with its components. Able to compute total income and define tax complicacies and structure in manual and online format. Able to file IT return for various assesses. Able to understand amendments made from time to time in Finance Act.

# **THEORY**

### **CORPORATE LAWS:**

### **BCH-403**

➤ The objective of the course is to impart basic knowledge of the provisions of the Companies Act 2013 and the Depositories Act, 1996. Case studies

involving issues in corporate laws are required to be discussed in the light of this, learner will be able to cover various provisions and case studies related to Incorporation of various types of companies, Charters of company. doctrine of constructive notice, doctrine of indoor management, various rules regarding managerial personnel, Management & control of companies, majority powers and minority rights, Corporate accountability, amalgamation, Winding up proceeding, winding up of unregistered company, dissolution of company.

# THEORY BUSINESS ECONOMICS: BCH-404

Upon successful completion of this course, the student will be able to:

- > Learn economics in terms of business.
- > Describe the nature of economics in dealing with the issue of scarcity.
- ➤ Perform supply and demand analysis to analyze the impact of economic events on Markets.
- ➤ Analyze the behaviour of consumers in terms of the demand for products.
- > Evaluate the factors affecting firm behaviour, such as production and costs.
- ➤ Analyze the performance of firms under different market structures.
- ➤ Recognize market failure and the role of government in dealing with those failures.
- ➤ Understand the dynamics of how the markets work.
- ➤ Understand the dynamics of how the markets work.
- ➤ Use economic analysis to evaluate controversial issues and policies.

# THEORY BANKING OPERATIONS AND MANAGEMENT: BCH-405

- ➤ To make them aware of banking rules and regulations.
- > Students will learn about historical evolution of banking.
- > They will get knowledge of different types of banks.

- ➤ They will become aware of operational aspects of banking.
- ➤ Will learn about negotiable instruments and basic norms.

# THEORY SECRETARIAL PRACTICES: BCH-406

➤ The Objective of this course is to induct the students with the knowledge of secretarial practice in the organizations and able to understand Meaning, Appointments, Legal position, Powers and Responsibilities and Removal of company secretary, also know how to Draft Notice, Agenda, Minutes of Statutory, Annual General and Extra-ordinary General Meetings. Drafting of Resolutions. Drafting of Call Letters, Share certificate and share warrant, etc.

## **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.

## **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:**

- > 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 2017-2018)

#### **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

getrecruited in the banking sector working as customer service executives. Students can also find employment in various government sectors.

#### **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.

#### **SYLLABUS**

COURSE	PAPER	PAPER NAME	MARKS		
	No.				
	PHYSICS				
	PAPER-1	MECHANICS AND WAVE MOTION	50		
	PAPER-2	CIRCUIT FUNDAMENTAL AND BASIC	50		
		ELECTRONICS			
	PAPER-3	OPTICS	50		
	PAPER-4	PRACTICAL PHYSICS	50		
	CHEMISTRY				
<b>R-1</b>	PAPER-1	INORGANIC CHEMISTRY	50		
YEAR-1	PAPER-2	ORGANIC CHEMISTRY	50		
YE	PAPER-3	PHYSICAL CHEMISTRY	50		
	PAPER-4	PRACTICAL CHEMISTRY	50		
	MATHEMETICS				
	PAPER-1	ALGEBRA	50		
	PAPER-2	CALCULUS	50		
	PAPER-3	MATRIX AND DIFFERENTIAL	<b>50</b>		
		EQUATIONS			
	PAPER-4	COORDINATE GEOMETRY	50		
	PHYSICS				
	PAPER-1	ELECTRICITY, MAGNETISM	50		
	PAPER-2	THERMAL PHYSICS	50		
61	PAPER-3	ELEMENTS OF QUANTUM MECHANICS	50		
R-2		AND ATOMIC SPECTRA			
YEAR-2	PAPER-4	PRACTICAL PHYSICS	50		
	CHEMISTRY				
	PAPER-1	INORGANIC CHEMISTRY	50		
	PAPER-2	ORGANIC CHEMISTRY	50		
	PAPER-3	PHYSICAL CHEMISTRY	50		
	PAPER-4	PRACTICAL CHEMISTRY	50		

MATHEM	MATHEMATICS	
PAPER-1	ADVANCE CALCULAS	50
PAPER-2	MATHEMATICAL METHODS	50
PAPER-3	DIFFERENTIAL EQUATIONS	50
PAPER-4	MECHANICS	50

#### **COURSE OUTCOMES**

#### YEAR-1

# 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 A.C circuit and relate A.C. 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 A.C. and D.C. circuit.

# 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 fibbers, 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.

# PRACTICAL PHYSICS: PAPER CODE:

Experimental physics has the most striking impact on the industry wherever the instruments are used to determine the thermal and electronic properties. The following outcomes are expected by this laboratory course:

- > Students will achieve measurement precision.
- > Students will verify the conceptual learning through experiments in these areas.
- > Students will better appreciate the theoretical concepts in mechanics, electricity and magnetism, and optics through experiments.
- ➤ Online Virtual Lab Experiments are expected to give insight in the simulation techniques, and provide basis for modeling

#### **THEORY**

#### **INORGANIC CHEMISTRY:**

#### **PAPER CODE:**

➤ Understand about orbital their shape, electron filling pattern in orbital, 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:**

- ➤ 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.

# THEORY PHYSICAL CHEMISTRY:

- ➤ 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, 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**

#### **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.

#### **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**

### MATRICES AND 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 a 2 x 2 or 3 x 3 matrix 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

#### **COORDINATE 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 conicoids, generating lines, confocal conicoids and reduction of second-degree equations.

#### YEAR-2

# 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.

#### **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:**

- ➤ 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 Germer experiment, Hertz experiment, Stern-Gerlach experiment.

# 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:**

- ➤ 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.

#### **THEORY**

#### **INORGANIC CHEMISTRY:**

- ➤ 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 bioinorganic, 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:**

- ➤ The preparation and chemical reactions of Alcohols and Epoxides -Alcohols Dihydric alcohols: (Ethylene Glycol) Trihydric alcohols: (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.

#### **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:**

- ➤ 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**

#### **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.



#### **LUCKNOW PUBLIC COLLEGE OF PROFESSIONAL STUDIES**

## BACHELOR OF ARTS IN JOURNALISM AND MASS COMMUNICATION (BAJMC)

(SESSION 2017-2018)

### 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 allencompassing 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.	<b>PAPER</b>	PAPER   PAPER TITLE		
B01	Ι	LANGUAGE & CULTURAL STUDIES		
B02	II	INTRODUCTION TO MASS-COMMUNICATION		
B02	III	PRACTICAL /VIVA-VOICE		

BAJMC – II SEMESTER					
S.NO.	<b>PAPER</b>	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.	<b>PAPER</b>	PAPER TITLE			
B07	Ι	MESSAGE & MASS-MEDIA AUDIENCE			
B08	II	BASICS OF REPORTING & EDITING			
B09	III	PRACTICAL / VIVA VOICE			

BAJMC – IV SEMESTER				
S.NO.	S.NO. PAPER PAPER TITLE			
B13	I	BASICS OF ADVERTISING & PUBLIC RELATIONS		
B14	II	NEW MEDIA		
B15	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

- ➤ 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** 

- ➤ 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.

### 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

- 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

- > 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.