SCHEME OF INSTRUCTION AND SYLLABUS

Bachelor of Business Administration

(In association with IBM)

From Academic Year: 2025-26 Onwards

BBA-Business Analytics

FACULTY OF COMMERCE & MANAGEMENT

United University

Rawatpur-Jhalwa (Prayagraj)

Uttar Pradesh

University Vision

To establish a value based global university having dynamic learning environment encouraging creativity and innovation, research inspired experiential learning and focusing on topics that are pertinent to the development of the region, the country and the world.

University Mission

- To provide a dynamic, inspiring and varied learning environment with global exposure.
- To position the institution as a premier hub for research and experiential learning.
- To develop into an adaptable University meeting the demands of society and business.
- To incorporate value thinking, integrity, wisdom and passion in professional for their career and life.

Department Vision

To achieve global competence by evolving thought leadership, innovative and creative solution, making socially responsible business leaders through flexible, value based, management education driven by high quality research and collaboration.

Department Mission

1. To nurture responsive ethical leaders sensitive to environment and society.
2. To encourage critical thinking and continuous improvement.
3. To inculcate a culture of innovation and entrepreneurship.
4. To create and disseminate knowledge through applied and inter-disciplinary research and practices in emerging areas of management.

Program Educational Objectives
(Undergraduate)

PEO 1: To develop students professionally to handle business issues.

PEO 2: To develop students to be a better team worker.

PEO 3: To bridge the gap between theoretical and practical knowledge of the students by adopting innovative teaching pedagogy.

PEO 4: To develop socially, ethically responsible business leaders.

PEO 5: To sharpen soft and hard skills among the students.

PEO 6: To promote entrepreneurial skills among students.

Program Outcomes

On successful completion of the BBA-IBM programme the student will be able to:

PO1: Upon completion of the BBA-IBM program, the individual must demonstrate maturity, professionalism and team working skills.

PO2: Upon completion of the BBA-IBM program the students will have general idea of operations in business.

PO3: Upon completion of the BBA-IBM program, the individual will have specialized skills to deal with area specific issues of concern.

PO4: Upon completion of the BBA-IBM program, the individual will be able to apply technological knowhow for business advancements.

PO5: Upon completion of the BBA-IBM program, the individual will be capable of analysing, investigating and solving critical business issues.

Program Specific Outcomes

PSO1: An ability to apply conceptual foundations of management to solve practical decision-making problems.

PSO2: An ability to adapt to dynamic changes in an environment with an understanding of societal and ecological issues relevant to professional managerial practice through life-long learning.

PSO3: Excellent adaptability to function in multi-disciplinary work environment, good interpersonal skills as a leader in a team in appreciation of professional ethics and societal responsibilities.

SCHEME OF INSTRUCTION

COURSE CATEGORY ABBREVIATIONS

1. Core Courses
2. Discipline Specific Courses (DSE)
3. Generic Electives (GE)
4. Ability Enhancement Compulsory Courses (AECC)
5. Skill Enhancement Courses (SEC)

Semester I

				Contact Hours			26
S. No.	**Course Code**	**Course Category**	**Course Name**	**L**	**T**	**P**	**C**
1	CMUCBB101T	Core Courses	Principles of Management	4	0	0	4
2	CMUCBB102T		Organizational Behaviour	4	0	0	4
3	CMUCBB103T		Business Economics	4	0	0	4
4	SCSMPBB10T	Discipline Specific Courses (DSE)	Business Mathematics	4	0	0	4
5	SCSEPBB10T	Generic Electives (GE)	Environmental Studies	2	0	0	2
6	PTSPPBB11T	Ability Enhancement Compulsory courses (AECC)	Professional Proficiency	2	0	0	2
7	CMUCBB115T	Skill Enhancement courses (SEC)	Business Communication	2	0	0	2
8	CMUIBB102T	IBM	Data Visualization	4	0	0	4
					Total Credits		26

***Abbreviations: (L)** Lecture, **(T)** Theory, **(P)** Practical, **(C)** Credits*

COURSE CODE & NAME: CMUCBB101T / PRINCIPLES OF MANAGEMENT

COURSE OUTCOMES

1. Describe the influence of historical forces on the current practice of management. To explain how organizations, adapt to an uncertain environment
2. Describe the process of management's four functions: planning, organizing, staffing, directing, and controlling.
3. Develop cognizance of the importance of management principles
4. Identify and evaluate social responsibility and ethical issues involved in business situations and logically articulate own position on such issues.

UNIT 1: OVERVIEW OF MANAGEMENT
Evolution of Management: - Contribution of Taylor, Mayo & Fayol, Different approaches of management, role of manager, Management & its functions. Level of Management, managerial skills at various levels, SWOT analysis.

UNIT 2: PLANNING
Nature and purpose of planning, Planning process, Types of plans, Objectives – Management by objective (MBO) Strategies: Types of strategies, Policies, Decision- making: Types of decision, Decision Making Process, Rational Decision Making, Case Study

UNIT 3: ORGANIZING
Nature and purpose of organizing, Organization Structure: Formal and informal groups, Line and Staff authority, Departmentation, Span of control, Centralization and Decentralization Delegation of authority, Staffing: Selection and Recruitment, Orientation, Career Development Career stages, Training, Performance Appraisal, Case Study

UNIT 3: DIRECTING
Concept, Techniques of directing and supervision, Types of supervision, Essential characteristics of supervisor, Communication, Barriers to effective communication, Organization Culture Elements and types of culture, Managing cultural diversity, Case Study

UNIT 4: CONTROLLING
Process of controlling, Types of control, Budgetary and non- Quality Control, Budgetary control techniques, Managing Productivity, Cost Control, Purchase Control, Maintenance Control, Planning operations, Case Study

TEXTBOOKS

1. L. M. Prasad- Principles and Practices of Management, Sultan Chand & Sons, 7th edition, 2007.

REFERENCE BOOKS

1. P.C. Tripathi, P.N. Reddy, Principles of Management (6th Edition), McGraw Hill Education, 2022
2. V.S.P. Rao, Management: Principles & Practice of Management ,Text and Cases (2nd Edition), , Excel Books, 2010
3. Robbins, S.P. and Decenzo, D.A. Fundamentals of Management, Pearson Education Asia, New Delhi. 11th Edition
4. Hellregel, Management, Thomason Learning, Bombay. 8th Edition
5. Robbins & Coulter, Management, Prentice Hall of India. New Delhi.

COURSE CODE & NAME: CMUCBB102T / ORGANIZATIONAL BEHAVIOUR

COURSE OUTCOMES

1. Demonstrate the organizational behavior and how these behavior influences the overall effectiveness of an organization and its stakeholders.
2. Ability to explain the process of developing behavior of individuals.
3. Identify and evaluate learning process and its impact on growth of employees and organization. Evaluate the importance of managing and motivating people towards the achievement of organizational goals
4. Developing cognizance of the leadership styles to anticipate the consequences of each leadership style.
5. Predict the situations that cause conflict and their redressal and assessing stresses.

UNIT 1: OVERVIEW OF ORGANIZATION BEHAVIOUR
Introduction: Meaning & Nature of O.B, Need & Significance of O.B, Discipline Contributing to O.B, Foundation of Individual Behavior, Organizational Models.

UNIT 2: PERSONALITY & PERCEPTION
Personality: Meaning, Types, Importance, Determinants of Personality, Factors Affecting Personality. Perception: Concept & Meaning- Importance-Factors Influencing Perception, Case Study

UNIT 3: LEARNING & MOTIVATION
Learning: Meaning, Significance, Types of Learning Styles, Learning Process, Theories of Learning. Motivation: Definition & Concept of Motive & Motivation, Case Study

UNIT 4: CONFLICT & STRESS
Conflict: Nature & Meaning - Types of Conflict, Levels of Conflict, Conflict Resolution. Stress: Meaning, Sources of Stress, Consequences & Coping Strategies of Stress, Case Study

UNIT 5: LEADERSHIP & POWER
Leadership: Meaning- Significance, Leadership Styles. Power: Meaning- Concept, Types of Power, Importance, Case Study

TEXTBOOKS

1. Robbins, Stephen P: Organizational Behavior" Prentice Hall, New Delhi.

REFERENCE BOOKS

1. K.Aswathappa, Organizational Behaviour, (edition), Himalaya Publishing House, 2016.
2. Pareek. U, Understanding Organizational Behaviour, (3rd edition) Delhi, India: Oxford University Press, 2014.
3. Singh, K. Organisational Behaviour: Texts & Cases, (3rd edition), India:Pearson, 2015
4. Greenber, J. & Baron, R.A. (2005). Behavior in Organizations. New Delhi: Pearson Education.

COURSE CODE & NAME: CMUCBB103T / BUSINESS ECONOMICS

COURSE OUTCOMES

1. Understand the essential ideas in Managerial Economics pertinent to consumer, producer, and wealth-owner, including concepts, theories, and rules of utility and indifference curve.
2. Understand and apply demand ideas and laws.
3. Application of concept of production function and laws of production, various cost functions.
4. Analysis of market structure and its working in relation to pricing decision.
5. Evaluation of Economic system and its performance in current scenario.

UNIT 1: INTRODUCTION OF ECONOMICS

Definition of Economics – Adam Smith, Marshal, Robbins and Samuelsson's view. Nature and scope of Economics- Economics as a Science, as an Art, positive and normative science. Inductive and deductive methods of economics. Micro & Macro Economics: Concept Definition, Scope and Characteristics.

UNIT 2: DEMAND AND SUPPLY ANALYSIS

Demand Analysis: Concept and Types of Demand, Determinants of Demand, Law of Demand, Exception of Law of Demand, Demand Forecasting, Elasticity of Demand-Price, Income & Cross Elasticity.
Supply Analysis: Concept and Types of Supply, Determinants of Supply, Law of Supply, Elasticity of Supply, Market equilibrium curve, Case Study

UNIT 3: PRODUCTION AND COST ANALYSIS

Production: concept, factors of production and short run and long run production, Production function, laws of production-law of return to scale, law of variable proportion. Economies and Diseconomies of Scale. Cost Analysis: Cost Concepts-Opportunity Cost, Incremental Cost, Sunk Cost, Direct & Indirect Cost, Fixed Cost, Variable Cost & Total Costs, Average Fixed Cost, Average Variable Cost, Average Cost and Marginal Cost, relationship between Average Cost, Marginal Cost Curve & Total Cost, Cost Curves–short-term and long–term cost curves, Case Study

UNIT 4: MARKET STRUCTURES & COMPETITION

Types of Markets & Competition: Perfect Competition- Features, Determination of Price and Output. Monopoly Market: Features, Determination of Price and Output, Monopolistic Competition- Features, Determination of Price and Output, Oligopoly- Features, Determination of Price and Output, Case Study

UNIT 4: NATIONAL INCOME, BUSINESS CYCLES, INFLATION

Business Cycles: Definition Features and Phases of Business Cycles, Effects of Business Cycles and Controlling Business Cycles. Inflation – Types of inflation, causes of Inflation, Measurement of inflation, and impact of inflation. National Income: Concept of National Income, GDP, GNP, NDP, NNP, Methods of Measuring National Income, circular flow of income, Impact of global environment on business, Case Study

TEXTBOOKS

1. Dwivedi D.N. - Managerial Economics (Vikas Publication, 7th Edition).

REFERENCE BOOKS

1. Ahuja, H.L. (2015). Managerial Economics. S. Chand.
2. Atmanand. (2008). Managerial Economics. Excel Books.
3. Hirschey. (2009). Economics for Managers. Cengage Learning.
4. Peterson, H.C., Lewis, W.C., & Jain, S.K. (2009). Managerial Economics. Pearson Education.
5. Dr. D.M.Mithani. Managerial Economics – Theory and Applications, Himalaya Publications, 7th Ed.

COURSE CODE & NAME: SCSMPBB10T / BUSINESS MATHEMATICS

COURSE OUTCOMES

1. Learn about the about algebra and its application.
2. Understand the matrices and its uses in business
3. Learn the differentiation and its application
4. Outline the integration and its application.
5. Learn about linear programing and its application.

UNIT 1: FUNDAMENTAL OF ALGEBRA
Set: Introduction, Representation of sets, Types and Basic operation on set, Laws of set algebra, Venn diagram, Use of theory in business. Relation & Function: Composite relations, Properties of relation, Definition of function, Classification of functions, Operations on functions.
Introduction to permutation and combination (Simple Problem)

UNIT 2: MATRICES
Introduction and Definition of matrix & determinant, Properties of determinants, Types of Matrices, Operation on Matrices, Transpose, Adjoin & Inverse of Matrix, Rank of Matrix, Eigen value and Eigen vector, Solution to a system of equation by the Cramer's rule, Use of Matrix in Business.

UNIT 3: DIFFERENTIAL CALCULUS
Differential Calculus: Limit, Continuity and Differentiability; Differentiation, Differentiation of product of two functions, Differentiation of quotient of two functions, Differentiation by substitution, Maxima & Minima.

UNIT 4: INTEGRAL CALCULUS
Integral Calculus: Fundamental rule of Integration, Integration by substitution, Integration by parts, Finite integrals, Practical applications in real life business problem.

UNIT 5: LINEAR PROGRAMING
Linear programing problem, Formulation of Linear Programing, Graphical method of solution, Simplex method for solving the LPP, Transportation & Assignment problem.

TEXTBOOKS

1. Business Mathematics, by Qazi Zameeruddin, vikas publication

COURSE CODE & NAME: SCSEPBB10T / ENVIRONMENTAL STUDIES

COURSE OUTCOMES

1. Gain understanding of the concepts of environmental studies.
2. Develop a concern towards environment preservation.
3. Able to be a part of different sustainable developmental activities.

UNIT 1: INTRODUCTION TO ENVIRONMENTAL STUDIES
Multidisciplinary nature of environmental studies; Scope and importance; Concept of sustainability and sustainable development. Ecosystems: Structure and function of ecosystem; Energy flow in an ecosystem: food chains, food webs and ecological pyramids. Nutrient cycle.

UNIT 2: NATURAL RESOURCES
Renewable and non-renewable energy resources, Land resources and land use change; Land degradation, soil erosion and desertification. Deforestation: Causes and impact due to mining dam building on environment. Flood and drought, Case Study

UNIT 3: ENVIRONMENTAL POLLUTION
air pollution, water pollution, thermal pollution, noise pollution, soil pollution; Solid Waste Management; Environmental Impact Assessment, Case Study

UNIT 4: BIODIVERSITY AND CONSERVATION
Levels of biological diversity: genetic, species and ecosystem diversity; hot spots; threats to biodiversity; Conservation of biodiversity: in-situ and ex -situ conservation of biodiversity, Case Study

UNIT 5: IMPACT OF ENERGY USAGE ON ENVIRONMENT
Global warming, climate change, Depletion of ozone layer, Acid rain. Environmental ethics, Role of NGOs, Environmental Laws: Environment Protection Act. Air (Prevention and Control of Pollution) Act. Water (Prevention and control of Pollution) Act. Wildlife Protection. Act. Forest Conservation Act, Case Study

TEXTBOOKS

1. Environmental and Pollution Awareness by Sharma BR; Satya Prakashan, New Delhi.
2. Environmental Chemistry and Pollution Control by S.S. Dara; S Chand Publishing, New Delhi.
3. Environmental studies by Dr. Suresh K. Dhameja; S>K>Kataria & Sons, Delhi.

REFERENCE BOOKS

1. Environmental Pollution by Dr. RK Khitoliya; S Chand Publishing, New Delhi
2. Environmental Science by Deswal and Deswal; Dhanpat Rai and Co. (P) Ltd. Delhi.

COURSE CODE & NAME: PTSPPBB11T/ PROFESSIONAL PROFICIENCY

COURSE OUTCOMES:

1. Gain insight about better representation of communication skills and apply them in business world.
2. To develop personality and aptitude building required for jobs
3. To inculcate employability skills and prepare for Industries /corporate and public and Private Sector jobs.

UNIT 1: HARD SKILLS

Hard skill includes Basic Grammar, Vocabulary, Articles, Tenses, Construction of Sentences and Reading Comprehension etc.

UNIT 2: COMMUNICATION SKILL

Efforts should be made to overcome the initial hesitation of speaking English of students and hence improve their fluency in English. Suggested methods include:

- Follow only English language in the class.
- Class should be interactive and students should always be engaged in some kind of conversation.
- Group Discussion and Interview Practices
- Each student should speak 5 minutes, 3-4 times in 1st semester on topics of his choice selected from Social, Environmental, Sports, Business and Economics, Medicines and Health Care, Science and Technology, Politics, World Affairs and Religion etc.
- In the above process students should be regulated towards better Vocabulary and Pronunciation.

UNIT 3: APPTITUDE BUILDING QUANTITATVIE

APPTITUDE

1. Basic Calculations: (BODMASS rule, Square and square root, Cube and cube root, Different types of numbers, Divisibility rule, Fraction and comparison of fraction)
2. Number System: Multiples, Factors Remainder, Remainder Theorem, Unit Place, Number formation, Factorial, LCM and HCF Finding and its application.
3. Percentage: (Basics of percentage and its calculation, Comparison of percentage, how to use in data interpretation, Venn diagram)

LOGICAL REASONING

1. Coding and decoding.
2. Number Series
3. Blood Relation.

COURSE CODE & NAME: CMUCBB115T / BUSINESS COMMUNICATION

COURSE OUTCOMES:

1. To distinguish among various levels of organizational communication and communication barriers.
2. To stimulate their Critical thinking by designing and developing clean and lucid writing skills.
3. To demonstrate his/her verbal and non-verbal communication ability through presentations.

Unit I: Introduction to Business Communication: Introduction, Role of Communication in Business, Definitions of Communication, Purpose of Communication, Principles of communication, Communication Process, Forms of Communication, Communication direction, Barriers of Communication, Seven Cs of Communication. Communication Targets; Internal Communication; Miscommunication and strategies to resolve; Dealing with grapevine communication.

Unit II: Oral and Written communication: Oral Communication: Advantages of Oral Communication, Limitations of Oral Communication, Two Sides of Oral Communication, types of oral communication, Effective Listening. Written Communication: Written Communication, Purpose, Principles, Writing Techniques, E Correspondence. Drafting official; Dealing with WhatsApp messages, Case Study

Unit III: Business Letters and Report Writing: Business Letters and Its Need, Types of Letters, Structure of Business Letter, Form of Letters, Report Writing, Types of Business Reports, Characteristics and Purpose of a Good Report, Guiding Principles of Writing a Report, Preparing A Report, Structure of A Report. Importance of business language: Concept, elements, significance, examples. Application of business language. **Presentation Skill:** Presentation, Elements of Presentation, Designing A Presentation, Using Visual Aids, Appearance and Posture, Tips for An Effective Presentation, Case Study

Text Book:

- Vikram Bisen and Priya, "Business Communication", New Age International Publishers.
- B. M. Shaikh, "Business Communication", Vision Publication.
- Urmila Rai and S. M. Rai, "Business Communications", Himalaya Publication House.

References Book:

K.K. Ramachandran, K.K. Lakshmi, K.K. Karthick & M. Krishna Kumar **Business Communication; First Edition;** Vikas Publishing, 2021

Arthur H. Bell, Dayle M. Smith, K Maharul Islam; Business Communication, third edition (An Indian Adaptation); **Wiley Publication; 2023**

Homai Pradhan , **Prof. N.S. Pradhan**, Business Communication ; Third Edition; Himalaya Publishing House; 2021.

COURSE CODE & NAME: / CMUIBB102T DATA VISUALIZATION

COURSE OUTCOMES:

1. To understand Python programming basics and apply them to data analysis.
2. To use Python libraries such as Pandas and NumPy for data manipulation and analysis.
3. To create visualizations using Python libraries such as Matplotlib and Seaborn
4. To equip learners with foundational skills in navigating the Power BI Desktop interface and creating basic data visualizations using imported Excel or CSV data.
5. To enable learners to build interactive and well-formatted reports by using slicers, filters, and default themes.

UNIT 1: Python Basics for Data Visualization, Introduction to Python and IDEs (Jupyter Notebook, VS Code), Data Types, Variables, Input/Output, Conditional Statements and Loops, Functions and Modules

UNIT 2: Data Handling with Python, Introduction to NumPy: Arrays, Indexing, Basic Operations, Introduction to Pandas: Series and DataFrames, Data Cleaning: Handling Missing Data, Filtering, Sorting, Loading and Saving Data (CSV, Excel)

UNIT 3: **Data Visualization using Python,** Introduction to Matplotlib: Line, Bar, and Pie Charts, Customizing Charts: Titles, Labels, Legends, Colors, Seaborn Overview: Histograms, Boxplots, Scatter Plots, Using Plotly (optional/extension)

UNIT 4: Exploring Power BI and creating basic visualization, Introduction to Power BI: What is Power BI? Power BI Desktop, Service, Mobile. Real world use cases, **Power BI Desktop Interface Overview**: Home ribbon, visualizations pane, fields pane. Report, Data, and Model views (overview only), **Importing Data**: Connecting to Excel and CSV files**.** Previewing and loading data. Understanding data tables and field types, **Creating Visualizations:** Bar chart: clustered, stacked, Pie chart: percentages and values, Line Chart, Tree Map. Modifying chart properties: titles, labels, colors, sorting

UNIT 5: **Enhancing Interactivity and building a Simple report, Introduction to Filters and Slicers:** Visual-level, page-level, report-level filters. Adding slicers: category, date, and number slicers. Using multiple slicers and syncing across pages, **Building a Simple Dashboard:** Creating a multi-page report. Designing a layout with consistent formatting. Adding text boxes, titles, and labels. Applying default Power BI themes. Saving and exporting the report (PBIX, PDF), **Review and Final Project:** Students build a basic interactive dashboard from a given dataset

Text/Reference Books:

1. *Python for Data Analysis* by Wes McKinney

2. Mastering Power BI by Chandraish Sinha

Further suggested Readings

1. *Data Visualization with Python and JavaScript* by Kyran Dale
2. *Effective Python: 90 Specific Ways to Write Better Python* by Brett Slatkin
3. “Introducing Microsoft Power BI" by Alberto Ferrari and Marco Russo
4. "Microsoft Power BI For Dummies" by Jack A. Hyman