



Estd. 1990

IMS GHAZIABAD
(UNIVERSITY COURSES CAMPUS)
Status of 12(B) by UGC

| Program Name: BBA | | |
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| COURSE OUTCOMES | | |
| SEMESTER I | | |
| Course Code: | Course Name | Course Outcomes (CO): After the completion of the course students will be able to: |
| BBA-101 | Fundamentals of Management | CO101.1: Acquaint the students with the fundamentals of management as they are practiced today and also students will be able to define and compare the concepts of management by different experts. |
| | | CO101.2: Interpret and apply the management function Planning and also be able to learn managerial decision making skills. |
| | | CO101.3: Examine analytical and problem solving skills, based on understanding the management concept of Organizing and also being able to learn the difference between Centralization and decentralization. |
| | | CO101.4: Develop a working knowledge of fundamental terminology of management function: directing and coordination., also the students will be able to define the concepts of Motivation and Leadership with examples. |
| | | CO101.5: Acquire the students with the understanding of concept Controlling and how to apply controlling techniques for managing contemporary organizations. |
| BBA-102 | Organizational Behavior | CO102.1: Understand basic knowledge of main ideas and key theories relating to organization behaviour. |
| | | CO102.2: Interpret the concepts of organization behavior in managing people and fostering an environment that encourages continuous learning within organizations. |
| | | CO102.3: Illustrate skills in diagnosis and problem solving by using the learned concepts to given situations. |
| | | CO102.4: Correlate an interest in positive attitude towards the many aspects of the behavioural patterns of human beings at work place. |
| | | CO102.5: Evaluate organizational behavior concepts, theories, and principles to enhance the overall effectiveness, efficiency, and well-being of individuals and the organization as a whole. |
| | | CO102.6: Formulate an integrated understanding of change in management, showcasing their ability to apply these concepts collaboratively for fostering positive organizational development. |
| BBA-103 | Managerial Economics | CO103.1: Understanding the fundamental concepts of Economics and its relevance in Business Management. |
| | | CO103.2: Apply the concepts of demand and supply in the Business Management. |
| | | CO103.3: Analyze the different market structures to assess the implications on pricing strategies. |
| | | CO103.4: Evaluate various pricing methods and explain their impact on business decisions and market outcomes. |
| | | CO103.5: Appraise the concepts of economic growth and development and evaluate their impact on business and the economy. |
| BBA-104 | Accounting and Financial Analysis | CO104.1: Understand and remember the basic concepts of accounting and financial statements. |
| | | CO104.2: Applying accounting concepts and principles to prepare financial statements. |
| | | CO104.3: Employ critical thinking skills to analyse financial data as well as the effects of different financial accounting methods on the financial statements. |
| | | CO104.4: Evaluate the financial position and performance of an entity with the help of various techniques in accounting. |

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| | | CO104.5: Create effectively various financials and demonstrate the ability to communicate such data to the users of Financial statements. |
| BBA-105 | Business Law | CO105.1: Acquire complete knowledge of the legal aspects of the laws affecting businesses. CO105.2: Understand the basic rules regarding different types of laws to contract used in businesses. CO105.3: Articulate the application skills relating to Formation and Discharge of sale of goods. CO105.4: Develop an analytical skill using the different case laws relating to contract entered during partnership. CO105.5: Evaluate negotiations, case laws and amendments under each business contract for better implementation. |
| BBA-106 | Business Organization and Ethics | CO106.1: Identify the role of business activities in modern business and its application. CO106.2: Apply the theoretical concept of business unit, plant location and plant layout in their business decisions. CO106.3: Analyze organizational culture and the ethical practices and address a variety of ethical dilemmas at work. CO106.4: Evaluate the CSR, social change, and social responsibility of businesses in the present business context. CO106.5: Create the business plan. |
| SEMESTER II | | |
| Course Code: | Course Name | Course Outcomes (CO) |
| BBA-201 | Quantitative Techniques for Business | CO201.1 Recognize and recall the different types of data in statistical analysis, methods of data classification, tabulation, frequency distribution and graphical presentation. CO201.2: Understand the concept of Central Tendency to analyze datasets effectively and Measures of Dispersion for data interpretation and decision-making. CO201.3 Apply correlation methods and regression concepts, including Introduction, Regression Lines, and Regression Equations CO201.4 Analyze the application of Time Series, Index Numbers, Interpolation, and Extrapolation. CO201.5 Evaluate principles of Probability and Probability Distributions |
| BBA-202 | Business Communication | CO202.1: Recall fundamental business communication concepts, terminology, and principles to establish a foundational understanding of the subject CO202.2: Interpret written and oral business messages, demonstrating comprehension of communication strategies and techniques CO202.3: Apply business communication skills in practical scenarios, such as drafting effective emails, memos, and reports, showcasing the ability to implement learned concepts in a professional context CO202.4: Evaluate and analyze business communication scenarios, identifying effective and ineffective communication practices within organizational contexts CO202.5: Develop advanced business communication materials, like presentations to demonstrate the synthesis of knowledge and skills acquired throughout the course |
| BBA-203 | Human Resource Management | CO203.1: Acquaint students with the concepts of HRM, including HRD, compensation, Training & development, e-HRM, and more. CO203.2: Interpret and apply acquired professional skills after learning Global and e-HRM to enhance managerial decision making abilities. |

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| | | CO203.3: Evaluate analytical and problem-solving skills through comprehension of HR theories, HR procurement, career planning and mobility concepts. |
| | | CO203.4: Develop students with a comprehensive grasp of performance appraisal and compensation, enhancing their practical knowledge and skills. |
| | | CO203.5: Apply the knowledge of technology in HRM to increase to effectively tackle modern challenges. |
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| BBA-204 | Marketing Management | CO204.1: Identify Market challenges & Opportunities in a dynamic Business. |
| | | CO204.2: Apply the concepts relating to Marketing Management. |
| | | CO204.3: Analyze the concepts relating to consumer buying behavior |
| | | CO204.4: Explain and interpret Market Research evolution and Structure |
| | | CO204.5: Assess and interpret the relevance of pricing and distribution strategies. |
| | | CO204.6: Integrate knowledge from different business management areas to solve complex business problems |
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| BBA-205 | Business Environment | CO205.1: Identify the nature of business environment and its components. |
| | | CO205.2: Apply the conceptual framework of Business environment and generate interest in International Business. |
| | | CO205.3: Analyze the socio-economic implications of Liberalization, Privatization and Globalization. |
| | | CO205.4: Evaluate the various Economic Systems and Industrial Policies. |
| | | CO205.5: Assess various policies of the government like FEMA, EXIM, Start-ups etc. in regulation and development of business. |
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| BBA-206 | Fundamentals of Computer | CO206.1: Understand and recall the basic concepts of a computer, including its history and types and describe the significance of each computer generation in technological advancements. |
| | | CO206.2: Apply the relationship between hardware and software in a computer system and differentiate between RAM and ROM and assess their roles in computing. |
| | | CO206.3: Analyze the implications of digital piracy and assess management strategies and importance of cyber security laws in safeguarding digital information. |
| | | CO206.4: Evaluating security features to protect the operating system and personal data and Develop proficiency in using MS Word for various applications and tasks. |
| | | CO206.5: Create complex Excel spreadsheets using filters and advanced commands and develop engaging presentations using PowerPoint templates, charts, and tables. |
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| BBA-207 | Assessment on Soft Skills Based Presentation/GD | CO207.1: Identify the crucial role of communication in the workplace as the cornerstone of efficiency and maximum individual and team contribution. |
| | | CO207.2: Impart the knowledge and practical applications of various facets of an effective leader. |
| | | CO207.3: Enhance the self awareness of the students through self assessment and reflection. |
| | | CO207.4: Analyze and upgrade the emotional intelligence of the students & raise awareness of business trends and technology savviness. |
| | | CO207.5: Assess creativity skills by applying critical and innovative thinking abilities along with problem-solving skills. |
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| SEMESTER III | | |
| Course Code: | Course Name | Course Outcomes (CO) |
| BBA-301 | Advertising Management | CO301.1: Illustrate and memorize working knowledge of advertising framework and theories and also know the current trends of advertising. |
| | | CO301.2: Interpret and relate the role of public relation and publicity in terms of communication. |
| | | CO301.3: Extract and relate the role of advertising in sales of product and service and also role of sales promotional offers in terms of attracting and retaining customers. |

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| | | CO301.4: Examine and appraising analytical and theoretical knowledge of Print media and Broadcasting concept. |
| | | CO301.5: Develop critical thinking and analytical ability through developing the cite of Media Planning and Strategies concepts. |
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| BBA-302 | Team Building & Leadership | CO302.1: Identify how global leadership skills contribute to leadership effectiveness. |
| | | CO302.2: Apply the leader's role in team-based organizations and their contribution towards attainment of organizational objectives |
| | | CO302.3: Analyze the potential contribution of outbound leadership to the development of team leadership. |
| | | CO302.4: Evaluate the role of Leadership during crisis management and prioritize the activities during tough times. |
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| BBA-303 | Indian Economy | CO303.1: Remember the basic characteristics of Indian economy, its development and growth attributes. |
| | | CO303.2: Understand the causes and impact of population growth and deeply evaluate the problem of unemployment in India. |
| | | CO303.3: Discover agriculture as the foundation of economic growth and development along with the role of public and private sector in the development of the country. |
| | | CO303.4: Analyse the problems and prospects in Indian Agriculture, Iron and Steel Industry, Sugar Industry, Cotton and Textile Industry & Large scale, small-scale and cottage industries. |
| | | CO303.5: Evaluate the structure and functioning of Indian Banking system and Niti Aayog. |
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| BBA-304 | Customer Relationship Management | CO304.1: Comprehend basic customer relationship management and their application in business. |
| | | CO304.2: Understand e-crm practices and their impact on emerging business practices. |
| | | CO304.3: Devise an effective CRM Strategy affecting better customer decisions and retention. |
| | | CO304.4: Design Sales Force Automation (SFA) principles and practices to improve sales efficiency and effectiveness, manage customer relationships, and support e-business initiatives. |
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| BBA-305 | Management Information System | CO305.1: Understand the leadership role of Management Information Systems in achieving business competitive advantage through informed decision making. |
| | | CO305.2: Apply and synthesize business information and systems to facilitate evaluation of strategic alternatives. |
| | | CO305.3: Analyze & interrelate how various support systems can be used for business decisions and to sustain competitive advantage. |
| | | CO305.4: Evaluate & Express the proven value and relationship between business data, data management, and business intelligence. |
| | | CO305.5: Recognize contemporary MIS theory and how information systems support business strategy, business processes, and practical applications in an organization. |
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| BBA-306 | Income Tax Law & Practice | CO306.1: Define the basics of concept of Income Tax and its implications. |
| | | CO306.2: Understand the concept of Basis of Charge in Income Tax in business Comprehending |
| | | CO306.3: Articulate the concepts of Heads of Income in Income Tax Knowledge |
| | | CO306.4: Develop aggregation of Income, Set off and Carry forward of losses, deduction from gross total Income Evaluating |
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| SEMESTER IV | | |
| Course Code: | Course Name | Course Outcomes (CO) |

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| BBA-401 | Consumer Behaviour | CO401.1: Understand the nature and significance of consumer behavior, demonstrating its relevance and application in marketing decisions, and distinguishing between consumer and industrial buying behavior. |
| | | CO401.2: Apply the determinants of consumer behavior, including motivation, personality, self-concept, and external influences such as culture, subculture, social class, and reference groups, while understanding basic models of consumer behavior. |
| | | CO401.3: Analyze the stages of the consumer decision-making process, including problem recognition, pre-purchase search, alternative evaluation, and post-purchase behavior, while understanding the concept of diffusion of innovation. |
| | | CO401.4: Evaluate the role of consumer involvement in decision-making, and analyze its impact on customer satisfaction, recognizing consumer behavior as an interdisciplinary field. |
| | | CO401.5: Design research methodologies to investigate online customer behavior, appreciate the diversity in consumer behavior, and evaluate the role of consumer behavior in shaping marketing strategies, with a focus on the Indian perspective. |
| BBA-402 | Financial Management | CO402.1: Understand the concepts of financial management, finance functions, objectives and TVM |
| | | CO402.2: Apply the various techniques associated with compounding, discounting and capital budgeting. |
| | | CO402.3: Analyze the various capital structure theories, capitalization of a firm, leverage analysis, cost of capital and their implications for a company |
| | | CO402.4: Evaluate Working Capital Management & different dividend models like Walter, Gordon's, and MM Hypothesis |
| | | CO402.5: Apply financial management principles and digital tools for cost benefit analysis with concepts of Cost of Capital, Investment decision for sustainable business practices. |
| BBA-403 | Production & Operation Management | CO403.1: Understanding of the role and importance of production and operations management in organizations. |
| | | CO403.2: Apply the knowledge of quality control, inventory management and project management. |
| | | CO403.3: Analyze and solve production management problems and make informed decisions to improve efficiency and effectiveness. |
| | | CO403.4: Evaluate the impact of technology and innovation, the ethical and social decisions of operations managers on stakeholders. |
| | | CO403.5: Assess the impact of global and cultural factors on production and operations management. |
| BBA-404 | Sales & Distribution Management | CO404.1: Understand appropriate sales organization structures, demonstrating the ability to manage external relations |
| | | CO404.2: Apply appropriate sales organization structures, demonstrating the ability to manage external relations |
| | | CO404.3: Analyze personal selling theories, develop essential qualities of successful sales executives, and demonstrate proficiency in prospecting, pre-approach, and post-approach strategies. |
| | | CO404.4: Evaluate suitable marketing channels, identify the characteristics of middlemen, and design an efficient physical distribution system to ensure timely product delivery. |
| | | CO404.5: Design effective recruitment and selection strategies, implement continuous training programs, and exhibit leadership skills to guide and motivate a high-performing sales team. |
| BBA-405 | Research Methodology | CO405.1: Define research in the context of business and management. |
| | | CO405.2: Explain the importance of research problem formulation and its impact on the research process. |

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| | | CO405.3: Apply basic data analysis techniques to interpret research findings in a business context. |
| | | CO405.4: Synthesize research findings from various sources to inform decision-making and develop new knowledge. |
| | | CO405.5: Evaluate the potential impact of research findings on business practices. |
| BBA-406 | Entrepreneurship & Small Business Management | CO406.1: Understand entrepreneurship theories, traits, and the roles of support institutions, showcasing the ability to recall and explain fundamental concepts |
| | | CO406.2: Demonstrate the social benefits and incentives for small businesses in India, showcasing the ability to explain the implications and significance of government initiatives. |
| | | CO406.3: Apply project classification to transform innovative ideas into practical projects, demonstrating the ability to use acquired knowledge in real-world scenarios. |
| | | CO406.4: Analyze the challenges and teething problems associated with starting a small industry, showcasing the ability to break down complex issues and identify potential solutions. |
| | | CO406.5: Evaluate the principles of project formulation, classification, and appraisal learned in the course, showcasing the ability to synthesize information and articulate a comprehensive plan for starting a small industry. |
| SEMESTER V | | |
| Course Code: | Course Name | Course Outcomes (CO) |
| BBA-501 | Arithmetic Aptitude | CO501.1: Understand basic concepts of arithmetic operations. |
| | | CO501.2: Apply Short-cut methods with time management which will be helpful to them to clear the competitive exams. |
| | | CO501.3: Analyze the problems logically and approach the problems in a different manner. |
| | | CO501.4: Enrich their knowledge and to develop their logical reasoning thinking ability. |
| | | CO501.5: Create their own shortcut methods to solve the complex problems in a stipulated time. |
| BBA-502 | Aptitude Reasoning | CO502.1: Define the basic concepts of logical reasoning skills and problems related to language and verbal reasoning. |
| | | CO502.2: Understand the management of time effectively in solving various test-taking strategies with the ability of critical thinking. |
| | | CO502.3: Apply satisfactory competency in the use of reasoning and recognise patterns and relationships. |
| | | CO502.4: Analyse the skills to solve a variety of problems including mathematical, analytical and logical problems more effectively. |
| | | CO502.5: Evaluate the skills of decision-making in various challenging situations with emotional & social intelligence. |
| BBA-503 | General Business Awareness | CO503.1: Acquire knowledge on the business cultures covering all the areas of marketing, finance, Human Resource, operations and data analysis. |
| | | CO503.2: Understanding of the diverse political environment of business across the globe. |
| | | CO503.3: Discover the skills to solve the variety of corporate dilemmas by reviewing & comparing classical with contemporary business models. |
| | | CO503.4: Evaluate the skills of decision-making by conducting research in various challenging situations by taking in global leader. |
| | | CO503.5: Develop holistic personality & design innovative ideas to initiate/lead a business venture/ business segment. |
| BBA-504 | General English | CO504.1: Identify basic grammar and vocabulary and exhibit memory of previously learned material by recalling facts, terms and basic concepts |

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| | | CO504.2: Understand key basic sentence structures and comprehend complex sentences |
| | | CO504.3: Apply grammar and vocabulary to rearrange and create new words and sentences appropriate for professional communication |
| | | CO504.4: Analyze sentences to identify grammatical errors and correct them. |
| | | CO504.5: Create and rearrange sentences to form coherent paragraphs and passages with logical transitions |
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| BBA-505 (M-1) | Rural Marketing | CO505(M-1).1: Identify rural market Challenges & Opportunities in a dynamic market. |
| | | CO505(M-1).2: Apply the concepts relating to consumer buying behaviour |
| | | CO505(M-1).3: Analyze the concepts relating to consumer buying behaviour |
| | | CO505(M-1).4: Explain and interpret Rural Marketing Evolution and Structure |
| | | CO505(M-1).5: Assess and interpret the relevance of pricing and distribution strategies. |
| | | CO505(M-1).6: Integrate knowledge from different business management areas to solve complex business problems |
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| BBA-505 (F-1) | Corporate Taxes - Direct & Indirect Tax | CO505 (F-1).1: Define the key concepts, principles, and regulatory framework of Direct & Indirect Taxation in the context of corporate entities operating in India. |
| | | CO505 (F-1).2: Interpret and apply the provisions of the Income Tax Act, in reference to taxable income, special provisions for new business, GST transactions and Custom Laws while complying with the relevant requirements. |
| | | CO505 (F-1).3: Devise the fundamentals of various taxation laws like Income tax, Goods and Services Tax (GST), including registration, input tax credit, tax rates, and compliance procedures. |
| | | CO505 (F-1).4: Analyze and evaluate the impact of GST on corporate transactions and Custom Laws on imports, exports, and cross-border trade. |
| | | CO505 (F-1).5: Appraise various laws and regulations in practical life. |
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| BBA-506 (M-2) | Service Marketing | CO506(M-2).1: Define the core concepts of Service Marketing, including its characteristics and classification of services, differentiate between Product and Services marketing, recall the components of the Services Marketing Mix (7 P's) and recognize current marketing paradigms and challenges |
| | | CO506(M-2).2: Understand the relationship between consumer behavior and services versus goods, comprehend the concepts of segmentation, targeting, and positioning in Services Marketing, grasp the significance of differentiation strategies and the impact of consumer expectations and perceptions on services |
| | | CO506(M-2).3: Discover service processes, including blueprints and physical evidence, Evaluate the role of advertising, personal selling, sales promotion, and public relations in Service Marketing, Analyze service quality and measurement techniques and the handling of complaints |
| | | CO506(M-2).4: Illustrate the success of service offerings through measures of service quality and customer satisfaction, assess the role of Customer Relationship Management (CRM) in Service Marketing, critically evaluate the latest issues in Service Marketing with specific reference to contemporary companies such as Uber, Ola, OYO, Swiggy, and Zomato |
| | | CO506(M-2).5: Develop designing new services, setting service standards, and managing demand and capacity effectively, demonstrate an understanding of the role of employees and customers in service delivery, apply pricing considerations and strategies to services and analyze their effectiveness. |
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| BBA-506 (F-2) | Financial Institutions & Investment Management | CO506(F-2).1: Understand the financial system and investment opportunities. |
| | | CO506(F-2).2: Examining the different markets and instruments found in the financial system. |
| | | CO506(F-2).3: Analyze the risk and return framework for enabling an understanding of the theoretical tenets of investment analysis. |

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| | | CO506(F-2).4: Evaluate the financial instruments and services as investment options and role of DFIs in investment management. |
| | | CO506(F-2).5: Develop an understanding of portfolio management by evaluating the various instruments and their regulatory systems. |
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| SEMESTER VI | | |
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| Course Code: | Course Name | Course Outcomes (CO) |
| BBA-601 | Strategic Management & Business Policy | CO601.1: Identify the technique of strategic analysis and facilitate to develop strategic thinking through case analysis. |
| | | CO601.2: Apply the theoretical concept of Top management role & Responsibilities, Business objective in their business decisions |
| | | CO601.3: Analyze the main structural features of an industry and develop strategies that position the firm most favorably in relation to competition and influence industry structure to enhance industry attractiveness |
| | | CO601.4: Evaluate the different stages of industry evolution and recommend strategies appropriate to each stage |
| | | CO601.5: Create the student's ability to think strategically, understand the language of business, analyze and verbally in class discussion, critically reflect on existing theories and tools, to creatively combine or generate frameworks and tools and use them where applicable |
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| BBA-602 | Operations Research | CO602.1: Identifying the Operational Concepts for decision making |
| | | CO602.2: Compare the concepts of Operations in order to take sound decision making |
| | | CO602.3: Articulate the concepts of operations in different situations |
| | | CO602.4: Prioritize Linear programming as an indicator of the broader concepts of Operation |
| | | CO602.5: Develop the concept of the subject in the best possible manner. |
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| BBA-603 | Fundamentals of E-Commerce | CO603.1: Define and explain key concepts related to e-commerce, including its meaning, types (B2B, B2C, etc.), and basic requirements. |
| | | CO603.2: Comprehend the core characteristics of the internet, including email, WWW, FTP, telnet, intranet, and extranet. |
| | | CO603.3: Apply the role of e-commerce in building customer relationships and analyze different electronic payment systems used in online transactions. |
| | | CO603.4: Analyze the purpose and functionalities of Electronic Data Interchange (EDI) in business communication and e-commerce transactions. |
| | | CO603.5: Compare and contrast various payment gateways like Visa, Rupay, and Mastercards, evaluating their suitability for different types of e-commerce transactions. |
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| BBA-604 | Economic & Industrial Law | CO604.1: Elaborate the various concept of Industrial Relations. |
| | | CO604.2: Outline the important causes and various impact of industrial disputes. |
| | | CO604.3: Gain understanding about legal provisions of various labour legislations prevailing in India. |
| | | CO604.4: Differentiate between each labour law and its applicability in Industry. |
| | | CO604.5: Develop a comprehensive compliance framework for employers regarding industrial laws. |
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| BBA-605 (M-3) | Retail Management | CO605(M-3).1: Define the main concepts in retail and merchandising management |
| | | CO605(M-3).2: Explain the consumer behaviour for retail products and services |
| | | CO605(M-3).3: Apply the retail applications in solving retail manager problems |
| | | CO605(M-3).4: Analyse problems faced by retail managers for better decision making |
| | | CO605(M-3).5: Evaluate the effectiveness of retail decision making for solving retail problems |
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| BBA-605 (F-3) | Cost and Management Accounting | CO605(F-3).1: Understand various costing systems and management systems |
| | | CO605(F-3).2: Analyse and provide recommendations to improve the operations of organisations through the application of Cost and Management accounting techniques |
| | | CO605(F-3).3: Evaluate the costs and benefits of different conventional and contemporary costing systems |
| | | CO605(F-3).4: Analyze cost-volume-profit techniques to determine optimal managerial decisions |
| | | CO605(F-3).5: Apply cost accounting methods for both manufacturing and service industry. |
| BBA-606 (M-4) | Digital Marketing | CO606(M-4).1: Understand importance of Digital Marketing in context of present business scenario |
| | | CO606(M-4).2: Analyse the role of Search Engine Optimisation and Google Webmaster tool. |
| | | CO606(M-4).3: Evaluate Promotional strategies success for brands through Social Media Marketing |
| | | CO606(M-4).4: Create Video advertisements and Paid Campaigns on Google Adwords |
| | | CO606(M-4).5: Assess Email Marketing, Content Marketing, Affiliate marketing and synthesize Internet Entrepreneurship. |
| BBA-606 (F-4) | Company Accounts | CO606(F-4).1: Understanding the meaning of basic terminologies, learning the fundamentals, learning company policies and technical concepts of accounting. |
| | | CO606(F-4).2: Applying accounting concepts and principles to prepare financial statements and calculate various amounts related to ESOP, Bonus shares etc. |
| | | CO606(F-4).3:Applying basics throughout the course for policy formation and various decision making. |
| | | CO606(F-4).4:Evaluate the financial position and performance of an entity with the help of various techniques/parameters in accounting |
| | | CO606(F-4).5: Create financial statements using accounting knowledge |



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(UNIVERSITY COURSES CAMPUS)
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Program Name: Masters in International Business

COURSE OUTCOMES (COs) - (AY 2024-25)

SEMESTER I - New Syllabus

| Course Code | Course Name | Course Outcomes (CO): After the completion of the course students will be able to: |
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| MIB101 | Management Concepts & Organization Behaviour | CO101.1: Understand the key functions of management and their significance in organizational success. |
| | | CO101.2: Articulate different way to enhance communication effectiveness, and make informed decisions in various organizational contexts. |
| | | CO101.3: Comprehend the role of personality, perception, values and attitude in individual behavior. |
| | | CO101.4: Apply various leadership theories and models to different scenarios and recognize the importance of ethical leadership and social responsibility. |
| | | CO101.5: Evaluate change management strategies, foster innovation, and manage conflicts constructively. |
| MIB102 | International Business | CO102.1: Identify and relate with the international business concepts and theories leading to better understanding of the international trade. |
| | | CO102.2: Develop an insight about international business mechanisms impacting the decision making for international managers. |
| | | CO102.3: Analyse the application of IB techniques in managing global work and workforce better. |
| | | CO102.4: Critically assess and evaluate the IB trends to have informed decision making. |
| MIB103 | Accounting for Managers | CO103.1: Understand the fundamental concepts and principles of accounting. |
| | | CO103.2: Analyze and interpret financial statements. |
| | | CO103.3: Apply accounting principles to common business transactions. |
| | | CO103.4: Develop a financial plan for a business. |
| | | CO103.5: Critically evaluate the ethical implications of accounting practices. |
| MIB104 | Managerial Economics | CO104.1: Understand the concept of Managerial economic for better decision making and forward planning. |
| | | CO104.2: Apply the knowledge of the mechanics of supply and demand to explain working of markets. |
| | | CO104.3: Analyze the cost revenue function to determine the optimal price and output for the firms across sectors. |
| | | CO104.4: Apply game theory to understand how markets evolve and operate, and how managers should think about the strategic decisions, they continually face. |
| | | CO104.5: Evaluate the reasons for responsible for market failures. |
| MIB105 | Business Statistics | CO105.1: Interpret statistical results in the context of business problems and communicate their findings effectively. |
| | | CO105.2: Understand the ethical considerations related to data collection, analysis, and reporting in a business context. |
| | | CO105.3: Applying concepts, theories and tools in developing Model driven Decision-making. |
| | | CO105.4: Critically assess, evaluate and predict, current and future metrics, research technologies, and research data output. |
| | | CO106.1: Identify basic principles and concepts of marketing and role of marketing in business and society. |
| | | CO106.2: Demonstrate a clear understanding of interaction between micro and macro environments on marketing. |

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| MIB106 | Marketing Management | CO106.3: Interpret consumer behavior for implementation & application of marketing plans. |
| | | CO106.4: Evaluate various dimensions of marketing mix of any product including services product. |
| | | CO106.5: Develop a set of skills important to successful performance in marketing management positions including critical thinking, working in a group environment, oral and written presentation skills. |
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| MIB107 | Design Thinking & Innovation | CO107.1: Explain the principles and processes of design thinking and its relevance to business innovation. |
| | | CO107.2: Apply design-thinking methodologies to identify unmet customer needs and opportunities for innovation. |
| | | CO107.3: Employ empathy and user-centricity to develop a deep understanding of stakeholder requirements. |
| | | CO107.4: Generate and evaluate creative solutions to business problems through iterative prototyping and testing. |
| | | CO107.5: Demonstrate effective communication and collaboration skills in multidisciplinary teams. |
| | | CO107.6: Develop a mindset of continuous experimentation and learning to drive ongoing innovation within organizations. |
| MIB108 | Business Communication | CO108.1: Recognize how communication works and why it is important. |
| | | CO108.2: Classify the various barriers and challenges faced in communication. |
| | | CO108.3: Articulate ideas with confidence in a professional setting. |
| | | CO108.4: Interact in one-on-one and group meetings. |
| MIB109 | Emerging Technologies for Business | CO109.1: Create and manage an online portfolio using tools like WIX and Google Sites, and design mockups and wireframes with FIGMA. |
| | | CO109.2: Apply AI concepts, including generative AI and explainable AI, in managerial decision-making and operational processes. |
| | | CO109.3: Identify different types of cyber threats and implement best practices for cyber hygiene to safeguard business operations. |
| | | CO109.4: Explain the workings of blockchain technology and evaluate the risks and benefits of cryptocurrency in online transactions. |
| | | CO109.5: Develop an understanding of AR and VR technologies and their potential to enhance business processes and customer experiences. |
| | | CO109.6: Utilize crowdsourcing platforms to engage a broader audience and incorporate crowd-based solutions into business strategies. |
| MIB110 | Foreign Language - I (German/French) | CO110.1: Introduce themselves and engage in simple conversations in French. |
| | | CO110.2: Comprehend and respond to basic spoken and written French texts. |
| | | CO110.3: Demonstrate proficiency in essential grammar concepts, including verb conjugation, noun- adjective agreement, and sentence structure. |
| | | CO110.4: Navigate common business situations in French, such as greetings, introductions, and making requests. |
| | | CO110.5: Gain awareness of French culture, customs, and business etiquette, enhancing their ability to work in a global environment. |
| MIB 111 | Social Internship | CO111.1: Apply management concepts and theories in real-world social settings. |
| | | CO111.2: Analyze the social, economic, and environmental impact of organizational activities. |
| | | CO111.3: Demonstrate effective teamwork, leadership, and communication skills in a diverse organizational environment. |
| | | CO111.4: Develop innovative solutions to address social challenges and contribute positively to community development. |
| | | CO111.5: Reflect critically on their internship experience and identify areas for personal and professional growth. |
| SEMESTER II - New Syllabus | | |
| Course Code | Course Name | Course Outcomes (CO) |
| | | CO201.1: Better understanding python and its utility. |
| | | CO201.2: Understanding of the data analytics techniques to enhance informed decision-making. |
| | | CO201.3: Data Visualization. |

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| MIB201 | Analytics for Managers | CO201.4: Apply statistical analysis and machine learning techniques to identify patterns in the data. |
| | | CO201.5: Effectively communicate the findings of the data analysis using visualization techniques. |
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| MIB202 | Consumer Behaviour | CO202.1: Identify and relate with the psychological processes that underlie the effectiveness of marketing strategy in terms of impact on consumer behavior. |
| | | CO202.2: Develop an insight and knowledge base of the various underlying concepts driving consumer behavior. |
| | | CO202.3: Apply concepts, theories, models, and tools in developing consumer behavior driven marketing strategies. |
| | | CO202.4: Critically assess, evaluate and predict current and future metrics, research technologies, and research data output. |
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| MIB203 | Financial Analysis and Decision Making | CO203.1: Apply financial analysis tools to assess the financial health and performance of organizations. |
| | | CO203.2: Evaluate investment opportunities using various valuation methods. |
| | | CO203.3: Analyze and interpret financial statements to identify trends and patterns. |
| | | CO203.4: Apply financial decision-making techniques to capital budgeting, risk management, and working capital management. |
| | | CO203.5: Understand the ethical considerations in financial decision-making. |
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| MIB204 | Business Environment & Legal Aspects of Business | CO204.1: Identify the internal and external factors that affect businesses, both domestically and internationally. |
| | | CO204.2: Understand the legal and regulatory framework in which businesses operate and how it impacts their decision-making. |
| | | CO204.3: Analyze provisions of Companies Act concerning incorporation and regulation of business organizations. |
| | | CO204.4: Evaluate case laws in arriving at conclusions facilitating business decisions. |
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| MIB205 | Business Research Methods | CO205.1: Identify and understand the main concepts and theories in research. |
| | | CO205.2: Analyse research tools and its applications in managerial decision-making. |
| | | CO205.3: Develop research strategies for management problems. |
| | | CO205.4: Implement the learning in formulating effective research strategies. |
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| MIB206 | Human Resource Management | CO206.1: Explain the concept of Human Resource Management and its role in achieving organizational goals. |
| | | CO206.2: Analyze HR strategies aligned with organizational objectives. |
| | | CO206.3: Apply HR practices across the employee lifecycle. |
| | | CO206.4: Evaluate the effectiveness of HR initiatives. |
| | | CO206.5: Demonstrate critical thinking and problem-solving skills in HRM contexts. |
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| MIB207 | International Trade Operations & Documentations | CO207.1: Describe the basic concept related to international trade operations, procedures and documentation. |
| | | CO207.2: Demonstrate an understanding export finance and international business risk coverage. |
| | | CO207.3: Analyze the process & documents required for customs clearance of export & import cargos. |
| | | CO207.4: Develop the capability to negotiate documents with the bank and avail exports incentives. |
| | | CO207.5: Evaluate the role of clearing and forwarding agents and shipment of exports cargo, documents by road rail and air. |
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| MIB208 | Foreign Language - II (German/French) | CO208.1: Engage in fluent and articulate conversations in French on a wide range of business topics. |
| | | CO208.2: Demonstrate proficiency in advanced grammar concepts, including subjunctive mood, conditional tense, and complex sentence structures. |
| | | CO208.3: Conduct business meetings, negotiations, and presentations confidently in French. |
| | | CO208.4: Comprehend and analyze complex written texts, including reports, articles, and business documents, in French. |
| | | CO208.5: Navigate cultural nuances and adapt communication styles effectively in French business environments. |
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| MIB209 | Minor Research Project Viva-Voce | CO209.1: Identify and define a research problem or question within a specific management domain. |
| | | CO209.2: Conduct a comprehensive literature review to understand existing theories, frameworks, and empirical findings related to the research topic. |
| | | CO209.3: Design and execute a research methodology appropriate for addressing the research question, including data collection and analysis techniques. |
| | | CO209.4: Analyze research findings and draw meaningful conclusions that contribute to the understanding of the chosen management topic. |
| | | CO209.5: Present research findings effectively through written reports and oral presentations. |
| | | CO209.6: Demonstrate ethical conduct in research, including proper citation of sources and adherence to research protocols. |
| SEMESTER III - Old Syllabus | | |
| Course Code | Course Name | Course Outcomes (CO) |
| MIB-301 | International Financial Management | CO301.1; Understand international capital and foreign exchange market |
| | | CO301.2; Identify and appraise investment opportunities in the international environment |
| | | CO301.3; Identify risk relating to exchange rate fluctuations and develop strategies to deal with them |
| | | CO301.4: Identify and evaluate foreign direct investment and international acquisition opportunities |
| | | CO301.5: Develop strategies to deal with other types of untry risks associated with foreign operations |
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| MIB-302 | Organizational Behaviour and Development | CO302.1: Identify and understand the factors impacting human behaviour in an organisation. |
| | | CO302.2: Infer the concept of perception, attitude, learning and motivation while handling a team in an organisation. |
| | | CO302.3: Articulate different styles of leadership according to the need and demand of an organisation. |
| | | CO302.4: Explore the external business environment and unfreeze and refreeze the organisation structure. |
| | | CO302.5: Design the theoretical frameworks and communicate it to the organisation in order to enhance individual, group and organisational effectiveness. |
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| MIB-303 | International Trade Procedures, Documentation & Logistics | CO303.1: Describe the basic concept related to international trade procedures and documentation. |
| | | CO303.2: Demonstrate an understanding export finance and international business risk coverage. |
| | | CO303.3: Analyze the process & documents required for customs clearance of export & import cargos. |
| | | CO303.4: Develop the capability to negotiate documents with the bank and avail exports incentives. |
| | | CO303.5: Evaluate the role of clearing and forwarding agents and shipment of exports cargo, documents by road rail and air. |
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| MIB-304 | International Business Management | CO304.1: Identify and understand the main concepts and theories in international business |
| | | CO304.2: Estimate the nature of international collaborations and negotiations |
| | | CO304.3: Develop international business strategies for global growth and success |
| | | CO304.4: Implement the learning in formulating successful IB strategies |
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| MIB-305 | E-commerce | CO305.1: Understand the basic concepts of E-commerce through digital processes and standards. |
| | | CO305.2: Identify the various concerns of security and privacy in e commerce. |
| | | CO305.3: Discover various models and theories that explain various risks associated with e commerce and its mitigation. |
| | | CO305.4: Develop and communicate theories and applications, which may affect performance of E-Commerce on the organisations profitability and structure. |
| | | CO305.5: Design key solutions to enhance the business revenue and branding via sales and advertising techniques in the electronic age |
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| MIB-306 | Foreign Language (Basic) German/French | CO306.1: Understand requirement of everyday situations. |
| | | CO306.2: Handle complicated tasks such as elaborating, complaining and apologizing. |
| | | CO306.3: Narrate and describe in past, present and future time. |
| | | CO306.4: Apply communication strategies such as circumlocution, paraphrasing. |
| | | CO306.5: Support opinions and hypothesize. |
| MIB-307 | Minor Project & Viva- Voce | CO307.1: Identify and define a research problem. |
| | | CO307.2: Design and execute a research methodology to address the research problem. |
| | | CO307.3: Analyze research findings and draw conclusions addressing the research problems. |
| | | CO307.4: Present research findings effectively through written reports and oral presentations. |
| SEMESTER IV - Old Syllabus | | |
| Course Code | Course Name | Course Outcomes (CO) |
| MIB-401 | Project Management | CO401.1 Understand the fundamental principles, concepts, and methodologies of project management. |
| | | CO401.2 Apply the feasibility analysis for the proposed project. |
| | | CO401.3 Evaluate project funding sources to plan execution and effective closure of the projects. |
| | | CO401.4 Appraise project management methodologies and approaches to different project types, industries, and organizational contexts |
| | | CO401.5 Produce draft of Project Monitoring and evaluation proces. |
| MIB-402 | Strategic Management | CO402.1: Describe the basic concepts, environments and processes of strategic management. |
| | | CO402.2: Demonstrate an understanding of the concepts, tools & techniques of developing and executing strategies |
| | | CO402.3: Understand the best practices in Strategic Management |
| | | CO402.4: Demonstrate the capability of making decisions in dynamic business landscape |
| | | CO402.5: Develop their capacity to think and execute strategically |
| MIB-403 | Consumer Behaviour | CO403.1: Identify the major influences in consumer behaviour. |
| | | CO403.2: Distinguish between different consumer behaviour influences and their relationships. |
| | | CO403.3: Establish the relevance of consumer behaviour theories and concepts to marketing decisions. |
| | | CO403.4: Implement appropriate combinations of theories and concepts. |
| | | CO403.5: Recognise social and ethical implications of marketing actions on consumer behaviour. |
| MIB-404 | SERVICE MARKETING | CO404.1: Identify and understand the main concepts in services marketing |
| | | CO404.2: Analyse the trends in services and challenges lying ahead |
| | | CO404.3: Develop a successful service marketing mix |
| | | CO404.4: Implement the understanding in formulating service marketing strategies |
| MIB-405B | Foreign Language (Advanced) - German/French | CO405.1: Understand requirement of everyday situations. |
| | | CO405.2: Handle complicated tasks such as elaborating, complaining and apologizing. |
| | | CO405.3: Narrate and describe in past, present and future time. |
| | | CO405.4: Apply communication strategies such as circumlocution, paraphrasing. |
| | | CO405.5: Support opinions and hypothesize. |



IMS GHAZIABAD
 (UNIVERSITY COURSES CAMPUS)
 Status of 12(B) by UGC

Program Name: BCA

COURSE OUTCOMES

SEMESTER I

| Course Code | Course Name | Course Outcomes (CO) # | Course Outcomes (CO) |
|----------------|--|------------------------|---|
| | | | After the completion of the course students will be able to: |
| BCA 101 | Mathematics 1 | CO101.1 | Understanding the concept of Matrix, Limit and Continuity etc. |
| | | CO101.2 | Apply mathematical methods to various computing problems . |
| | | CO101.3 | Analyze mathematical reasoning and the process of constructing logical arguments. |
| | | CO101.4 | Evaluate the mathematical problems by using the various methods. |
| | | CO101.5 | Create a strong mathematical foundation to support advanced studies in computer science and related fields. |
| | | BCA-102 | Programming Principle and Algorithm |
| CO102.1 | Identify the concept of simple algorithms, flow chart, pseudocode, branching, iteration for arithmetic and logical problems. | | |
| CO102.2 | Apply the algorithms to programs & execution (in C language). | | |
| CO102.3 | Analysis of conditional & branching statement, iteration statement and recursion | | |
| CO102.4 | Evaluation of a problem through functions and synthesize a complete program by using divide and conquer approach. | | |
| CO102.5 | Create and develop complex program by using C language | | |
| BCA-103 | Computer Fundamental and Office Automation | Course Outcomes (CO) # | Course Outcomes (CO) |
| | | CO103.1 | Identify the concepts of input and output devices of Computers. |
| | | CO103.2 | Apply the information and understand how the computers interact with other computing systems and devices. |
| | | CO103.3 | Analyze the application of an operating system and its working, and solve common problems related to operating systems. |
| | | CO103.4 | Evaluate the basic working of word processing, Spreadsheet and Presentation Graphics Software skills. |
| | | CO103.5 | Assess to use the Internet safely, legally, and responsibly |

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| BCA-104 | Principle of Management | Course Outcomes (CO) # | Course Outcomes (CO) |
| | | CO104.1 | Understand the importance of demonstrating effective verbal and non-verbal communication skills |
| | | CO104.2 | Apply effective discussion, presentation, and writing skills to communicate ideas clearly and professionally. |
| | | CO104.3 | Analyze strategies to build reading confidence, comprehension, organization, retention, and fluency. |
| | | CO104.4 | Evaluate speech outlines for coherence and purposeful organization. |
| | | CO104.5 | Create clear and articulate speech through effective listening and precise enunciation. |
| BCA-106 | Business Communication | Course Outcomes (CO) # | Course Outcomes (CO) |
| | | CO106.1 | Identify the nature and objective of Technical Communication relevant for the workplace . |
| | | CO106.2 | Apply technical writing for the purposes of Technical Communication and its exposure in various dimensions. |
| | | CO106.3 | Analyse presentation skills to enhance confidence in face of a diverse audience. |
| | | CO106.4 | Evaluate application of the learning to promote their technical competence |
| | | CO106.5 | Assess their efficacy as fluent & efficient communicators by learning the voice dynamics. |
| BCA-105P | Computer Laboratory And Practical Work Of Office Automation (CFOA) | Course Outcomes (CO) # | Course Outcomes (CO) |
| | | CO105P.1 | Identify the working of Open Office (Word processing, Spreadsheets and Presentation). |
| | | CO105P.2 | Apply the acquired knowledge on editor, spread sheet and presentation software. |
| | | CO105P.3 | Analyze the performance of various types of in built function in spreadsheet. |
| | | CO105P.4 | Evaluate the performance and presentation skills of students. |
| | | CO105P.5 | Create and handle database operations using MS-Access |
| BCA-107P | Computer Laboratory and Practical Work of Programming Principle & Algorithm (PPA) | Course Outcomes (CO) # | Course Outcomes (CO) |
| | | CO107P.1 | Identify the basic concept of building block in C |
| | | CO107P.2 | Apply various operations using various operators in C |
| | | CO107P.3 | Analyze the structure of Loop and branching construct |
| | | CO107P.4 | Evaluate programming knowledge of problem solving by writing small programs |
| | | CO107P.5 | Assess the knowledge of user defined functions in C |
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| BCA-008 | ENVIRONMENTAL STUDIES | Course Outcomes (CO) # | Course Outcomes (CO) |
| | | CO008.1 | Identify environmental problems at local and national levels through literature and general awareness. |
| | | CO008.2 | Apply practical knowledge acquired through visits to wildlife areas, environmental institutes, and interactions with experts. |
| | | CO008.3 | Analyze key environmental issues using an interdisciplinary approach and evaluate possibilities for mitigation. |
| | | CO008.4 | Evaluate their roles and identities as citizens, consumers, and environmental actors in a complex, interconnected world. |
| | | CO008.5 | Create strategies to motivate individuals to maintain a healthy and safe environment for all, ensuring a quality life for everyone. |
| SEMESTER II | | | |
| Course Code | Course Name | Course Outcomes (CO) # | Course Outcomes (CO) |
| BCA-201 | Mathematics II | | |
| | | CO201.1 | Identify mathematical principals |
| | | CO201.2 | Apply mathematical concept to the real - world. |
| | | CO201.3 | Analyze mathematical structure and algorithm |
| | | CO201.4 | Evaluate the accuracy and efficiency of the computational solutions |
| | | CO201.5 | Create mathematical modal for computational solution |
| BCA-202 | C Programming | Course Outcomes (CO) # | Course Outcomes (CO) |
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| | | CO202.1 | Understand the various concept of programming. |
| | | CO202.2 | Apply and implement the concept of pointers. |
| | | CO202.3 | Analyze and implement the concept of Strings. |
| | | CO202.4 | Evaluate the concept of stucture and union. |
| CO202.5 | Asses and implement the concepts of file handling. | | |
| BCA-203 | Organization Behavior | Course Outcomes (CO) # | Course Outcomes (CO) |
| | | CO203.1 | Understand the concept of Organization Design and determine the factors that affect Organization Design. |
| | | CO203.2 | Apply the components of Individual Behavior and the concept of Learning, Perception, Attitudes and values. |
| | | CO203.3 | Analyze and explore various theories of motivation and their application in organizations and also apply these theories to practical problems in organizations. |
| | | CO203.4 | Evaluate the behavior of individuals and groups in organizations. |
| | | CO203.5 | Assess how organizational change and conflict affect working relationships within organizations and demonstrate how to apply relevant theories. |
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| BCA-204 | Digital electronics and Computer Organisation | Course Outcomes (CO) # | Course Outcomes (CO) |
| | | CO204.1 | Identify the basic concept of Combinational Circuit (Half Adder, Full Adder) as well as arithmetic and logical operation on binary numbers |
| | | CO204.2 | Apply the concepts to design Combinational as well as Sequential circuits. |
| | | CO204.3 | Analyze the design of Input /output system and Arithmetic Logic Unit. Understanding of Internal Parts and working of ALU. |
| | | CO204.4 | Evaluate the design datapath and control unit of computer from its register transfer language description |
| | | CO204.5 | Assess algorithmically derive the concept of matrix multiplication on multiprocessor system, as well as the study of multiprocessor using simulator. |
| BCA-205 | Financial Accounting & Management | Course Outcomes (CO) # | Course Outcomes (CO) |
| | | CO205.1 | Understand the fundamental concepts and objectives of financial accounting |
| | | CO205.2 | Apply financial statements using ratio analysis, funds flow analysis, and cash flow Analysis |
| | | CO205.3 | Analyze the long-term sources of finance for businesses. |
| | | CO205.4 | Evaluate the trade-off between liquidity and profitability in Working Capital Management |
| | | CO205.5 | Assess sound receivables management practices |
| BCA-206 P | Computer Laboratory and Practical Work of C Programming | Course Outcomes (CO) # | Course Outcomes (CO) |
| | | CO206.1 | Identify the use of array, string, pointer and functions and its process to declaration and defenition. |
| | | CO206.2 | Apply the concept of pointer with array, string and function |
| | | CO206.3 | Analyze the working of structuture and union |
| | | CO206.4 | Evaluate the use of arrays, structures and user defined functions. |
| | | CO206.5 | Create programs using file handling functions. |
| SEMESTER III | | | |
| | Course Name | Course Outcomes (CO) # | |
| BCA-301 | Object Oriented Programming Using C++ | | Course Outcomes (CO) |
| | | CO301.1 | Understand the concept of object - oriented programming to implement application. |
| | | CO301.2 | Apply the insight of class, object, and constructor. |
| | | CO301.3 | Analyze oops concepts (i.e. inheritance and polymorphism) |
| | | CO301.4 | Evaluate the concepts of exception handling. |
| | | CO301.5 | Assess object-oriented file handling concepts to implement real world problems. |
| | | CO302.1 | Understand various data structures as arrays, linked lists, stacks, queues, and trees representation in memory, used by the algorithms and their common applications |

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| BCA-302 | Data Structure Using C & C++ | CO302.2 | Apply the concept of recursion, application of recursion and its implementation. |
| | | CO302.3 | Analyze Trees, Traversal Algorithms and perform various operations on these data structures. |
| | | CO302.4 | Evaluate the computational efficiency of various sorting and searching algorithms. |
| | | CO302.5 | Assess the alternative implementations of data structures with respect to their performance to solve a real-world problem |
| BCA-303 | Computer Architecture & Assembly Language | CO303.1 | Understand the basic components and operation of a digital computer system. |
| | | CO303.2 | Apply the design of arithmetic & logic unit and understanding of the fixed point and floating-point arithmetic operations. |
| | | CO303.3 | Analyze the control unit techniques and the concept of Pipelining |
| | | CO303.4 | Evaluate the hierarchical memory system, cache memories and virtual memory. |
| | | CO303.5 | Assess different ways to communicate with I/O devices and standard I/O interfaces. |
| BCA-304 | Business Economics | CO304.1 | Understand the basic elements of Business Economics aspects, nature and decision making. |
| | | CO304.2 | Identify Pricing policy under different market competitions and apply methods for production to minimize the cost and maximum the profit. |
| | | CO304.3 | Analyse how markets work to allocate resources and the optimal individual decision-making that underlies market outcomes. |
| | | CO304.4 | Evaluate various market structures and discuss their implications for resource allocation |
| | | CO304.5 | Assess the advantages and potential shortcomings of markets, discuss the conditions under which markets work |
| BCA-305 | Elements of Statistics | CO305.1 | Understand the concept of Sampling, Classification, Frequency distribution, Permutation & Combination, Probability and Quality Control. |
| | | CO305.2 | To apply basic ideas of statistics as measures of central tendency, Dispersion, Permutation and Combination. |
| | | CO305.3 | Analyzing statistical data with the help of Central Tendency & Dispersion, Control Limits, tolerance limits and Control Charts. |
| | | CO305.4 | To Evaluate Nature of data, probability and random variables with various discrete and continuous probability distributions. |
| | | CO305.5 | To Create Statistical Quality Control Charts, Relative Measures of Dispersion. |
| BCA-306P | Computer Laboratory and Practical Work of OOPS | CO306P.1 | Identify real world problem and understand about class and object |
| | | CO306P.2 | Apply Object oriented approach for finding Solutions to various problems with the help of C++ language. |
| | | CO306P.3 | Analyze programming based solutions to various real-world problems using C++ |
| | | CO306P.4 | Evaluate the concepts of object oriented approach towards problem solving |
| | | CO306P.5 | Create File handling program |
| BCA-307P | Computer Laboratory and Practical Work of DS | | |
| | | CO307P.1 | Identify appropriate constructs of Programming language, coding standards for application development. |
| | | CO307P.2 | Apply programming skills for solving problems. |
| | | CO307P.3 | Evaluate the problems involve in graphs, trees and heaps. |
| | | CO307P.4 | Create Algorithms for solving problems like sorting, searching, insertion and deletion of data. |

| | | CO307P.5 | | |
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| SEMESTER IV | | | | |
| Course Code: | Course Name | Course Outcomes (CO) # | Course Outcomes (CO) | |
| BCA-401 | Computer Graphics & Multimedia Application | | Course Outcomes (CO) | |
| | | CO401.1 | Understand the basics of computer graphics, various graphics systems and applications of computer graphics. | |
| | | CO401.2 | Apply various algorithms for scan conversion and filling of basic objects and their comparative analysis. | |
| | | CO401.3 | Analyze the geometric transformations on graphics objects and their application in composite form. | |
| | | CO401.4 | Evaluate the scene with different clipping methods and its transformation to graphics display device. | |
| | | CO401.5 | Create projections and visible surface detection techniques for display of 3D scene on 2D screen & create multimedia projects. | |
| BCA-402 | Operating System | | | |
| | | CO402.1 | Understand the basic components of operating system and their functions | |
| | | CO402.2 | Apply algorithms for deadlock problems, file system concepts & storage structures and process concepts on different processes by using scheduling algorithms. | |
| | | CO402.3 | Analyze different memory management techniques, process coordination and disk scheduling algorithms | |
| | | CO402.4 | Evaluate the requirement for process synchronization and coordination handled by operating system. | |
| | | CO402.5 | Create (Formulate) the solutions to schedule the real time applications | |
| BCA-403 | Software Engineering | | | |
| | | | CO403.1 | Understand and Identify various software characteristics and compare different software Development Models |
| | | | CO403.2 | Apply the contents of a SRS and implement basic software quality assurance practices to ensure that design, development meet or exceed applicable standards |
| | | | CO403.3 | Analyse various methods for software design |
| | | | CO403.4 | Evaluate the design testing strategy for software systems, employ techniques such as unit testing, Test - driven development and functional testing |
| | | | CO403.5 | Assess the software development process independently as well as in teams and make use of Various software management tools for development, maintenance and analysis. |
| BCA-404 | Optimization Techniques | | | |
| | | | CO404.1 | Understand the Concepts of LPP, Queuing Theory, Replacement Theory, Inventory Theory and Job Sequencing |
| | | | CO404.2 | Apply optimization techniques in solving LPP, Queuing Theory, Replacement Theory, Inventory Theory and Job Sequencing |
| | | | CO404.3 | Analyze different solution approach for an optimization problem |
| | | | CO404.4 | Evaluate Optimal Solutions.for Replacement, and LPP Problems |
| | | | CO404.5 | Create (Formulate) Optimal Solutions for real life Problems. |
| BCA-406 | Mathematics III | | | |
| | | | CO406.1 | Understanding and problem identification by using mathematical principles. |
| | | | CO406.2 | Apply Mathematical Concepts and methods to develop efficient and optimize solution. |
| | | | CO406.3 | Analyze complex mathematical problems and derive appropriate solution. |
| | | | CO406.4 | Evaluate the effectiveness of various methods to solve computational problems. |

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| | | CO406.5 | Create innovative mathematical models for further solution. |
| BCA-405P | Computer Laboratory and Practical Work of Computer Graphics & Multimedia Application | CO405P.1 | Understand the appropriate Programming User-interfaces |
| | | CO405P.2 | Apply the Concepts of 2D & 3D object representation & transformation |
| | | CO405P.3 | Analyze various scan & clipping algorithms |
| | | CO405P.4 | Evaluate the Implementation of 2D object's visibility detection & viewing |
| | | CO405P.5 | Create the multimedia project based on learned concepts |
| SEMESTER 5 | | | |
| Course Code: | Course Name | Course Outcomes (CO) # | |
| | | | Course Outcomes (CO) |
| BCA-501 | Introduction to DBMS | CO501.1 | Understand knowledge of database for real- life applications. |
| | | CO501.2 | Apply query processing techniques to automate the real - time problems of Database |
| | | CO501.3 | Analyze and solve the redundancy problem in database tables using normalization. |
| | | CO501.4 | Evaluate and understand the concepts of transactions, their processing so they will be familiar with broad range of database management issues including data integrity, security and recovery |
| | | CO501.5 | Create a small database project using database tools. |
| BCA-502 | Java Programming and Dynamic Webpage Design | CO502.1 | Understand the concept of packages, multi-threading,exception handling and JDBC. |
| | | CO502.2 | Apply the knowledge of JSP,EJB and ODBC in making dynamically database connected web pages. |
| | | CO502.3 | Analyze how data is being retrieved from database and forms using various RMI Layers. |
| | | CO502.4 | Evaluate the reports and results generated by the software being designed. |
| | | CO502.5 | Create various softwares using swings and Jsp. |
| BCA-503 | Computer Network | | |
| | | CO503.1 | Understand basic concepts, OSI reference model, services and role of each layer of OSI model and TCP/IP, networks devices and transmission media, Analog and digital data transmission |
| | | CO503.2 | Apply channel allocation, framing, error and flow control techniques. |
| | | CO503.3 | Analyze Implementation of functions of Network Layer i.e. Logical addressing, subnetting & Routing Mechanism. |
| | | CO503.4 | Evaluate of Transport Layer function i.e. Port addressing, Connection Management, Error control and Flow control mechanism. |
| | | CO503.5 | Create Implementation of functions offered by session and presentation layer and their Implementation. Also understand the different protocols used at application layer i.e. HTTP, SNMP, SMTP, FTP. |
| BCA-504 | Numerical Methods | CO504.1 | Understand common numerical methods and how they are used to obtain approximate solutions. |
| | | CO504.2 | Apply numerical methods to obtain approximate solutions to mathematical problems. |
| | | CO504.3 | Analyse the accuracy of common numerical methods. |
| | | CO504.4 | Evaluate critical thinking skills in assessing the suitability of numerical methods for specific problems. |
| | | CO504.5 | Create efficient, well-documented and present numerical results in an informative way. |
| BCA-505P | Computer Laboratory and Practical Work of DBMS | CO505P.1 | Understand and identify various queries and their execution |
| | | CO505P.2 | Apply SQL DML/DDDL commands to populate and query a database |
| | | CO505P.3 | Analyze the integrity constraints on a database |
| | | CO505P.4 | Evaluate PL/SQL including stored procedures, stored functions, cursors, packages |

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| | | CO505P.5 | Create a simple database system and demonstrate competence with the fundamental tasks involved with modelling, designing, and implementing a DBMS. |
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| BCA-506P | Computer Laboratory and Practical Work of Java Programming and Dynamic Webpage Design | CO506P.1 | Understand the concept of classes, objects, members of a class and relationships among them needed for a specific problem. |
| | | CO506P.2 | Apply SQL DML/DDDL commands to populate and query a database using Jdbc-Odbc. |
| | | CO506P.3 | Analyze the implementation of Applet and packages |
| | | CO506P.4 | Evaluate the outputs of RMI, EJB and JSP . |
| | | CO506P.5 | Create dynamic web pages in JSP |
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| BCA-507MP | Minor Project | CO507MP.1 | Understand the components used in an Online Project with advanced technologies of their choice. |
| | | CO507MP.2 | Apply the Concepts & Technology to match with the SRS. |
| | | CO507MP.3 | Analyze the gaps between SRS & Project Outcome to develop a project professionally. |
| | | CO507MP.4 | Evaluate the Project Deployment and Maintenance. |
| | | CO507MP.5 | Access the Project for being Scalable and of Public Use. |
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| BCA-508ST | Viva-Voice on Summer Training | CO508ST.1 | Understand the knowledge, attitudes, and perceptions essential for developing a professional identity through on-the-job experience. |
| | | CO508ST.2 | Apply theoretical knowledge in real-world settings through supervised professional experiences. |
| | | CO508ST.3 | Analyze the operations of authentic organizations to gain insight into their functioning. |
| | | CO508ST.4 | Evaluate the interconnections between various functions and departments within organizations. |

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| | | CO508ST.5 | Create an encompassing perspective of business organizations, assessing them in their entirety. |
| SEMESTER 6 | | | |
| Course Code: | Course Name | Course Outcomes (CO) # | |
| BCA-601 | Computer Network Security | | Course Outcomes (CO) |
| | | CO601.1 | Understand the concept of cryptography with the different Network Models. |
| | | CO601.2 | Apply different network security, Authentication protocols and their application. |
| | | CO601.3 | Analyze IP Security that can be used to connect different network |
| | | CO601.4 | Evaluate the concept of Secure socket layer ,TCP layer and architecture of SNMP server. |
| | | CO601.5 | Assess the functioning of intruders, viruses, firewall and threats. |
| BCA-602 | Information System: Analysis Design & Implementation | CO602.1 | Understand the concept of logical design, physical design, test planning, implementation, planning and performance evaluation, communication, interviewing |
| | | CO602.2 | Apply specific Model. |
| | | CO602.3 | Analyze dataflow diagram, quality metrics,package evaluation and acquisition. |
| | | CO602.4 | Evaluate design of output and control, file design/database design, process, user interface design. |
| | | CO602.5 | Assess object modeling, dynamic modeling and functional object system for implimentation. |
| BCA-603 | E-Commerce | CO603.1 | Understand the recent trends in e-commerce to equip students with up-to-date knowledge. |
| | | CO603.2 | Apply skills in website management relevant to industry needs. |
| | | CO603.3 | Analyze the nature and current trends of e-commerce for comprehensive understanding. |
| | | CO603.4 | Evaluate the significance of advertising and marketing within the realm of e-commerce. |
| | | CO603.5 | Create assessments of e-commerce models and identify the prerequisites for initiating and maintaining e-business sites. |
| BCA-604 | Knowledge Management | CO604.1 | Understand the different knowledge management concepts. |
| | | CO604.2 | Apply knowledge management concepts in data mining and knowledge discovery. |
| | | CO604.3 | Analyze and understand the use of one of the approaches of MIS i.e. Executive information system for developing the strategic information in an organization. |
| | | CO604.4 | Evaluate different approaches of MIS and take business decisions for different organizations. CO5: Analyze the relationship between information, tacit knowledge, explicit knowledge and organizational knowledge. |
| | | CO604.5 | Assess the relationship between information, tacit knowledge, explicit knowledge and organizational |
| BCA-605P | Major Project | CO605P.1 | Understand the components used in an Online Project with advanced technologies of their choice. |
| | | CO605P.2 | Apply the Concepts & Technology to match with the SRS. |
| | | CO605P.3 | Analyze the gaps between SRS & Project Outcome to develop a project professionally. |
| | | CO605P.4 | Evaluate the Project Deployment and Maintenance. |
| | | CO605P.5 | Access the Project for being Scalable and of Public Use. |



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Status of 12(B) by UGC

Program Name: M.Sc BIOTECHNOLOGY

COURSE OUTCOMES (COs)

M.Sc. Biotechnology First Semester

| Course Code | Course Name | Course Outcomes (CO) |
|--------------|---|---|
| M.Sc. BT 101 | Fundamental of Genetics | CO101.1 : Conceptualising the basics of genetics. |
| | | CO101.2 : Understanding the process of linkage, crossing over and gene mapping . |
| | | CO101.3: Summarising genetics of sex determination and differentiation |
| | | CO101.4: Explaining Mutations and Mutagenic Agents and multiple alleles. |
| | | CO101.5: Defing the Genetics of Inbreeding Depression and Heterosis, concept of Extra - chromosomal Inheritance, Biochemical genetics and Gene Concept. |
| M.Sc. BT 102 | Cytogenetics and Molecular Genetics | CO102.1 : Identify of basic concepts of Cell division, Chromosomal abnormalities. |
| | | CO102.2 : Analyze the proper understanding of Genetic material, DNA Duplication and Organization of genetic material. |
| | | CO102.3 : Apply the Application of Genetic Codes. |
| | | CO102.4 : Evaluate Genetic material, DNA Duplication and Organization of genetic material. |
| | | CO102.5: Assess the concept of cytogenetics & Molecular biology |
| M.Sc. BT 103 | Statistical Methods and Bioinformatics in Biology | CO103.1 : Analyzing the concepts of Data presentation and measurement of central tendency and dispersion. |
| | | CO103.2 : Assessing the concepts of various experimental designs such as ANOVA. |
| | | CO103.3 : Understanding the basic concept, scope and application of Bioinformatics. |
| | | CO103.4 : Analyzing about the database and their role in Protein and Nucleic acid Databases. |
| | | CO103.5: Evaluating the role of different bioinformatics tools to analyze biological databases. |
| M.Sc. BT 104 | Tools and Techniques in Biotechnology | CO104.1 : To demonstrate the applicability of Microscopy. |
| | | CO104.2 : To apply the various types of Centrifugation techniques. |
| | | CO104.3 : To analyze the techniques of Electrophoresis. |
| | | CO104.4 : To understand the process of Chromatography and Spectroscopy. |

M.Sc. Biotechnology Second Semester

| Course Code | Course Name | Course Outcomes (CO) |
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| M.Sc. BT 201 | Fundamentals of Biochemistry | CO201.1 : Identify the basic concept, structure, chemical nature, types and properties of biomolecules in the cell. |
| | | CO201.2 : Apply the depth knowledge of classification of different biomolecules. |
| | | CO201.3 : Analyze concept of metabolism in aspect of biomolecules. |
| | | CO201.4 : Evaluate the synthesis and degradation of macromolecules. |
| | | CO201.5: Assess the structure and function of various biomolecules. |
| M.Sc. BT 202 | Plant Genetic Resources: Conservation and Sustainable use | CO202.1 : Introducing the basic concept of species. |
| | | CO202.2 : Summarizing the Centers of Diversity and Centers of Origin. |
| | | CO202.3 : Understanding the concept of biodiversity and germplasm conservation. |
| | | CO202.4 : Explaining IPGRI, NBPGR, FAO, CGIAR, Future Harvest Centers and CBD. |
| | | CO202.5: Defining the importance of various Intellectual Property Rights (IPRs). |
| M.Sc. BT 203 | Biotechnology in Crop improvement | CO203.1 : To provide students with an in-depth understanding of Plant organ, tissue and cell culture. |
| | | CO203.2 : To make student understand the various types of Biofertilizers, Bioinsecticides and Molecular Farming. |
| | | CO203.3 : To Understand the various Methods of Gene Transfer in Plants. |
| | | CO203.4 : To analyze the Nutritional quality of plants, Plant and Genome Programs. |
| | | CO204.1 : Understanding the students to know about basics of Genetic Engineering and Vectors. |

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| M.Sc. BT 204 | Recombinant DNA Technology and Genetic Engineering | CO204.2 : Enabling students to describe Genomic and cDNA library. |
| | | CO204.3 : Providing the knowledge of various molecular expression techniques like Southern, Northern, Western blotting, Chromosome walking, Chromosome jumping and PCR. |
| | | CO204.4 : Enabling students to understand Gene Sequencing. |
| | | CO204.5 : Understanding the Site directed mutagenesis to characterize targeted DNA. |
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| M.Sc. Biotechnology Third Semester | | |
| Course Code | Course Name | Course Outcomes (CO) |
| M.Sc. BT 301 | Microbial, Industrial and Environmental Biotechnology | CO301.1 : Identify depth knowledge and understanding of concepts of biotechnology in microbes, industries and environment. |
| | | CO301.2 : Apply the techniques to carrying out roles of microbes, industries and environment in biotechnology. |
| | | CO301.3 : Analyze how and why biotechnology application is done in microbes, industries and environment. |
| | | CO301.4 : Evaluate the concept of microbes, industries and environment in biotechnology. |
| | | CO301.5 : Assess how microbial, industrial and environmental biotechnology have played an important role in various fields of production. |
| M.Sc. BT 302 | Concepts of Nano-biotechnology | CO302.1 : To stimulate their Critical thinking about Nano-Biotechnology. |
| | | CO302.2 : To demonstrate understanding of Surface-functionalized Nano-particles for controlled drug delivery. |
| | | CO302.3 : To demonstrate the Structural DNA nanotechnology and Nanostructure DNA templates. |
| | | CO302.4 : To be able to explain Probing DNA structure with Nanoparticles and Synthetic Nanoscale Elements for Delivery of Material into Viable cells. |
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| M.Sc. BT 303 | Animal biotechnology and Immunology | CO303.1 : Describe and discuss the Animal Tissue and Organ Culture. |
| | | CO303.2 : Identify the area of Cloning in biotechnology. |
| | | CO303.3 : Discuss critically the history and scopes of Immunology. |
| | | CO303.4 : Evaluate the about Types of Immunity, Ag-Ab interactions, Hybridoma Technology and various Vaccines. |
| | | CO303.5 : Apply the biotechnology in the field of immunology and animal biotechnology. |
| M.Sc. BT304 | Genomics and Proteomics | CO304.1 Able to understand the concept of Genomics and Proteomics |
| | | CO304.2 Able to explore the practical role and importance of various techniques of Genomics and Proteomics in various biological experiments |
| | | CO304.3 : Assess and select the appropriate applications, concepts and techniques to suit specific experiment |
| | | CO304.4 Able to understand the diagnosis and treatment of diseases through genomics and proteomics. |
| | | CO 304.5 Explore various Proteomics Strategies and their applications |
| M.Sc. Biotechnology Fourth Semester | | |
| Course Code | Course Name | Course Outcomes (CO) |
| | PROJECT WORK | |



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| Program Name: BIOTECHNOLOGY | | |
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| COURSE OUTCOMES (COs) | | |
| B.Sc. (H) BIOTECHNOLOGY I Year | | |
| Course Code | Course Name | Course Outcomes (CO): After the completion of the course students will be able to: |
| B.Sc. BT101 | Biochemistry | CO101.1 : Identify the basic concept, structure, chemical nature, types and properties of biomolecules in the cell. |
| | | CO101.2 : Apply the depth knowledge of classification of different biomolecules. |
| | | CO101.3 : Analyze concept of metabolism in aspect of biomolecules. |
| | | CO101.4 : Evaluate the concept of microbes, industries and environment in biotechnology |
| | | CO101.5: Assess the role of enzymes, vitamins in living organisms. |
| B.Sc. BT102 | Biophysics | CO102.1 : Understand of the entire fundamentals of Biophysics |
| | | CO102.2 : Apply the practical role and importance of various aspects of the subject. |
| | | CO102.3 : Analyze biophysics as an interdisciplinary research field. |
| | | CO102.4 : Evaluate and understand the nuclear interactions of biological system. |
| | | CO102.5: Apply the importance of the nature of biological materials |
| B.Sc. BT103 | Cell Biology | CO103.1 : Analyse the origin of living organisms |
| | | CO103.2 : Create the differences between Eukaryotic & Prokaryotic cells. |
| | | CO103.3 : Evaluate the process of cell cycle through cell division. |
| | | CO103.4 : Apply the cell signalling process in living system. |
| B.Sc. BT104 | Microbiology | CO104.1 : Identify the various classifications of microbes |
| | | CO104.2 : Apply the concept of various microbial strains and their growth pattern |
| | | CO104.3 : Analyse the application of different microbes from industrial point of view |
| | | CO104.4 : Evaluate disease causing micro-organisms. |
| | | CO104.5 : Assess various methods of sterilization and culture growth. |
| | | CO105.1 : Able to impart knowledge about the fundamentals of genetics. |
| | | CO105.2 : Summarizing about various essential classical and contemporary approaches and methods to study chromosome, genes and genome. |
| | | CO105.3 : Discussing linkage and crossing over and their significance in mapping. |
| | | CO105.4: Introducing different patterns gene transfer and mode of inheritance observed across biological system. |

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| B.Sc. BT105 | Genetics | CO105.5: Analysing knowledge of multiple alleles, chi-square test & hardy-Weinberg law. |
| B.Sc. BT106 | Instrumentation and Bio-Analytical Techniques | CO106.1 : Able to provide a comprehensive understanding of different techniques in biotechnology. CO106.2 : Provide students with technical and analytical skills with general understanding of the standard laboratory tools, procedures and process of biological research. CO106.3 : Understanding of Isolation, purification and characterization of biological samples using sophisticated analytical experimental techniques. CO106.4 : Learning the importance of radioisotope & autoradiography in molecular biology. CO106.5 : Able to provide scientific understanding of instrumentation, operation, interpretation of data and its applications |
| B.Sc. BT107 | BIOMATHEMATICS | CO107.1 : To Conceptual understanding with unified knowledge. CO107.2 : To knowledge of general mathematical principles. CO107.3 : To Knowledge of theoretical as well as practical concepts of mathematics. CO107.4 : To discuss problem posing and solving. |
| B.Sc. BT108 | Chemistry | CO108.1 : Understanding the entire concept of Chemistry. CO108.2 : Summarise the concept of elements placed on the periodic table due to similar properties. CO108.3 : Analyze the knowledge of the structure, bonding and hybridization of different compounds and ionic properties. CO108.4 : Understanding the core criteria of compounds of elements belonging to s, p and noble gases. CO108.5: Evaluation of heterogeneous catalytic chemical kinetics. |
| B.Sc. BT109 | Biodiversity | CO109.1 : Understanding the basic concept of biodiversity of species richness, abundance and pattern of diversity of flora and fauna. CO109.2 : Identification of the element of biodiversity of ecosystem diversity, species diversity and genetic diversity CO109.3 : Analyze about the global and geographical pattern of biodiversity for measuring, cataloguing and discovering the species. CO109.4 : Evaluation of the threats of biodiversity and problems in controlling trading of species. CO109.5 : Assessment the effect on environment due to In-situ and Ex-situ conservation of species. |
| B.Sc. (H) Biotechnology II Year | | |
| Course Code | Course Name | Course Outcomes (CO) |
| | | CO201.1 : Understanding the role of computers and network on the biological sciences. CO201.2 : Analyzing the various networking process of computers and their role. |

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| B.Sc. BT201 | Fundamentals of Computer & Bioinformatics | CO201.3 : Understand the basic concept, scope and application of Bioinformatics in biological sciences. CO201.4 : Evaluation of various biological databases in bioinformatics. CO201.5: Analyzing the biological data through bioinformatic tools and technique. |
| B.Sc. BT202 | Bioenergetics and Biomembranes | CO201.1 : Identify tthe basic concept and laws of thermodynamics and their role in the cell. CO202.2 : Apply the knowledge of metabolic activity in cell and stthe concept of metabolism in aspect of biomolecules. CO202.3 : Analyze the breakdown of molecules of biomolecules. CO202.4 : Evaluate the biomembranes and types and their role in cell. CO202.5: Assess the role ofv transport in aspect of cell. |
| B.Sc. BT203 | Molecular Biology | CO203.1 : Identify the mechanisms that underpin human inheritance CO203.2 : Understand chemical and molecular processes that occur in and between cells. CO203.3 : Apply of the role of molecular factors in health and disease. CO203.4 : Evaluate the role of gene in regulation in living organisms. CO204:5: Analyze the genetic material degradation |
| B.Sc. BT204 | Molecular Genetics & Cytogenetics | CO204.1 : Introducing the fundamentals of Molecular and Cytogenetics to the students. CO204.2 : Describing the concepts associated with chromosomal aberrations and how these can result in changes at phenotypic & genotypic level. CO204.3 : Explaining the role of numerical aberrations in evolution of crops and chromosome mapping. CO204.4 : Understanding plant breeding and their role in crop improvement. CO204.5: Summarizing molecular markers and their significance. |
| B.Sc. BT205 | IMMUNOTECHNOLOGY & IMMUNOLOGY | CO205.1 : Describe the components of our immune system CO205.2 : Analysis the assays techniques in immunology CO205.3 : Evaluate the application of antibodies in treatment of diseases CO205.4 : Understand the Immune system disorders CO205.5: Assess the immunology concept for living organisms. |
| B.Sc. BT206 | Recombinant DNA Tehnology | CO206.1 : Understanding the gene cloning and tools and techniques. CO206.2 :Constructing cDNA library by the manipulation of DNA using DNA Modifying enzymes. CO206.3 : Characterising genes using recombinant DNA technology with the help of high throughput applications like DNA sequencing CO206.4 : understanding Gene expression assays for targeted genes. CO206.5 : understanding the site directed mutagenesis to characterize targeted DNA. |
| | | CO207.1 : Understand the fundamental principles of animal physiology. |

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| B.Sc. BT207 | Animal physiology | CO207.2 : Analyze the structure and functions of important physiological systems including the cardio-respiratory, digestive, renal, reproductive and metabolic systems. |
| | | CO207.3 : Apply the principles to be incorporated into the adaptations of different animal groups. |
| | | CO207.4 :Evaluate the application about different patterns of animal and human behaviour. |
| | | CO207.5 : Assess the types of immune cells, their role in preventing the disease. |
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| B.Sc. BT208 | Plant physiology | CO208.1 : Identify the PLANT PHYSIOLOGY |
| | | CO208.2 : Apply the PLANT PHYSIOLOGY techniques. |
| | | CO208.3 : Analyze the PLANT PHYSIOLOGY system and its relation to various infectious diseases. |
| | | CO208.4 : Evaluate the different growth techniques in plants. |
| | | CO208.5 : Assess plant growth and germination |
| B.Sc. BT209 | Enzymes and Enzyme Technology | CO209.1 :Understand the basic concepts of enzymes and their functions. |
| | | CO209.2 :Assess the students learn about isolation and purification of enzymes. |
| | | CO209.3 : Identify the different approaches of enzyme engineering that can be utilized in various fields of biological sciences |
| | | CO209.4 : Apply the concepts of enzyme applications. |
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| B.Sc. (H) Biotechnology III Year | | |
| Course Code | Course Name | Course Outcomes (CO) |
| | | CO301.1 : Understand the entire concepts of Plant Biotechnology. |
| B.Sc. BT301 | Plant Biotechnology | CO301.2 : Evaluate the role and influence of Plant Biotechnology techniques on human welfare. |
| | | CO301.3 : Assess and select the appropriate applications, concepts and techniques to suit specific production of crop varieties. |
| | | CO301.4 : Identify the technology of transgenic plants |
| | | CO301.5 : Apply the biotechnology to transfer the gene in plants |
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| B.Sc. BT302 | Animal Biotechnology | CO302.1 : To understand the Basic concepts of Biotechnology, bacterial and animal cloning. |
| | | CO302.2 : To understand the role of Biotechnology for human welfare in production of recombinant products at industrial level and production of transgenic varieties. |
| | | CO302.3 : To provide a better understanding of Biotechnology to the student and assist to get novel ideas for human welfare. |
| | | CO302.4 : To understand the tissue engineering process. |
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| | | CO303.1 : Identify the nature of viruses, including their structure, replication and classification. |
| | | CO303.2 : Analyze how infection and replication of viruses is constrained by the viral genome and host immune defenses. |

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| B.Sc. BT303 | Molecular Virology | <p>CO303.3 : Apply the methodological approaches in diagnostic investigation of infectious diseases and the epidemiology of infections.</p> <p>CO303.4 : Evaluate the role of various serological and molecular methods in virus identification and detection.</p> <p>CO303.5 : Assess the organization of genome in viruses.</p> |
| B.Sc. BT304 | NANOBIOTECHNOLOGY | <p>CO304.1: Able to understand basics of nanotechnology and their applications.</p> <p>CO304.2 : Able to know the preparation and characterization of appropriate nano materials with precision.</p> <p>CO304.3 : The course introduces to the new and novel applications to solve biomedical problems through nanotechnology</p> <p>CO304.4 : To understand the role of immunology in field of nanotechnology.</p> <p>CO304.5 : Able to understand the role of immunology in the field of nanotechnology.</p> |
| B.Sc. BT305 | Environmental Biotechnology | <p>CO305.1 : Evaluate the concept of renewable and non renewable sources along with their impact on environment</p> <p>CO305.2 : Apply the utility of green energy fuel and their applications</p> <p>CO305.3 : Analyse the treatment of industrial effluents by microbes: a conventional approach</p> <p>CO305.4 : Enumerate the environmental impact on transgenic organism</p> |
| B.Sc. BT306 | Industrial Biotechnology | <p>CO306.1 : To understand the concept of bioassessment of fermentation</p> <p>CO306.2 : To explore about various kinds of bioreactors in brief and their working principle and applications</p> <p>CO306.3 : To study about numerous industrial enzymes: production & applications</p> <p>CO306.4 : To understand the students will get to know about the utilization of industrial enzymes in dairy and food industry</p> |
| B.Sc. BT307 | Genomics and Proteomics | <p>CO307.1 Able to understand the concept of Genomics and Proteomics</p> <p>CO307.2 Able able to understand the practical role and importance of various techniques of Genomics and Proteomics in various biological experiments</p> <p>CO307.3 :Able to assess and select the appropriate applications, concepts and techniques to suit specific experiment</p> <p>CO307.4 Able to understand and utilize algorithms in genomics and proteomics.</p> <p>CO 307.5 Explore various Proteomics Strategies and their applications</p> |
| | | <p>CO 308.1 : Identify specialized theoretical knowledge of biosafety, IPR and entrepreneurship</p> <p>CO308.2 : apply knowledge about patent in India, licensing and bioethics for transgenes.</p> <p>CO308.3 : Analyze the issues related to biosafety, IPR and entrepreneurship development which can be related to research in new or interdisciplinary fields.</p> |

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| B.Sc. BT308 | biosafety, IPR and entrepreneurship | CO308.4 : Evaluate the role of patent and its rule and regulation. CO308.5 : Assess the bioethical issues related to GMO's. |
| B.Sc. BT309 | Recent trends in biotechnology | CO309.1 : Identifying and analyzing the current trends in biotechnology CO309.2 : Describing common methodologies used in biotechnological processes CO309.3 : Communicating depth knowledge on topics covered in the area of advanced biotechnology CO309.4 : Understanding the different techniques like seed termination technology bioremediation. CO309.5 : Understanding the Application of biotechnology for biofuels: transforming biomass to biofuels |
| B.Sc. BT310 | Transcriptomics and Metabolomics | CO310.1 Able to understand the concepts of Transcriptomics and Metabolomics CO310.2 Able to analyse the metabolomics and its engineering. CO310.3 Able to understand the students will learn metabolic engineering and how it is used at industrial level CO310.4 Explore the approaches to analyse metabolome C 310-.5 Student will learn various techniques used for transcriptomics analysis |
| B.Sc. BT311 | Bioprocess Engineering and Technology | CO311.1 : understanding the basic principle of biochemical engineering CO311.2 : Identify the significance of aeration and agitation for synthesis of bioproducts and modes of operation of Fermenter. CO311.3 : Explain the downstream processing and subsequent purification of a target therapeutic protein. CO311.4 : Elaborates the quality of food products and changes in components during food preparations. CO311.5: Assess the mechanism and application of enzyme. |



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| Program Name: MICROBIOLOGY | | |
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| COURSE OUTCOMES (COs) | | |
| B.Sc. (H) Microbiology I Year | | |
| Course Code | Course Name | Course Outcomes (CO) |
| B.Sc. MB 101 | Fundamental of Microbiology | CO101.1 : Identify different scope and professions related to microbiology |
| | | CO101.2 : Apply the understanding of the discovery of microbes, isolation of microbes and different groups of microbes |
| | | CO101.3 : Analyze the overview on microbes classification and characterization |
| | | CO101.4: Evaluate the different staining techniques for the identification of microorganisms. |
| | | CO101.5: Assess the morphology of viruses and isolation of pure culture techniques. |
| B.Sc. MB 102 | Bacteriology | CO102.1 : Identify the basic cell structure and metabolism. |
| | | CO102.2 : Evaluate the three domains of living organisms and their morphological and physiological diversity (Bacteria, Archaea,) |
| | | CO102.3 : Apply the classification scheme used in Bergey's Manual of Systematic Bacteriology |
| | | CO102.4 : Analyze the knowledge about the three domains of living organisms and their morphological and physiological diversity of Eucarya |
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| B.Sc. MB 103 | Virology | CO103.1 : Identify the distinctive characteristics between prokaryotes, eukaryotes and viruses. The biological, chemical and physical properties of viruses, viroids and prions |
| | | CO103.2 : Apply the principles of viral taxonomy and their classification. |
| | | CO103.3 : Analyze the mechanism, steps of viral replication and challenges faced by them during their replication in the host cell. |
| | | CO103.4 : Evaluate the importance of viruses as disease causing agents and use in biotechnology. |
| | | CO103.5 : Assess the biological, chemical and physical properties of viruses, viroids and prions. |
| B.Sc. MB 104 | Mycology, Phycology and Protozoology | CO104.1 : Introduction to the students with history, definition and classification of Mycology, Phycology and Protozoology |
| | | CO104.2 : Awaring to the student with general characteristics of fungi and algae and to provide students with opportunities to develop basic methods to identify algae, fungi and protozoa. |
| | | CO104.3 : Analyzing the identification methods and general characteristics of algae |
| | | CO104.4 : Evaluating different species of fungi and their causing disease |
| | | CO104.5 : Evaluating different species of algae and their economic importance |
| B.Sc. MB 105 | Biochemistry | CO105.1 : Identify the basic concept, structure, chemical nature, types and role of biomolecules in the cell. |
| | | CO105.2 : Apply the depth knowledge of biomolecules. |
| | | CO105.3 : Analyze the structure and function of building blocks of body in aspect of biomolecules. |
| | | CO105.4 : Evaluate the structure and function of macromolecules. |
| | | CO105.5: Assess how metabolic pathways of carbohydrates and their role in photosynthesis and nitrogen fixation. |
| B.Sc. MB 106 | Biophysics | CO106.1 : Identify Biophysical techniques and their application in understanding structure and conformation of biological macromolecules, structure – function relationships, molecular transport within the cell and across membranes |
| | | CO106.2 : Analyze the entire concept of Biophysics. |
| | | CO106.3 : Apply the practical role and importance of various aspects of the subject. |
| | | CO106.4 : Evaluate the electrical properties of biological component. |
| | | CO 105.5: Assess the biomechanics |

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| B.Sc. MB 107 | Instrumentation and Cultural Techniques | CO107.1 : Able to provide students with a comprehensive understanding of different techniques in Microbiology. |
| | | CO107.2 : Able to provide students with technical and analytical skills with general understanding of the standard laboratory tools, procedures and process of biological research. |
| | | CO107.3 : To gain better understanding of Isolation, purification. |
| | | CO107.4 : To understand the characterization of Microbial Cultures. |
| | | CO107.5 : Able to introduce the student to principles and theory of instrument analysis. |
| B.Sc. MB 108 | Analytical Techniques | CO108.1 : Able to Understand the working and principles of advanced instruments and their applications in analysis. |
| | | CO108.2 : Able to acquaint with steps involved in the production of bioproducts and methods to improve modern biotechnology. |
| | | CO108.3 : To understand the importance of Radioisotope tracer technique in biological studies |
| | | CO108.4 : To understand the basic principles of all the techniques. |
| | | CO108.5 : Able to understand the importance of Radioisotope tracer technique in biological studies |
| B.Sc. MB 109 | Biology -S-1 | CO109.1 : Identify evolutionary theories and foundations of molecular biology. |
| | | CO109.2 : Apply the biological methods. |
| | | CO109.3 : Analyze the classical identification of animals . |
| | | CO109.4 : Evaluate the classical identification of plants. |
| | | CO109.5: Assess the keys for identification of plants and animals |
| B.Sc. MB 110 | Biology -S-2 | CO110.1 : Introduction to students with general classification and their characteristics of lower plants (algae, bryophyte etc) |
| | | CO110.2 : Understanding the details of animal and plant tissue. |
| | | CO110.3 : Identification of the process of membrane transport system |
| | | CO110.4 : Evaluate the various factors of photosynthesis in green plant |
| | | CO110.5: Analyze the mechanism of photosynthesis in green plants |
| B.Sc. (H) Microbiology II Year | | |
| Course Code | Course Name | Course Outcomes (CO) |
| B.Sc. MB 201 | Cell Biology | CO201.1 : Apply the knowledge of origin and history of cell. |
| | | CO201.2 : Evaluate the structure and function of different cell organelles. |
| | | CO201.3 : Understanding the knowledge of bacteria on the basis of cell wall. |
| | | CO201.4 : Analyse the bacterial cell wall composition |
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| B.Sc. MB 202 | Reproduction and Differentiation | CO202.1 : Apply the knowledge of cell, its genetic material and its mechanism of division |
| | | CO202.2 : Identify the mechanism of chemical signal of bacteria cell |
| | | CO202.3 : Analyse the mechanism of the division of cell. |
| | | CO202.4 : Evaluate the signalling of cell and its importance. |
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| B.Sc. MB 203 | Microbial Physiology | CO203.1 : Identify in-depth understanding of physiology of different microbes and its importance. |
| | | CO203.2 : Apply the concept of physiology and metabolism along with the practical role and importance of these biological processes. |
| | | CO203.3 : Analyze the role and influence on making life of humans healthy. |
| | | CO203.4 : Evaluate the mechanism of photosynthesis. |
| | | CO203.5: Assess the bacterial growth and various factors affecting their growth |
| B.Sc. MB 204 | Microbial Metabolism | CO204.1 : understanding the role of microorganisms in metabolism. |
| | | CO204.2 : Analyze the different process of energy generation and importance of ATP |
| | | CO204.3 : Identify the role of nitrogen in nature and in living organisms. |
| | | CO204.4 : Apply the importance of metabolism in microorganisms and process of metabolism. |
| | | CO204.5 : Assess the concept of secondary metabolites. |
| | CO205.1 : Identify understand core concept of molecular biology | |

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| B.Sc. MB 205 | Molecular Biology | CO205.2 : Analyze the fundamental structure, properties and processes in which nucleic acids play a part. |
| | | CO205.3 : Apply the mechanisms that underpin human inheritance |
| | | CO205.4 : Evaluate the gene regulation mechanism |
| | | CO205.5: Assess the degradation of nucleic acid |
| B.Sc. MB 206 | Microbial Genetics | CO206.1 : Understanding the fundamentals of genetic material and concept of lethality and multiple alleles. |
| | | CO206.2 : Summarising principles of inheritance & their applications and various other genetical concepts including linkage and crossing over. |
| | | CO206.3 : Comprehending the definition of gene in different eras. |
| | | CO206.4 : Able to understand the role of gene in mutation in prokaryotes and eukaryotes. |
| | | CO206.5: Introducing the concept of extra-chromosomal inheritance. |
| B.Sc. MB 207 | Biomaths | CO207.1 : To enable the students to develop logical and numerical skills. Students will apply the process of mathematical problem solving utilizing a variety of techniques. |
| | | CO207.2 : To develop thinking and reasoning power of students. Students will demonstrate critical-thinking and problem-solving skills. |
| | | CO207.3 : To perform mathematical operations and manipulations with confidence, speed and accuracy. A conceptual understanding of matrix, differential calculus and integral calculus will be developed among the students. |
| | | CO207.4 : To understand the integral calculus. |
| B.Sc. MB 208 | Biostats | CO208.1 : To choose appropriate statistical methods and apply them in various data analysis problems |
| | | CO208.2 : To understand the role of statistics and its applications in the field of biological sciences. |
| | | CO208.3 : To equip students with requisite quantitative skills that help to design data collection plans, analyze data appropriately and draw conclusion from these analysis. |
| | | CO208.4 : To understand how to apply correlation and regression in data. |
| B.Sc. MB 208 | Computers | CO208.1 : To introduce to the students the fundamentals and basic requirements of computer science |
| | | CO208.2 : To enable the student to gain an understanding of the core concepts and technologies which constitute Information Technology |
| | | CO208.3 : To articulate and demonstrate these basic fundamental concepts to the students |
| | | CO208.4: To understand the application of computer in different fields. |
| B.Sc. MB 209 | Zoology (S3) | CO209.1 : Understand the structure of heart, mechanism of circulation, composition of blood and their function. |
| | | CO209.2 :Analyze the excretion process, structure of kidney and mechanism of urine formation, osmoregulation in animals and their function. |
| | | CO209.3 : Apply the fundamental knowledge of respiration process in higher plants with particular emphasis on aerobic and anaerobic respiration and in animals, how the mechanism of transport of gases at tissues and lungs level occurs. |
| | | CO209.4 : Evaluate the composition of food and mechanism of digestion, absorption and assimilation in animals and human. |
| | | CO209.5 : Assess the translocation of solutes in plants and knowledge about insectivorous plants. |
| B.Sc. MB 210 | Botany (S-4) | CO210.1 : Undersatnding the importance of growth and developments in plants and animals. |
| | | CO210.2 : Analyzing the coordination and balance in plants |
| | | CO210.3 : Evaluation of the role of different sensory organs in animals and their role in the process of nervous system. |
| | | CO210.4 : Assess the role of homeostasis and thermoregulation process in animals |
| | | CO210.5 : Evaluating the types of animal behaviours and various experiments related to their coordination. |
| B.Sc. Microbiology III Year | | |

| Course Code | Course Name | Course Outcomes (CO) |
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| B.Sc. MB 301 | IMMUNOLOGY | CO301.1 : To understand about Historical Developments, Non- specific defense mechanisms – phagocytosis, Types of Immunity |
| | | CO301.2 : To understand about Antigen-antibody Reactions: Agglutination, Precipitation, Neutralisation, Complement Fixation. A brief idea of Immunodiffusion, Immuno-electrophoresis, ELISA, RIA, production of monoclonal antibodies. |
| | | CO301.3 : To understand about Hypersensitivity and allergic reactions. Autoimmune diseases, Rheumatoid arthritis, Pernicious anaemia, asthma, Hashimoto's thyroiditis, Myasthenia gravis. Vaccines of different generations and Vaccination |
| | | CO301.4 : To understand the different diseases due to the less immunity. |
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| B.Sc. MB 302 | MEDICAL MICROBIOLOGY | CO302.1 : Understand about Infection: Mechanism of Infection, Virulence (Toxigenicity), Transmission of Infection Disease (Food – borne, Water - borne, Air borne, Soil – borne, fomites). |
| | | CO302.2 : Analyze the diagnostic feature of bacterial, viral and protozoan diseases. |
| | | CO302.3 : Apply the knowledge to study symptoms. |
| | | CO302.4 : Evaluate the Important fungal diseases – Athlete's Foot, Mycetoma, Aspergillosis, Candidiasis. |
| | | CO302.5 : Assess the knowledge about chemotherapy and the mode of action of antibiotics. |
| B.Sc. MB 303 | Food & Dairy Microbiology | CO303.1 : Identify the major microorganisms found in food and dairy products, including bacteria, yeasts, molds, and viruses, and describe their characteristics and roles in food microbiology. |
| | | CO303.2 : Analyze the processes and conditions that affect microbial growth in food and dairy products, including environmental factors, nutrient availability, and preservation methods |
| | | CO303.3 : Apply microbiological techniques and methodologies to detect, enumerate, and control microorganisms in food and dairy samples, ensuring food safety and quality. |
| | | CO303.4 : Evaluate the effectiveness of various food preservation techniques, such as pasteurization, sterilization, refrigeration, and chemical preservatives, in inhibiting microbial growth and prolonging shelf life. |
| | | CO303.5 : Assess the risk of microbial contamination in different food and dairy processing environments and develop strategies to minimize such risks, ensuring compliance with food safety regulations and standards. |
| B.Sc. MB 304 | Agricultural Microbiology | CO304.1 : Conceptualizing the basic structure of soil and its type |
| | | CO304.2 : Imparting knowledge about the role of microbes and their significance in soil formation. |
| | | CO304.3 : Providing knowledge about microorganisms as components of the environment, nutrient cycling processes, interactions within microorganisms, interaction microorganism-plant |
| | | CO304.4 : Summarizing the role of microorganism in biopesticides and biofertilizers |
| | | CO304.5: Understanding the disease problems and their management on economically important fruit and vegetable crops. |
| B.Sc. MB 305 | Recombinant DNA Technology | CO305.1 : Understanding the gene cloning and tools and techniques. |
| | | CO305.2 : Constructing cDNA library by the manipulation of DNA using DNA Modifying enzymes. |
| | | CO305.3 : Characterising genes using recombinant DNA technology with the help of high throughput applications like DNA sequencing |
| | | CO305.4 : Understanding Gene expression assays for targeted genes. |
| | | CO305.5 : Understanding the Site directed mutagenesis to characterize targeted DNA. |
| | | CO306.1 : To study about the characteristics of industrially important microbes and their acquisition in nature |
| | | CO306.2 : To understand about the fundamentals of fermentation processes, fermentation equipments and their uses |

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| B.Sc. MB 306 | Industrial Microbiology | CO306.3 : To understand the Industrial production of various antibiotics, enzymes and organic acids |
| | | CO306.4 : To understand the production of different compounds at industrial level. |
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| B.Sc. MB 307 | Microbial Ecology | CO307.1 : Identify the existence of microbes in their natural environments |
| | | CO307.2 : To understand about the structure and developments of microbial communities based on their ecosystem |
| | | CO307.3 : Analyze the biological interaction and biogeochemical aspects of microbial ecology to maintain the C-N cycle |
| | | CO307.4 : Evaluate the understanding of the sewage treatment, bioremediation, phytoremediation and their applications |
| | | CO307.5: Assess role of microbes in BOD and COD. |
| B.Sc. MB 308 | Microbes in Environmental Biotechnology | CO308.1 : Exploring the treatment of industrial effluents and municipal wastes by microbes |
| | | CO308.2 : Identify about the degradation of pesticides and toxic metals through microbes |
| | | CO308.3 : Apply the concept of <i>Bacillus thuringiensis</i> . |
| | | CO308.4 : understanding about the environmental law and policies. |
| B.Sc. MB 309 | Fundamentals of Information Technology | CO309.1 : To introduce to the students the role of biotechnology in environment. |
| | | CO309.2 : To understand the role of microorganism in treatment of waste. |
| | | CO309.3 : To understand the role of microorganisms in pesticide production. |
| | | CO309.4 : To understand the process of bioaccumulation and biomineralisation. |
| B.Sc. MB 310 | Genomics, Proteomics and Bioinformatics | CO310.1 Able to understand the concept of Genomics and Proteomics |
| | | CO310.2 Able to understand the practical role and importance of various techniques of Genomics and Proteomics in various biological experiments |
| | | CO310.3 : Able to assess and select the appropriate applications, concepts and techniques to suit specific experiment |
| | | CO310.4 Able to understand the diagnosis and treatment of diseases through genomics and proteomics. |
| | | CO 310.5 Explore various Proteomics Strategies and their applications |
| B.Sc. MB 311 | Diagnostic microbiology | CO311.1 : Introducing students the fundamentals and basic requirements of Diagnostic microbiology Laboratory and its safety principles |
| | | CO311.2 : Enabling the student to gain an understanding of the Antimicrobial Susceptibility Testing: Traditional and automated antimicrobial susceptibility test methods and Interpretation of results. |
| | | CO311.3 : Learning Microscopic examination of infected materials (Swabs, Semisolids, Mucoid materials, Thin fluids, Cyto centrifuge) |
| | | CO311.4 : Understanding the microscopic examination of microbes. |
| | | CO311.5 : Utilising the colonial morphology for the presumptive identification of microbes |
| B.Sc. MB 312 | Biofafety and Bioethics | CO312.1 : To introduce student with biosafety and bioethical laws and issues |
| | | CO312.2 : To introduce students with procedure of licencing revenue, product development and selection |
| | | CO312.3 : To enable student to understand the use of microbes in industries |
| | | CO312.4 : To understand the selection of microbes in R & D |
| | | CO312.5: Assess the role of patent and its rule and regulation. |



Estd. 1990

IMS GHAZIABAD
(UNIVERSITY COURSES CAMPUS)
Status of 12(B) by UGC

Program Name: BAJMC

COURSE OUTCOMES

SEMESTER I

| Course Code: | Course Name | Course Outcomes (CO): After the completion of the course students will be able to: |
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| BAJMC-101 | Basics of Mass Communication and Journalism | CO101.1 – Understand the elements, types, various aspects, and the importance of Communication in human interaction and media. |
| | | CO101.2 – Apply foundational communication theories and models relevant to the media industry and describe their practical implications. |
| | | CO101.3 – Analyze the communication process across diverse contexts and evaluate the relevance of different communication theories in real-life media scenarios. |
| | | CO101.4 – Evaluate the origins, functions, and historical development of journalism and the Indian press through critical inquiry. |
| | | CO101.5 – Create the duties, responsibilities, professional values, and ethical standards expected of journalists and evaluate their role in shaping responsible journalism. |
| BAJMC-102 | General Hindi | CO102.1: शुद्ध हिंदी भाषा को लिखने और बोलने के तरीके को समझना। |
| | | CO102.2: औपचारिक और अनौपचारिक पत्रों के बीच के अंतर के ज्ञान को लागू करते हुए उनकी सही संरचना को समझना और प्रयोग करना। |
| | | CO102.3: हिंदी में विभिन्न प्रकार के निबंधों, कहानियों और फीचर की संरचना का विश्लेषण करना। |
| | | CO102.4: विभिन्न शब्दों की समझ का मूल्यांकन कर सही वाक्यांश का निर्माण करना। |
| | | CO102.5: मीडिया की भाषा का प्रयोग करके प्रभावी लेखन एवं प्रस्तुतीकरण कौशल का निर्माण करना। |
| BAJMC-103 | Digital Journalism | CO103.1: Understand Digital Journalism Tools and Platforms |
| | | CO103.2: Apply Digital Writing and Multimedia Skills |
| | | CO103.3: Analyze the Impact of Technology on Journalism |
| | | CO103.4: Evaluate Ethical and Legal Aspects in Digital Journalism |
| | | CO103.5: Develop writing skills and websites to apply learning skills |

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| BAJMC-104 | Advertising and Public Relations | CO104.1 :Understand the basic concepts and functions of Advertising and Public Relations. |
| | | CO104.2 : Apply advertising theories, motivation, and consumer behavior to design creative strategies and brand positioning |
| | | CO104.3 : Analyze various advertising strategies and ethical practices in the advertising industry. |
| | | CO104.4 : Evaluate advertising ethics, ASCI guidelines, and the effectiveness of online advertising methods |
| | | CO104.5 :Create advertising copies, online ad campaigns, and PR strategies integrating corporate communication and identity. |
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| BAJMC-105 | Computer for Mass Media (Course Related Practical-Viva) | CO105.1: Understand the advancements in computer technology across different generations of computers.. |
| | | CO105.2:Apply the knowledge of MS Word to create, format, and manage professional documents. |
| | | CO105.3: Analyze the working features of MS Word to perform advanced tasks like mail merge and document automation. |
| | | CO105.4: Evaluate the use and effectiveness of PowerPoint presentations for professional and academic purposes.. |
| | | CO105.5:Develop effective internet-based solutions by creating strategies for research, communication, and information sharing. |
| SEMESTER II | | |
| Course Code: | Course Name | Course Outcomes (CO) |
| BAJMC-201 | Print Media (Reporting and Editing) | CO201.1:Understand the the concept, meaning, and importance of news, including its types and values. CO201.2:News, its selection and presentation |
| | | CO201.2:Differentiate between types of reporting, headlines, and beats, and explain their role in effective journalism. |
| | | CO201.3:Apply reporting techniques to practical scenarios, demonstrating skills in news gathering and presentation. |
| | | CO201.4:Evaluate editing methods, proofreading techniques, and translation practices to ensure accuracy and clarity in news content. |
| | | CO201.5:Create and design well-edited reports, headlines, and layouts by integrating editorial guidelines and professional roles. |
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| BAJMC-202 | General English | CO 202.1: Understand the basic structure of the English language and explain grammar rules, vocabulary, and sentence formation. |
| | | CO202.2: Apply correct language usage and journalistic writing techniques in various communication contexts. |
| | | CO 202.3: Analyze various real-life communication scenarios and differentiate between formal and informal communication styles to communicate effectively. |
| | | CO 202.4: Evaluate and critique texts they read, extract key ideas, learn expressions, and assess the use of vocabulary and style in journalistic writing. |
| | | CO 202.5: Create journalistic content that reflects ethical, moral, national, and cultural values through the study and application of literature. |
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| BAJMC-203 | Mass Media Writing Skills | CO203.1: Understand the different types of media writing and recognize how to write for newspapers and magazines. |
| | | CO203.2: Apply the knowledge of feature writing, including its types, and effectively write for radio and television media |
| | | CO203.3: Analyze editorial writing techniques and differentiate between various genres in newspapers while understanding the nuances of writing |
| | | CO203.4: Evaluate the importance of technical writing in media, explore different forms of technical writing, and assess the characteristics of freelance journalism. |
| | | CO203.5: Create media content by integrating knowledge from all formats of writing and assess one's ability to write across platforms like print, radio, and television |
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| BAJMC-204 | Photo Journalism | CO204.1: Identify the fundamental concepts and basic principles of photography. |
| | | CO204.2: Analyse various types of photography and their specific characteristics and applications. |
| | | CO204.3: Apply photo editing tools and software for enhancing and modifying photographic images. |
| | | CO204.4: Evaluate the essential photography techniques including composition, lighting, exposure, and camera operation for effective image creation. |
| | | CO204.5: Create impactful and technically sound photographs using acquired theoretical and practical knowledge. |
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| BAJMC-205 | Media Related Software (Course Related Practical – Viva) | CO205.1: Understand media-related software tools and their applications in multimedia production tasks. |

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| | | CO205.2: Apply audio and video editing techniques using professional editing software to produce quality content. |
| | | CO205.3: Analyze visual content and graphics to enhance their effectiveness in media and communication. |
| | | CO205.4: Evaluate the processes and techniques involved in effective photo editing for media production. |
| | | CO205.5: Create professional visual designs and graphics by integrating the principles and applications of graphic design in media production. |
| SEMESTER III | | |
| Course Code: | Course Name | Course Outcomes (CO) |
| BAJMC-301 | Value Education | CO301.1 : Identify and explain positive character traits such as honesty, empathy, integrity, and responsibility. |
| | | CO301.2 : Apply ethical principles in real-life personal and professional scenarios to make responsible decisions. |
| | | CO301.3 : Analyze and reflect on ethical dilemmas by considering multiple perspectives and consequences. |
| | | CO301.4 : Evaluate and appreciate diverse cultures, beliefs, and value systems to promote tolerance and respectful coexistence. |
| | | CO301.5 : Develop personal strategies and coping mechanisms to build resilience and navigate life's challenges effectively. |
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| BAJMC-302 | Corporate Communication | CO302.01 – Remember and understand positive character traits such as honesty, empathy, integrity, and responsibility, and explain their significance in personal and professional life. |
| | | CO302.02 – Apply ethical principles in real-life personal and professional scenarios to make responsible decisions. |
| | | CO302.03 – Analyze and reflect on ethical dilemmas by considering multiple perspectives and consequences. |
| | | CO302.04 – Evaluate and appreciate diverse cultures, beliefs, and value systems to promote tolerance and respectful coexistence. |
| | | CO302.05 –Create personal strategies and coping mechanisms to build resilience and navigate life's challenges effectively. |
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| BAJMC-303 | Broadcast Journalism (Electronic Media-I) | CO303.01 -Understand the evolution and development of radio globally, trace the milestones in the world scenario, and explore the history and growth of radio broadcasting in India. |

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| | | CO303.02 -Apply the knowledge of various radio program types by identifying, categorizing, and explaining their objectives, formats, and target audiences. |
| | | CO303.04 -Analyze and critically differentiate between educational and community radio, focusing on their goals, audience engagement, funding patterns, and social impact. |
| | | CO303.04 -Evaluate the techniques and processes of three-tier broadcasting and assess in detail the organizational structure, functions, and services of All India Radio and its divisions. |
| | | CO303.05 -Assess/Create different formats of radio program presentation by designing scripts, planning content, and experimenting with innovative presentation styles to suit diverse audiences. |
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| BAJMC-304 | Indian Political System | CO304.1-Understand the historical background, foundation, and specific features of the Indian Constitution, and interpret their relevance in the media context. |
| | | CO304.2-Apply the knowledge of Fundamental Rights, Duties, and Directive Principles, along with the roles of constitutional authorities (President, Prime Minister, Speaker, Rajya Sabha Chairman), to illustrate their impact on citizens. |
| | | CO304.3-Examine parliamentary procedures, legislative processes, and budgetary systems, and analyze how they influence journalistic practices. |
| | | CO304.4-Evaluate Centre–State relations, the functioning of Panchayati Raj institutions, and the judiciary system to evaluate their impact on governance and media. |
| | | CO304.5-Develop an understanding of the Indian political party system, interest groups, and pressure groups, and construct arguments on their influence on democratic processes and media operations. |
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| BAJMC-305 | Graphics and Design (Course Related Practical-Viva) | CO305.1: Understand the procedures of pre-production, production, and post-production for graphics and videoProject |
| | | CO305.2: Implement the procedures of pre-production, production, and post-production in graphic and audio-video projects. |
| | | CO305.3: Identify current trends within the digital media industry and explore appropriate career opportunities. |
| | | CO305.4: Analyse advertising strategies, design elements, and develop effective advertising plans. |
| | | CO305.5: Create innovative visual content using the latest designing tools to enhance creativity. |
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| SEMESTER IV | | |

| Course Code: | Course Name | Course Outcomes (CO) |
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| BAJMC-401 | Media Laws and Ethics | CO401.1: Recall and define the fundamental concepts, meanings, and definitions of various media laws |
| | | CO401.2: Understand the relationship between law, society, and the press, and interpret the ethical responsibilities of journalists |
| | | CO401.3: Apply relevant media laws and ethical principles while analyzing real-life situations |
| | | CO401.4: Examine and compare various regulatory frameworks, including Press and Registration of Books Act, Prasar Bharati Act, Cable TV Regulation Act, PCI guidelines, and assess their impact on media practices in India. |
| | | CO401.5: Evaluate the need for media ethics and stronger regulatory mechanisms in the digital age and design ethically sound media content adhering to legal frameworks and organizational guidelines. |
| BAJMC-402 | Media and Cultural Studies | CO 402.1: Understand the basic concepts, elements, and significance of culture in human communication and society. |
| | | CO 402.2: Apply a digital story or blog post expressing your cultural identity. |
| | | CO 402.3 : Analyze intercultural changes and their impact on communication, values, and social structures. |
| | | CO 402.4 :Evaluate a media campaign promoting cultural inclusivity.. |
| | | CO 402.5: Create the richness and diversity of Indian culture through various regional, historical, and artistic expressions. |
| BAJMC-403 | Television Journalism (Electronic Media –II) | CO403.1: Understand the historical evolution and key characteristics of television in India and around the world. |
| | | CO403.2: Identify and demonstrate the use of visual grammar and basic camera techniques in television production. |
| | | CO403.3: Analyze various elements of visual composition used in different types of television programs and productions. |
| | | CO403.4: Create scripts for television, including writing formats for news bulletins and structuring TV news content effectively. |
| | | CO403.5: Develop the television programs using appropriate techniques and tools. |
| BAJMC-404 | Indian Social System | CO404.1 –Understand the key features and defining characteristics of Indian society. |
| | | CO404.2 –Apply the concepts of social structure to explain the components and operational dynamics of Indian society. |

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| | | CO404.3 – Analyze the processes of social change and their impact on various aspects of Indian society. |
| | | CO404.4 – Evaluate major social issues and challenges affecting Indian society and their implications. |
| | | CO404.5 – Evaluate major social issues and challenges affecting Indian society and their implications. |
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| BAJMC-405 | Print Media Production (Course Related Practical-Viva) | CO405.1: Identify the functions and uses of various graphic designing software. |
| | | CO405.2: Apply planning and writing skills for the preparation of print media content. |
| | | CO405.3: Analyse the process and components involved in house journal publication. |
| | | CO405.4: Evaluate the elements of newspaper layout design for effective print presentation. |
| | | CO405.5: Create photo features by applying visual storytelling and journalistic principles. |
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| SEMESTER V | | |
| Course Code: | Course Name | Course Outcomes (CO) |
| BAJMC-501 | Communication Research | CO501.1 – Remember the foundational knowledge of research methods and techniques used in communication studies. |
| | | CO501.2 – Understand the significance and relevance of communication research in contemporary media and society. |
| | | CO501.3 – Apply appropriate research designs by differentiating between various types of research methodologies. |
| | | CO501.4 – Analyze the key concepts and trace the evolution of communication research in the context of media development. |
| | | CO501.5 – Create scientific reasoning and construct original research frameworks based on empirical methods. |
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| BAJMC-502 | New Media Technology | CO502.1: Understand the evolving landscape of new media technologies and their role in shaping communication trends. |
| | | CO502.2: Apply practical skills in operating and utilizing various new media tools and platforms.. |
| | | CO502.3: Analyze digital and information literacy concepts, and assess the ethical implications of media usage and content creation. |

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| | | CO502.4: Evaluate the impact of new media technologies on society, culture, politics, economy, and individual behavior using critical thinking approaches. |
| | | CO502.5: Design, and produce innovative media outputs through interdisciplinary group projects and discussions. |
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| BAJMC-503 | Environment and Rural Communication | CO503.1- Undersatnd the importance of environment. |
| | | CO503.2- Apply previous knowledge and differentiate between rural setup and urban setup. |
| | | CO503.3- Analyse and suggest solutions of the issues of rural people. |
| | | CO503.4- Evaluate the success of the rural campaign and government running programs |
| | | CO503.5- Develop practical approach by relating the course study and what they have observed in practical environment. |
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| BAJMC-504 | Newspaper Production (Course Related Practical-Viva) | CO504.1- Understand the working of software used in newspaper and magazine production |
| | | CO504.2- Apply editing and layout design skills in the process of newspaper production. |
| | | CO504.3- Analyze the structure, principles, and techniques of article writing to identify factors that enhance effectiveness in print media. |
| | | CO504.4- Create newspapers and magazines by integrating editing, layout, and production techniques. |
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| BAJMC-505 | Content Production of New Media (Course Related Practical) | CO1 – Identify the process of setting up and managing a YouTube channel effectively with suitable tags, descriptions, and thumbnails. |
| | | CO2 – Apply the principles of journalistic writing in creating news stories and posts on current issues with accuracy and objectivity. |
| | | CO3 – Analyze the use of social media platforms through post scheduling, audience engagement, and response strategies. |
| | | CO4 – Evaluate monetization strategies for social media channels by implementing them and assessing generated outcomes. |
| | | CO5 – Assess/Create a monetized social media channel by integrating learned strategies and demonstrating the ability to generate revenue through practical application. |
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| SEMESTER VI | | |
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| Course Code: | Course Name | Course Outcomes (CO) |
|---------------------|--|---|
| BAJMC-601 | Media Management | CO601.1: Understand the principles of media management concept ,policy ,strategies and ownership patterns of mass media. |
| | | CO601.2: Apply media management techniques to design strategies for production, promotion, and financial planning, considering audience behavior and market dynamics. |
| | | CO601.3: Analyze different media ownership models, organizational policies, budgeting processes, and program management practices. |
| | | CO601.4: Evaluate the financial, ethical, and operational aspects of media management and create innovative solutions for improving program planning, marketing strategies, human resource management, and content distribution. |
| | | CO601.5: Design and develop innovative media management strategies and solutions integrating production, promotion, financial planning, and content distribution |
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| BAJMC-602 | Development Communication | CO602.1 : Identify and understand the Indictors of Development |
| | | CO602.2 : Apply the effective communication technique for the purpose of Development |
| | | CO602.3 : Analyze the role of media—traditional and new—in facilitating behavior change in developmental contexts. |
| | | CO602.4 : Evaluate the effectiveness of different development communication campaigns based on audience feedback and impact studies. |
| | | CO602.5 : Design and develop a multimedia development communication plan addressing a specific social issue |
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| BAJMC-603 | Audio-Visual Production (Electronic Media Practical-Viva) | CO603.1: Recall the fundamental concepts, formats, and techniques involved in audio-visual production |
| | | CO603.2: Understand diffrent stage of Audio -Visual Production |
| | | C0603.3 : Apply theoretical knowledge to create short films, documentaries, news bulletins, and radio scripts using professional production techniques. |
| | | CO603.4 : Analyze various audio-visual formats and differentiate between production techniques used |
| | | CO603.5: Evaluate the effectiveness of produced content and design high-quality audio-visual productions |
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| BAJMC-604 | Profile Study (Project Report) | CO604.1 – Understand the significance and role of research in academic and professional contexts. |

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| | | CO604.2 – Analyze existing literature and Summarize key findings relevant to the chosen research topic. |
| | | CO604.3 – Apply appropriate research methods and tools to Collect, Organize, and Analyze data effectively. |
| | | CO604.4 – Evaluate research findings, Interpret empirical evidence, and Draw meaningful conclusions. |
| | | CO604.5 – Create well-structured written reports and Deliver effective oral presentations to communicate research findings and arguments. |
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| BAJMC-605 | Internship-Viva | CO605.1 – Identify the lessons learned for future professional development. |
| | | CO605.2 – Apply theoretical knowledge gained from academic coursework to real-world situations. |
| | | CO605.3 – Analyze the student’s performance during the internship, highlighting strengths and areas for improvement. |
| | | CO605.4 – Evaluate the student’s professional development. |
| | | CO605.5 – Assess/Create personal learning goals. |


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