

PROGRAMME SPECIFIC OUTCOMES, PROGRAMME OUTCOMES AND COURSE OUTCOMES

**PG & DEPARTMENT OF COMPUTER SCIENCE
BCA- EXTRA-CREDIT COURSES & VALUE-ADDED COURSES**

PSOs	PROGRAMME SPECIFIC OUTCOMES	
PSO1	Able to work as software programmer, system and network administrator, web designer faculty for computer science and computer applications	
PSO2	Able to design and develop computer applications for Business problems.	
PSO3	Able to create platforms to become an entrepreneur and a relish for higher studies such as M.C.A., M.Sc., etc.,	
PSO4	Apply standard Computer science practices and strategies in real-time software project development.	
PSO5	Work with and communicate effectively with professionals in various fields and persue life long professional development in computing.	
BCA		
BCA / PROGRAMMES OUTCOMES		
POs	Description of POs	
PO1	Understand the Concepts of key areas of Computer Science.	
PO2	Analyze and apply latest technologies to solve problems in the areas of Computer Applications.	
PO3	Develop various real-time applications using latest technologies and programming languages.	
PO4	Possess Strong foundation for their higher studies.	
PO5	Become employable in various IT companies and Government jobs.	
PO6	Develop practical skills to provide solutions to industry, society and Business.	
BCA/ COURSE OUTCOMES		
	Description of COs	Bloom's Taxonomy / Cognitive Domain
Sub. Code: MUBCC1	Digital Electronics	
CO1.	Gain the knowledge of input and output devices, Number System, Simplification Techniques, Combinational and Sequential Circuits.	Knowledge (Level K1) Comprehension (Level K2)
CO2.	Understand the fundamental concepts and techniques used in digital electronics	Knowledge (Level K1)

Sub. Code: MUBCEC2		SBC- E-Commerce
CO1.	Recollect the concepts of e-commerce and its types, EDI and e-security protection.	Knowledge (Level K1) Comprehension (Level K2)
CO2.	Comprehend the role of EDI in current scenario.	Comprehension (Level K2)
CO3.	Deploy the types of firewalls for security in network.	Applications (Level K3)
CO4.	Applications in different e-commerce technologies.	Analysis (Level K4)
CO5.	Categorize the e-commerce and apply in different e-commerce technologies.	Analysis (Level K4)
Sub. Code: MUBCC3		Object Oriented Programming with C++
CO1.	Get an idea about object oriented paradigm with concepts of streams, classes, functions, data and objects and also recollect the concepts of files.	Knowledge (Level K1)
CO2.	Classify difference between object oriented programming and procedural oriented language and data types in C++.	Knowledge (Level K1) Comprehension (Level K2)
CO3.	Apply dynamic memory management techniques using pointers, constructors, destructors, etc.	Knowledge (Level K1) Applications (Level K3)
CO4.	Acquire the concept of polymorphism and apply inheritance with the understanding of early and late binding.	Applications (Level K3) Analysis (Level K4)
CO5.	Validate the use of various OOPs concepts with the help of programs.	Analysis (Level K4) Synthesis (Level K5)
Sub. Code: MUBCC4		Data Structures
CO1.	Recognize fundamental concepts of Data structures, space complexity and time complexity.	Knowledge(Level K1)
CO2.	Understand linear data structures such as stacks, queues, linked list and non linear data structures such as trees and Graphs.	Knowledge(Level K1) Comprehension (Level K2)
CO3.	Apply appropriate data structure for a given application.	Applications(Level K3)
CO4.	Implement different searching and sorting techniques.	Applications(Level K3)
CO5.	Analyze efficient algorithms by acquiring knowledge about time and space complexities of the algorithms.	Analysis(Level K4)
Sub. Code: MUBCL3		Object Oriented Programming with C++ Lab

CO1.	Understand Object oriented features and C++ concepts.	Comprehension (Level K2)
CO2.	Apply Object oriented features and C++ concepts.	Application (Level K3)
CO3.	Practice to solve the real world problems.	Application (Level K3)
CO4.	Apply to solve the real world problems.	Application (Level K3)
CO5.	Experiment various data structure concepts using C++.	Analysis (Level K4)
Sub. Code: MUBCL4 Office Automation and Tally Lab		
CO1.	Practice MS-Office package and do the documentation, calculation, presentation and manipulating the tables.	Applications(Level K3)
CO2.	Describe MS-Office package and do the documentation, calculation, presentation and manipulating the tables.	Applications(Level K3)
CO3.	Get idea about creation and alteration of company profile and Balance sheet.	Comprehension (Level K2)
CO4.	Apply various accounting voucher entries.	Applications(Level K3)
CO5.	Acquire the knowledge in bank reconciliation statement preparation and stock summary	Analysis(Level K4)
Sub. Code: MUBCA3 Business Accounting		
CO1.	Understand the accounting concept, conversion, methods and its rules.	Knowledge(Level K1)
CO2.	Acquire knowledge for preparation of journal and Ledger.	Analysis(Level K4)
CO3.	Summarize the ledger balance and check the arithmetical accuracy of books of accounts.	Applications(Level K3)
CO4.	Applications of ledger balance and check the arithmetical accuracy of books of accounts.	Applications(Level K3)
CO5.	Prepare Financial statement of sole trading concern with accounting principles.	Synthesis(Level K5)
Sub. Code: MUBCHR3 SBC-Human Rights		
CO1.	Know the basic rights and freedoms, regardless of their political, economical and cultural systems.	Knowledge (Level K1)
CO2.	Understand the importance and historical growth of the Human Rights.	Knowledge (Level K1)
CO3.	Describe historical growth of the Human Rights.	Comprehension (Level K2)
CO4.	Demonstrate the awareness of international context of human rights.	Comprehension (Level K2) Application (Level K3)
CO5.	Categorize the modern issues regarding child and women.	Analysis (Level K4)
Sub. Code: MUBCN1 Internet and its Applications		

CO2.	Understand Security Investigation and Security Analysis,	Knowledge (Level K1) Comprehension (Level K2)
CO3.	Analyse Security models.	Application (Level K3) Analysis (Level K4)
CO4.	Figure out the Physical design of the Security	Analysis (Level K4)
CO5.	Evaluate the Security and Analysis process.	Synthesis(Level K5)
Sub. Code:MUBCOS5 SBC-Open Source Technology		
CO1.	Recall the concepts of Open Source, Linux, Java Script and PHP.	Knowledge (Level K1)
CO2.	Describe the concepts of Open Source, Linux, Java Script and PHP.	Comprehension (Level K2)
CO3.	Demonstrate the basics of Open Source Software.	Application (Level K3)
CO4.	Examine and design various applications using Open Source Software.	Analysis(Level K4) Synthesis(Level K5)
CO5.	Examine and design various applications using Open Source Software.	Analysis(Level K4) Synthesis(Level K5)
Sub. Code:MUBCC8 Data Communication and Networks		
CO1.	Recall the networking concepts, Transmission media and OSI layers of Network.	Knowledge(Level K1)
CO2.	Describe the networking concepts, Transmission media and OSI layers of Network.	Comprehension(Level K2)
CO3.	Compare OSI & TCP/IP models.	Knowledge(Level K1) Comprehension (Level K2)
CO4.	Deploy the elementary Data link protocols.	Applications(Level K3)
CO5.	Review transport service and Transmission control protocol like DNS, Email.	Synthesis(Level K5)
Sub. Code:MUBCC9 Computer Graphics		
CO1.	List the display devices and recognize the Viewing and clipping algorithms.	Knowledge(Level K1)
CO2.	Comprehend the attributes of output primitives and geometric Transformation.	Comprehend(Level K2)
CO3.	Describe the attributes of output primitives and geometric Transformation.	Comprehend(Level K2)
CO4.	Demonstrate the algorithms for drawing lines & circle.	Applications(Level K3)
CO5.	Analyze the 2D and 3D viewing and clipping algorithms.	Analysis(Level K4)

Sub. Code: MUBCPR		Project Work
CO1.	Understand the problem.	Comprehension (Level K2)
CO2.	Implement & execute the real time application.	Application(Level K3)
CO3.	Apply& execute the real time application.	Application(Level K3)
CO4.	Analyze various testing methods.	Analysis (Level K4)
CO5.	Verify the expected results in real time applications.	Synthesis (Level K5)
Sub. Code:MUBCE3		Data Mining and Warehousing
CO1.	Understand the basic concepts of Data mining and Data warehousing	Knowledge(Level K1)
CO2.	Analyse various Data mining techniques like Classifications, Clustering, Association Rule Mining, Prediction and related algorithm.	Analysis(Level K4)
CO3.	Choose appropriate Data mining techniques to carry out simple data mining task.	Application(Level K3) Analysis(Level K4)
CO4.	Develop Data mining algorithm to store heterogeneous data.	Synthesis(Level K5)
CO5.	To implement Data mining algorithm.	Application(Level K3)
Sub. Code:MUBCSS6		SBC-Soft Skills
CO1.	Describe the reading, writing, listening and communication skills.	Knowledge (Level K1)
CO2.	Discuss the reading, writing, listening and communication skills.	Comprehension (Level K2)
CO3.	Dramatize the day today activities with the help of soft skills.	Application (Level K3)
CO4.	Analyze and improve the skills for employability.	Analysis (Level K4)
CO5.	Analyze and improve the skills for employability.	Analysis (Level K4)
Sub. Code:MUBCN2		Web Designing
CO1.	Classify various HTML tags.	Comprehension (Level K2)
CO2.	Apply various HTML tags.	Applications(Level K3)
CO3.	Illustrate HTML tags in simple programs.	Applications(Level K3)
CO4.	Describe HTML tags in simple programs.	Analysis(Level K4)
CO5.	Design websites using HTML tag.	Synthesis(Level K5)