

Course	Course Outcomes	a	b	c	d	e	f	g
	CO 1: Explore the organization structures and systems approach to organization development.			H			H	
	CO 2: Interpret behavior and its various dimensions in the organization.	M			H			M
	CO 3: Classification of various organizational structures.	M						
	CO 4: Understanding the various ways of departmentalization based on organization functionalities.						M	
	CO 5: Analysis of organizational theories and conceptualize these with contemporary organizational designs.							
	CO 1: Perform operations on various discrete structures such as sets, functions, relations, and sequences.	H						
	CO 2: Ability to solve problems using Counting techniques, Permutation and Combination, Recursion and Generating functions.	H		H		H		
	CO 3: Apply algorithms and use of graphs and trees as tools to visualize and simplify Problems.	H		H		H		
	CO 3: Apply algorithms and use of graphs and trees as tools to visualize and simplify Problems.	H		H		H		
	CO 4: Use of K-Maps and Truth Tables to construct and verify correctness of a Boolean expression.	H		H		H		
	CO 5: Understand the various properties of algebraic systems like Rings, Monoids and Groups.	M				H		
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	CO 1: Explain the history of the internet and related internet concepts that are vital in understanding web development.	H	M			M		
	CO 2: Discuss the insights of internet programming and implement complete application over the web.	H	H			H		
	CO 3: Demonstrate the important HTML tags for designing static pages and separate design from content using Cascading Style sheet.	H	M			H		
	CO 4: Utilize the concepts of JavaScript and Java	H	H			H		
	CO 5: Use web application development software tools i.e. Ajax, PHP and XML etc. and identify the environments currently available on the market to design web sites.	H	H			H		
BTCS-602								
	CO 1: Define database system concepts and apply normalization to the database.	M	M			M		
	CO 2: Explain the basic processing and optimization techniques for high level query.	M						
	CO 3: Describe different transaction processing concepts and use different concurrency control techniques.	H	M			M		
	CO 4: Discuss different types of databases such as object oriented and distributed databases.	H	M			M		
	CO 5: Identify different types of database failures and techniques to recover from such failures.	H	H			H		
	CO 6: Discuss advanced database technologies and products used in enterprise.	H						
	CO 1: Comprehend the role and function of human resource management in industry			M	H		H	M

	CO 2: Describe how to strategically plan for the human resources needed to meet the organizational needs.			M	H			M
	CO 3: Understand various steps-recruitment, selection, training, development, maintenance and appraisal of human factor at work and their legal provisions.				H		M	H
	CO 4: Gain insight of concepts of job analysis and compensation function and their legal provisions.				H		H	M
	CO 5: Identify and explain the issues involved in establishing industrial relations, integration function and impact of legislation on human resource management practice.			M	H		H	H
	CO 1: To understand the basics of system programs like editors, compiler, assembler, linker, loader, interpreter and debugger.	H				H		
	CO 2: Describe the various concepts of assemblers and macro-processors.	H		L		H		
	CO 3: To understand the various phases of compiler and compare its working with assembler.	H		L		H		
	CO 4: To understand how linker and loader create an executable program from an object module created by assembler and compiler.	H	M	L		H		
	CO 5: To know various editors and debugging techniques.	H				H		
	CO 1: Understand the basics of operating systems like kernel, shell, types and views of operating systems.	H		M	M			
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	CO 2: Describe the various CPU scheduling algorithms and remove deadlocks.		H	M		H		
	CO 3: Explain various memory management techniques and concept of thrashing	M	H			M		
	CO 4: Use disk management and disk scheduling algorithms for better utilization of external memory.		H			M		
	CO 5: Recognize file system interface, protection and security mechanisms.						H	
	CO 6: Explain the various features of distributed OS like Unix, Linux, windows etc.			H	M			
	CO 1: Discuss the fundamental elements of discrete-event simulation including statistical models, random processes, random variates, and inputs to simulation	H	M	M		H		
	CO 2: Analyse a real world problem and apply modelling methodologies to develop a discrete-event simulation model	H	H	H		M		
	CO 3: Recognise the cost/benefits of computer simulation, the generation of meaningful results, decision making, and risks	M						
	CO 4: Interpret and contrast discrete-event techniques for implementing a solution to a simulation problem	H	H	M		H		
	CO 5: Compare and evaluate alternative system designs using sampling and regression				M			

	CO 1: Plan a software engineering process life cycle , including the specification, design, implementation, and testing of software systems that meet specification, performance, maintenance and quality requirements	M	H	H	H	H	M	H
	CO 2: Able to elicit, analyze and specify software requirements through a productive working relationship with various stakeholders of the project	H	M	H	H	M	H	H
	CO 3: Analyze and translate a specification into a design, and then realize that design practically, using an appropriate software engineering methodology.	M	H	H				
	CO 4: Know how to develop the code from the design and effectively apply relevant standards and perform testing, and quality management and practice				M	M		
	CO 5: Able to use modern engineering tools necessary for software project management, time management and software reuse.	H				M		
	CO 1: Demonstrate the installation process of various operating systems.	H	M	H	H	H		
	CO 2: Implement virtualization by installing Virtual Machine software.	M	M	M	H	M		
	CO 3: Apply UNIX/LINUX operating system commands.	H	H			M		
	CO 4: Understand different UNIX/LINUX shell scripts and execute various shell programs.	H	H	M	M	H		
	CO 1: Understand computer network basics, network architecture, TCP/IP and OSI reference models.					H		

	CO 2: Identify and understand various techniques and modes of transmission		H	M		H		
	CO 3: Describe data link protocols, multi-channel access protocols and IEEE 802 standards for LAN		H					
	CO 4: Describe routing and congestion in network layer with routing algorithms and classify IPV4 addressing scheme			H				
	CO 5: Discuss the elements and protocols of transport layer					M		
	CO 6: Understand network security and define various protocols such as FTP, HTTP, Telnet, DNS	H		M		H		
	CO 1: Ability to implement queuing model using C++	H	H	H		M		
	CO 2: Use network simulators to analyse various network parameters	M	M			M		H
	CO 3: Understand how to use MATLAB and its Functionality	H	H			H		
	CO 4: Use the concepts like branching statements, loops, functions and additional datatypes	H	H	M		M		
	CO 1: Recognize the problem domain.		H			M		H
	CO 2: Understand different techniques and methodologies available for knowledge acquisition.	M	H	M	L			H
	CO 3: Develop an expert system of moderate complexity in LISP or PROLOG.	H		H		L		
	CO 4: Have practical exposure to expert system shell, neural network and simulator.							
	CO 1: Design, implement, test, debug and document programs in C++.	H	H			H		
	CO 2: Develop programs to create symbol table for assembly and high level language program.	H	H			H		
	CO 3: Implement Single Pass Assembler.	H	H	M		H		

	CO 4: Explore features of debug command.	H				H		
	CO 5: Use of LEX and YACC Tools.	H	M			H		
	CO 1: Understand, analyze and apply the role of languages like HTML,DHTML,CSS,JavaScript and PHP.	H	H	H		H		
	CO 2: Analyze a web page and identify its elements and attributes.	H				M		
	CO 3: Create web pages using HTML,DHTML and Cascading Style Sheets.		H	H				
	CO 4: Create dynamic web pages using javascript, XML.		H	H				
	CO 5: Build web applications using PHP.		H	H				
	CO 1: Understand the theoretical base of the expert system and its development process.			H	M	H		
	CO 2: Differentiate between different knowledge representation techniques and describe methods of knowledge acquisition and extraction.	H				M		M
	CO 3: Describe various learning and planning techniques for different types of expert systems such as neural, fuzzy and real expert system.				H	M		
	CO 4: Develop expert systems using various available tools.	H	H	H		H		
	CO 5: Analyze the development process of expert system through various case studies.		H				M	
	CO 1: Identify and use various networking components			M	H	M		
	CO 2: Understand different transmission media and design cables for establishing a network		H	H		M		
	CO 3: Implement any topology using network devices	H	H	H		H		
	CO 4: Understand the TCP/IP configuration for Windows and Linux							

	CO 5: Implement device sharing on network	M		H		H		
	CO 6: Learn the major software and hardware technologies used on computer networks						M	
	CO 1: Understand the basic concepts of formal languages, automata and grammar types, as well as the use of formal languages and reduction in normal forms	H				M		
	CO 2: Demonstrate the relation between regular expressions, automata, languages and grammar with formal mathematical methods	H				H		
	CO 3: Design push down automata, cellular automata and turing machines performing tasks of moderate complexity	H	H	H		H		
	CO 4: Analyze the syntax and formal properties, parsing of various grammars such as LL(k) and LR(k)		M	H				
	CO 5: Describe the rewriting systems and derivation languages	M				H		
	CO 2: Able to prepare SRS document, design document, test cases and software configuration management and risk management related document.	H	H	H	H	H	M	H
	CO 3: Develop function oriented and object oriented software design using tools like rationalrose.	H		H	H		H	
	CO 4: Able to perform unit testing and integration testing.	H	H		H	M		
	CO 5: Apply various white box and black box testing techniques	H	H		H	M		
	CO 1: Able to track the progress of a project using Openproj tool.	H	M	H				
	CO 2:	H	H	H	H	H	M	H
	CO 1: Understand the normalisation of databases through various case studies	H	H			H		

	CO 2: Use of query optimization techniques, backup and recovery features of database management software	H	M			H		
	CO 3: Create a new database and administer the database management software	H	H	M		H		
	CO 4: Develop different web databases and object oriented database management system	H	H	M				
	CO 5: Describe the usage of data mining tools	H	H			M		
	CO 1: Conceptualize the processes and various factors involved in the formation of environment.							
	CO 2: Recognize the importance of environment and the sustainable of natural resources.						H	
	CO 3: Analyze interaction between social and environmental processes.						M	
	CO 4: Use scientific reasoning to identify and understand environment problems and evaluate potential solutions.						M	
	CO 5: Visualize the impacts of human activities on environment and role of society in these impacts.							
	CO 6: Recall critically about their role as citizens, consumers and environmental actors in a and inter connected world							
	CO 1: Define fuzzy neural network based expert systems and represent the world knowledge using syntax of Propositional Logic and First Order Predicate Logic	H		H				
	CO 2: Interpret the logical consequences and validity of formulae using the rules of propositional and predicate logic		H	H		H		

	CO 3: Assess the completeness of Resolution Procedure, Soundness and completeness of Linear Resolution, Unification and Selective Linear Definite Resolution.		H			H		
	CO 4: Demonstrate Logic Programming Paradigm, Prolog execution models, Prolog's basic and advanced prolog concepts such as LIST, CUT, and Fail using illustrative programming examples.	H			H			
	CO 5: Convert world knowledge into FOPL formula and construct well-crafted prolog programmes of moderate size and sophistication to solve real life problems using efficient and good programming techniques.	H	H	M		H	H	
	CO 1: Understand the taxonomy of microprocessors and knowledge of contemporary microprocessors.	H	H			H		
	CO 2: Describe the architecture, bus structure and memory organization of 8085 as well as higher order microprocessors.	L	M					
	CO 3: Explore techniques for interfacing I/O devices to the microprocessor 8085 including several specific standard I/O devices such as 8251 and 8255.	M	H			M		
	CO 4: Demonstrate programming using the various addressing modes and instruction set of 8085 microprocessor	H	H					H
	CO 5: Design structured, well commented , understandable assembly language programs to provide solutions to real world control problems	H	H	H		M		
	CO 1: Solve differential equations of first order	H				M		
	CO 2: Explain the concepts of linear differential equations of second and higher order	H				M		

	CO 3: Analyze various applications of ordinary differential equations	H	M	M		M		
	CO 4: Solve problems based on linear algebra	H				M		
	CO 5: Explain the concepts of infinite series	H				M		
	CO 6: Solve problems based on complex numbers	H				H		
	CO 1: Correlate the impurities with hardness, chloride content and alkalinity of water.	H				H		
	CO 2: Be able to select a lubricant for a particular type of a machine and analyze the importance of temperature for viscosity.	H				H		
	CO 3: Be able to handle sophisticated instruments, to interpret the results to calculate other parameters.	H	H			H		
	CO 4: Understand advantages of chromatography.	H				H		
	CO 5: Know to maintain different reaction conditions to get maximum yield.	H	H	H		H		
	CO 1: Identify the structure of any unknown compound with the help of spectroscopy.	H	M			M		
	CO 2: Understand why different reactions give different quantum efficiency.	H				M		
	CO 3: Differentiate between hard and soft water and understand the disadvantages of using hard water.	H	M			M		
	CO 4: Know the principles of green chemistry and apply the concept of green chemistry so as to reduce pollution	H		M		M		
	CO 5: Comment on design of a metallic part which shows resistance to corrosion.	H	M			M		
	CO 6: select a polymer by considering the requirement	H				M		
	CO 7: Identify a nanosystem, understand applications of nanomaterials.	H						

	CO 8: Differentiate between crude oil and natural gas.	H						
	CO 1: Describe the elemental building blocks of a general purpose digital computer system like CPU, peripheral devices, primary and secondary memory, system and application software.	H		M		M		
	CO 2: Understand the program development life cycle using various tools like Flowcharts, Algorithms and Pseudo - code			M		M		
	CO 3: Classify Operators, expressions, character set, data types and control structures	H	H					
	CO 4: Understand the concept of modular programming and code reusability using library functions	H	H	H		M		
	CO 5: Write programs using Object Oriented concepts like Classes and Objects, file handling	H	H	H				
	CO 1: Get knowledge of Computer System, Window explorer, Control panel and Command prompt	H		M		M		
	CO 2: Work on Microsoft Word, Excel, PowerPoint and Mail Merging	H	M	M		M		
	CO 3: Use concepts of C++ types, basic terminologies, operators, expressions, control structures	M	M					
	CO 4: Implement programs using functions, arrays and strings	M	H	H		M		
	CO 5: Understand the concept of OOP's, use of classes and objects and basics of file handling	H	H	H		M		M
	CO 1: Knowledge of fundamental principles of thermodynamics, processes, their properties and applications.	H	M		M			
	CO 2: An ability to understand and solve mechanical and mathematical problems/equations using laws of thermodynamics.	H	H		M			L
	CO 3: Students will be able to understand about different power cycles and engines.	M	H		M			L

	CO 4: Conceptual understanding of different engineering materials, selection of materials and their properties.	H	L		L			M
	CO 5: Students will be able to understand fundamentals about centroid, centre of gravity and moment of inertia and use these principles to solve mathematical problems.	M	H		L			M
	CO 1: Conceptualize the processes and various factors involved in the formation of environment.							
	CO 2: Recognize the importance of environment and the sustainable of natural resources						H	
	CO 3: Analyze interaction between social and environmental processes						M	
	CO 4: Use scientific reasoning to identify and understand environment problems and evaluate potential solutions						M	
	CO 5: Visualize the impacts of human activities on environment and role of society in these impacts							
	CO 6: Recall critically about their role as citizens, consumers and environmental actors in a and inter connected world							
	CO 1: Apply truth functional propositional Logic(PL) and first order predicate logic (FOPL) to world knowledge	H	H			H		H
	CO 2: Develop structured prolog programmes for various tasks of moderate complexity and requirements	H	H		H	H		H
	CO 3: Demonstrate improvement in efficiency of prolog programs using good programming techniques	H	H		H	H	H	

	CO 4: Describe the basic predicates to manipulate list data structure and sorting algorithms using prolog programming	H	H		H	H	H	H
	CO 1: Solve basic binary math operations using the instructions of microprocessor 8085.	H	H			H		
	CO 2: Apply programming knowledge using the capabilities of the stack, the program counter		H			H		
	CO 3: Design, code and debugs Assembly Language programs to implement simple programs	H	H			H		
	CO 4: Execute a machine code program on the training boards.		H			H		
	CO 1: Understand the concept of Dynamic memory management, data types, algorithms, Big O notation	M		H				
	CO 2: Understand basic data structures such as arrays, linked lists, stacks and queues	H						
	CO 3: Describe the hash function and concepts of collision and its resolution methods	H				M		
	CO 4: Solve problem involving graphs, trees and heaps	H		H		H		
	CO 5: Apply Algorithm for solving problems like sorting, searching, insertion and deletion of data		H	H	M	H		
	CO 1: Describe the procedural and object oriented paradigm with concepts of streams, classes, functions, data and objects.	H		M				
	CO 2: Understand dynamic memory management techniques using pointers, constructors, destructors, etc	M	H					
	CO 3: Describe the concept of function overloading, operator overloading, virtual functions and polymorphism.	M	H					
	CO 4: Classify inheritance with the understanding of early and late binding, usage of exception handling, generic programming.	M		M		H		M

	CO 5: Demonstrate the use of various OOPs concepts with the help of programs.	H	H	M	H	H		
	CO 1: Apply the principles of number system, binary codes and Boolean algebra to minimize logic expressions	H		M				
	CO 2: Develop K-maps to minimize and optimize logic functions up to 5 variables	H	H	H		H		
	CO 3: Acquire knowledge about various logic gates and logic families and analyze basic circuits of these families	H	M			H		
	CO 4: Design various combinational and sequential circuits such as encoders , decoders and counters using multiplexers, and flip - flops	H	H	M		H		
	CO 5: Describe and compare various memory systems, shift registers and analog to digital and digital to analog conversion circuits	H	H	H		H		
	CO 1: Implement basic data structures such as arrays and linked list.		H	H				
	CO 3: Programs to demonstrate fundamental algorithmic problems including Tree Traversals, Graph traversals, and shortest paths.		H	H				
	CO 4: Implement various searching and sorting algorithms.	M	H	H		M		
	CO 2: Programs to demonstrate the implementation of various operations on stack and queue.		H	H		M		
	CO 1: Develop solutions for a range of problems using objects and classes.	H	H	H		H		
	CO 2: Programs to demonstrate the implementation of constructors, destructors and operator overloading.	H	H					

	CO 3: Apply fundamental algorithmic problems including type casting, inheritance, polymorphism.	H	H					
	CO 4: Understand generic programming, templates, file handling.	H				M		
	CO 1: Describe DBMS architecture, physical and logical database designs, database modeling, relational, hierarchical and network models.	H	H	H				
	CO 2: Identify basic database storage structures and access techniques such as file organizations, indexing methods including B-tree, and hashing.	H		M		M		
	CO 3: Learn and apply Structured query language (SQL) for database definition and database manipulation.	H	H	H	M	H		
	CO 4: Demonstrate an understanding of normalization theory and apply such knowledge to the normalization of a database.	M	H	H				
	CO 5: Understand various transaction processing, concurrency control mechanisms and database protection mechanisms.	M		H		H		
	CO 1: Understand basics of different computer peripherals and interfaces.	H				H		
	CO 2: Describe architecture of various computer hardware devices and their functioning.	H		M		H		
	CO 3: Study the details of system buses, memory system, and I/O interfaces.	H		M		H		
	CO 4: Identify the existing configuration of the computers and peripherals.	H		M		H		
	CO 5: Analyze progress in contemporary peripherals and bus systems.	H		M		H		

	CO 1: study of logic gates and realization of OR,AND,NOT AND XOR Functions using universal gates	H	H	H		H		
	CO 2: Design and implement combinational circuits like half adder/full adder,half subtractor/full subtractor,code converters,comparators,MUX/DEMUX	H	H	H		H		
	CO 3: Design and implement sequential circuits like flip-flops,counters and shift registers	H	H	H		H		
	CO 4: study of 8-bit DAC and 8-bit ADC	H						
	CO 1: Define the basic concepts of algorithms and analyze the performance of algorithms.	H	M					
	CO 2: Discuss various algorithm design techniques for developing algorithms.	H		H		H		
	CO 3: Discuss various searching, sorting and graph traversal algorithms.	H	M	H		H		
	CO 4: Understand NP completeness and identify different NP complete problems.	H				H		
	CO 5: Discuss various advanced topics on algorithms.	H	M	H		H		
	CO 1: understand the basics of computer graphics, different graphics systems and applications of computer graphics.	H	M		M			
	CO 2: Discuss various algorithms for scan conversion and filling of basic objects and their comparative analysis.	H	H			H		
	CO 3: Use of geometric transformations on graphics objects and their application in composite form.	H	H			H		
	CO 4: Extract scene with different clipping methods and its transformation to graphics display device.	H	H			H		

	CO 5: Explore projections and visible surface detection techniques for display of 3D scene on 2D screen.	H	H			H		
	CO 6: Render projected objects to naturalize the scene in 2D view and use of illumination models for this.	H	M			H		
	CO 1: Understand the basic concepts of computer graphics.	H	H	M	H	H		
	CO 2: design scan conversion problems using C++ programming.	H	H	M	H	H		
	CO 3: apply clipping and filling techniques for modifying an object.	H	M	M	H	H		
	CO 4: Understand the concepts of different type of geometric transformation of objects in 2D and 3D.	H	H	M	H	H		
	CO 5: Understand the practical implementation of modeling, rendering, viewing of objects in 2D.	H	H	M	H	H		
	CO 0: State the fundamentals related to network security and basics of IPv6 and IPsec.	H						
	CO 1: State the fundamentals related to network security and basics of IPv6 and IPsec.		M		L	L		M
	CO 2: CO2 Explain various protocols related to internet key exchange.	M	L					M
	CO 3: Study Adhoc network and its protocols.		H	M				L
	CO 4: Define various examples of wireless communication system, standards related to 2G and 3G wireless networks.							H
	CO 5: Design wireless mobile network according to parameters such as frequency reuse, handoff strategies and system capacity.	H	L	H	M			L
	CO 1: Implement Basic DDL, DML and DCL commands	M	H			H		

	CO 2: Understand Data selection and operators used in queries and restrict data retrieval and control the display order	M	H	H				
	CO 3: Write sub queries and understand their purpose	M	H					
	CO 4: Use Aggregate and group functions to summarize data	H	H	H				
	CO 5: Join multiple tables using different types of joins		H	H				
	CO 6: Understand the PL/SQL architecture and write PL/SQL code for procedures, triggers, cursors, exception handling etc..	H	H	H				
	CO 1: Develop function as a series of constants times sine and cosine functions.	H	M			M		
	CO 2: Solve ordinary differential equations using Laplace transforms.	H				H		
	CO 3: Explain special functions and their utility.	H				M		
	CO 4: Solve Linear Homogeneous Partial differential equations.	H				H		
	CO 5: Analyze various applications of Partial differential equations.	H	M			M		
	CO 6: Apply concepts of Functions of complex variables, their derivatives and integrals.	H				H		
	CO 1: Compete effectively in the job market being equipped with the requisite knowledge, skills, attitudes and practical experience.	H	M	H	H	H	H	H
	CO 2: Adapt readily to the real life work environment and practice the right work attitude.				H	H	H	H
	CO 3: Apply the knowledge acquired to solve the industrial problems in various phases of project development life cycle, gain new skills and master in particular technical area of interest.	H	M	H	H	H	H	H
	CO 4: Able to present a proper report, both orally and in writing on their work experience.		H	H	M	H		H

	CO 1: Explain the various computing paradigms and their characteristics.	H						
	CO 2: Discuss the insights of cloud computing and its features.							
	CO 3: Explain the various cloud service delivery models and cloud deployment models.		M					
	CO 4: Understand cloud security model and steps to reduce cloud security breaches.		M					
	CO 5: Compare and contrast various cloud computing platforms.							
	CO 1: Discuss the appropriateness of system models and processes and their suitability for different types of development projects.			H		H		
	CO 2: Plan and evaluate a project to develop the scope of work, provide accurate cost estimates and to plan the various activities and processes through managing people, communications and change.			H				
	CO 3: Understand the effect of different management and development practices on software and process quality.			H		H		
	CO 4: Describe and apply techniques for tracking the progress and status of a project and testing the project.			H				
	CO 5: Understand and follow the stages needed to negotiate an appropriate contract.						H	
	CO 1: Understand the basic concepts of strings, formal languages, automata and grammar types, as well as the use of formal languages and reduction in Normal forms	H				M		

	CO 2: Demonstrate the relation between regular expressions, automata, languages and grammar with formal mathematical methods	H				H		
	CO 3: Design push down automata, turing machines and their variations, performing tasks of moderate complexity	H	H	H		H		
	CO 4: Analyze the syntax and formal properties, parsing of various grammars such as context free grammar, LL(k) and LR(k)		M	H				
	CO 5: Understand ambiguity, decidability and recursively enumerable languages	M				H		
	CO 1: Study of propositional and predicate logic	M				M		
	CO 2: Understand the basic concepts of prolog and its execution strategy					H		
	CO 3: Design the knowledge base including facts and rules in prolog for various artificial intelligence problems	H	M					
	CO 4: Implement games and other real life problems in prolog	H	H					
	CO 1: Understand the problem types and implement search strategies to solve the problem.	H				H		
	CO 2: represent knowledge using propositional logic and first order predicate logic and apply logical reasoning techniques.	H				H		
	CO 3: Explain and use different planning techniques.	H			H	H		M
	CO 4: Understand and Apply various uncertainty and decision making techniques	H	H	H				
	CO 5: Describe how an artificial intelligent system develop learning and communication capabilities.		H					H
	CO 2: Explain the organisation of basic computer , its design and the design of control unit.	H	H	M	H	H		

	CO 3: Demonstrate the working of central processing unit and RISC and CISC Architecture.	H	H	H		H		
	CO 1: Describe the operations and language of the register transfer, microoperations and input- output organisation.	H	M	M		H		
	CO 4: understand the organisation of memory and memory management hardware.	H	H	H				
	CO 5: Elaborate advanced concepts of computer architecture, Parallel Processing, interprocessor communication and synchronisation	H	M	M		H		
	CO 1: Identify the industry in the desired field of interest related to Computer Science & Engineering.				M		M	
	CO 2: Identify the problem domain and design a system, component or process to meet desired needs while considering realistic constraints.	M	H	H	M	H	M	
	CO 3: Able to logically analyze a problem and model it as a computing system working in teams	M		M	M	H	M	M
	CO 4: Demonstrate the ability to communicate effectively the work done by means of documentation and report writing	H	H	H	H	H	M	H
	CO 1: Analyze, understand and manage critical financial situations	M			H	M		
	CO 2: Evaluate the economic potential of investment.	M			H			
	CO 3: Understand the various parameters like resource availability, depreciation, cost accounting etc and analyze project economic feasibility	M		M	H	M		
	CO 4: Understand the importance of HRM in industry			M	H		H	H
	CO 5: Comprehend procurement process and analyze the proper utilization of human resources.	M			H		H	H

	CO 6: Examine the importance of job satisfaction as well as integration and maintenance function.			M	H		M	M
	CO 1: Identify the problem given and design the algorithm using various algorithm design techniques.	H	M	M		H		
	CO 2: Implement various algorithms in a high level language.	H	H	H		H		
	CO 3: Analyze the performance of various algorithms.	H	H					
	CO 4: Compare the performance of different algorithms for same problem.	H	H					
	CO 1: Configure a LAN based on IPv4 address scheme and understand and implement IPv6 address scheme for a LAN.		H					
	CO 2: Configure and simulate any scenario of an Adhoc network and analyze various parameters related with their study.							H
	CO 3: Devise and design a system to capture and analyze the incoming traffic using packet capturing software package		M	M	M			
	CO 4: Configure WLL,PAN's,WLANS and wireless access points			M				M