LORDS INSTITUTE OF ENGINEERING & TECHNOLOGY
Department of Information Technology

Course Outcomes

Academic Year – 2023-2024   **Semester: IV (A)**

Student will be able to

CO. No.	Description
Course Outcomes: C42- Discrete Mathematics(U21CM401)	
C41.1	Distinguish between Propositional logic, deriving valid proofs of inference and checking the validity of inference.
C41.2	Illustrate operations on sets, relations, functions and algebraic structures.
C41.3	Demonstrate basics of counting, principles of permutations, combinations, applying inclusion /exclusion principle and pigeonhole methodology in solving counting problems.
C41.4	Writing generating functions and recurrence relations and apply the techniques for solving recurrence relations.
C41.5	Transform a problem in computer science and engineering as a graph and solve it efficiently using concepts of graph theory.
CO. No.	**Description**
Course Outcomes: C42 – Computer Organization and Microprocessor(U21IT401)	
C42.1	Describe the basic structure of computers and input - output organization
C42.2	Evaluate the performance of memories based on various parameters.
C42.3	Discuss the architecture, the instruction set and addressing modes of 8085 processor and write assembly language programs using 8085 instructions.
C42.4	Analyze the operation of Stacks, Subroutine, Interrupts of 8085 by using interfacing peripherals.
C42.5	Design the applications of interfacing circuits 8254/8253timer, A/D and D/A converter, Keyboard/Display controller with 8085 microprocessors.
CO. No.	**Description**
Course Outcomes: C43 – DatabaseManagementSystems(U21IT402)	
C43.1	Demonstrate ER models to represent simple database application scenarios and construct database queries using SQL
C43.2	Write Database queries using relational algebra and Calculus
C43.3	Recognize and identify the use of normalization and functional dependency in database design
C43.4	Apply the concept of database transaction and related concurrent recovery facilities
C43.5	Apply and relate how to evaluate a set of queries in query Processing
CO. No.	**Description**
Course Outcomes: C44 – Operating Systems(U21IT403)	
C44.1	Summarize the concepts and functions of operating systems
C44.2	Evaluate and compare the performance of CPU scheduling algorithms.
C44.3	Describe deadlock prevention and avoidance algorithms.
C44.4	Compare and contrast memory management strategies
C44.5	Demonstrate the functionality of Operating System and Perform administrative tasks on Linux severs

CO. No.	Description
Course Outcomes: C45 – Java Programming(U21CS402)	
C45.1	Describe the basics of OOP concepts and java programming.
C45.2	Implement the concept of interfaces and exceptional handling, how to solve real world problems.
C45.3	Create java applications by utilizing multi- threading and analyse collection framework classes.
C45.4	Design GUI applications using AWT and JDBC Connectivity.
C45.5	Explore Swing and apply the concept of servlets to solve programming problems.

CO. No.	Description
Course Outcomes: C46 – Microprocessor Lab(U21IT4L1)	
C46.1	Apply different addressing modes & model programs using 8085 Instruction set
C46.2	Develop logic building through programs
C46.3	Implement sorting Algorithms using 8085 processor
C46.4	Develop interfacing applications using 8085 processor
C46.5	Use the 8085 simulator tools on LCD display, DAC, ADC, peripheral devices.

CO. No.	Description
Course Outcomes: C47 – Database Management Systems Lab(U21IT4L2)	
C47.1	Design database schema for a given application and apply normalization
C47.2	Use SQL commands for data definition and data manipulation
C47.3	Demonstrate creation and usage of Views and Stored Procedures using SQL
C47.4	Develop solutions for database applications using procedures, cursors and triggers
C47.5	Design and built a simple database system demonstrate competence with the fundamental tasks involved with modelling, designing, and implementing a DBMS.

CO. No.	Description
Course Outcomes: C48 – Operating Systems Lab(U21IT4L3)	
C48.1	Execute UNIX commands and work with shell programming
C48.2	Analyze the operating system algorithms
C48.3	Implementing CPU scheduling algorithms
C48.4	Work with memory management and implement Page Replacement Algorithm
C48.5	Implement deadlock handling mechanism

CO. No.	Description
Course Outcomes: C49 – Java Programming Lab(U21CS4L1)	
C49.1	Develop Java applications using the concepts of Inheritance, interfaces, packages, access control specifier.
C49.2	Implement the concepts of Exception Handling in java Applications.
C49.3	Read and write data using different Java I/O streams.
C49.4	Create graphical user interfaces and Applets by applying the knowledge of Event Handling.
C49.5	Apply the knowledge of Event Handling.

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CO. No.	Description
Course Outcomes:C61 – Artificial Intelligence(U21IT601)	
C61.1	Identify problems that are amenable to solution using State space search algorithms
C61.2	Implement and analyse working of an AI technique using Heuristic search
C61.3	Demonstrate and design the Bayesian Networks
C61.4	Implement the concepts of Markov Decision process.
C61.5	Apply the program and Reinforcement Learning

CO. No.	Description
Course Outcomes:C62 – Computer Networks(U21IT602)	
C62.1	Explain the function of each layer of OSI and trace the flow of information from one Node to another node in the network
C62.2	Familiarize with the Transmission Media, Flow Control, Error Detection and Correction
C62.3	Describe the principles of IP addressing and internet routing
C62.4	Implement client-server socket-based network application.
C62.5	Describe the working of DNS, mail, file transfer and www. networking applications

CO. No.	Description
Course Outcomes: C63 – Machine Learning(U21CD601)	
C63.1	Describe machine learning algorithms, Baye's and optimal classifier.
C63.2	Construct Decision Tree using classification & regression models with multilayer perceptron (MLP).
C63.3	Enumerate clustering in large databases and implements the different graphical models.
C63.4	Implement various genetic algorithms, and analyse dimensionality reduction.
C63.5	Explain reinforcement learning, and its implementation using dynamic programming.

CO. No.	Description
Course Outcomes: C64 – Software Testing Methodologies (U21IT606)	
C64.1	Describe the basic knowledge of Testing.
C64.2	Use the knowledge of White Box Testing methods
C64.3	Test an application using Functional Testing.
C64.4	Use Object Oriented Testing and Millennium Testing methods
C64.5	Solve software complexities with best practices.

CO. No.	Description
Course Outcomes:C65 –Road Safety Engineering(U21CE609)	
C65.1	Describe the fundamentals of traffic safety analysis
C65.2	Analyze accident data
C65.3	Explain the concept of road safety in Urban Transport
C65.4	Apply crash reduction techniques
C65.5	Design of urban infrastructure considering safety aspects

CO. No.	Description
Course Outcomes:C66 – Artificial Intelligence Lab(U21IT6L1)	
C66.1	Develop solutions for informed and uninformed search problems in AI
C66.2	Apply reasoning in first order logic using Prolog
C66.3	Apply python libraries to synthesize information and develop supervised learning models.
C66.4	Develop a case study in multidisciplinary area to demonstrate the use of AI.
C66.5	Analyze and develop real time applications by using AI tools.

CO. No.	Description
Course Outcomes:C67– Computer Networks Lab(PC652IT)	
C67.1	Demonstrate the usage of basic commands ipconig, ifconfig, netstat, ping, arp, telnet, ftp, finger and trace route of LINUX platform
C67.2	Develop and Implement Client-Server Socket based programs using TCP, and UDP sockets
C67.3	Create a client server communication through TCP and UDP protocols.
C67.4	Use advanced socket programming in LINUX environment.
C67.5	Use transport layer protocols, connection oriented & connectionless models.

CO. No.	Description
Course Outcomes:C68-Machine Learning Lab(U21IT6L2)	
C68.1	Implement the procedures for the machine learning algorithms.
C68.2	Apply appropriate data sets to build Artificial Neural Network using Machine Learning algorithms
C68.3	Design Java and Python programs for Machine Learning algorithms.
C68.4	Analyze appropriate data sets to implement Bayesien's network and K- Means Algorithms.
C68.5	Identify and apply Machine Learning algorithms to solve real world problems.

CO. No.	Description
Course Outcomes:C69-Mini Project-I(PW654IT)	
C69.1	Formulate a specific problem and give solution.
C69.2	Develop model(s) either theoretical, practical and numerical form
C69.3	Solve, interpret and correlate the results and discussions.
C69.4	Conclude the results obtained
C69.5	Write the documentation in standard format

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CO. No.	Description
Course Outcomes:C81 – Information Security(PE852IT)	
C81.1	Describe the steps in Security Systems development life cycle (Sec SDLC)
C81.2	Demonstrate the common threats, legal and ethical issues.
C81.3	Identify security and risk management for business needs & use of security frameworks in preparing security blue print for the organization.
C81.4	Implementation of reactive solutions, firewalls, software, and Intrusion Detection techniques.
C81.5	Employ ethical hacking tools and secure communication protocols, and address both the technical and non-technical security aspects.
CO. No.	Description
Course Outcomes:C82 – Road Safety Engineering(OE 801 CE)	
C82.1	Articulate the fundamentals of traffic safety analysis
C82.2	Analyse accident data
C82.3	Remember the concepts of road safety in urban transport
C82.4	Apply crash reduction techniques
C82.5	Design of urban Infrastructure considering safety aspects
CO. No.	Description
Course Outcomes: C83 – Project Work-II	
C83.1	Acquire practical knowledge in spite of theoretical concepts he/she acquired.
C83.2	Recognize uncertainty of open-ended investigations like technical problems and difficulties in collecting the required data.
C83.3	Asses different tools /software's and protocols which he used in the project.
C83.4	Simulate their Software results and dump into hardware for testing.
C83.5	Prepare the Documentation Report and perform the Presentation of the Project Work.