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| **Sl. No** | **Syllabus** | **Curriculum** | **Deployment Strategy and**  **Tool** | **Cross-cutting issues**  **integrated** | **PO, PSO and CO** | **Attainment Verification** |
| 1. | DATA STRUCTURES AND APPLICATIONS | * To introduce the fundamental concept of data structures and to emphasize the importance of data structures in developing and implementing efficient algorithms. In addition, another objective of the course is to develop effective software engineering practice, emphasizing such principles as decomposition, procedural abstraction, and software reuse. * Data structures are used to implement printer spoolers so that jobs can be printed in the order of their arrival. To implement back functionality in the internet browser. To store the possible moves in a chess game. To store a set of ﬁxed key words which are referenced very frequently * They are essential components in creating fast and powerful algorithms. They help to manage and organize data so that it will make our code cleaner and easier to understand. Data structures can make the difference between an Okay product and an outstanding | 1. Chalk and   Talk method   1. PPT | * Business   Ethics   * Human   values | PO1:Engineering Knowledge  PO2:Problem Analysis  PO3:Design/Development Of Solutions  PO4:Conduct Investigations Of Complex Problems  PO5:Modern Tool Usage |  |
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|  |  | PSO1:Professional Skills  PSO2:Problem Solving Skill |
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|  |  | CO1:Apply different types of data structures, operation and algorithms for searching, sorting and pattern matching for the given problems.  CO2:Illustrate the operations of stack and queues and Implement the algorithms for stack and queue applications.  CO3:Distinguish between SLL, DLL and CLL by its operations and Implement algorithms for its applications such as polynomials and sparse matrix.  CO4:Illustrate the operations of trees and Implement the algorithms for the given problems using binary trees.  CO5:Implement the algorithms for searching, sorting and file manipulation operations in different applications. |
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