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| Sl. No | Syllabus | Curriculum | Deployment Strategy and  Tool | Cross-cutting issues  integrated | PO, PSO and CO | Attainments | 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:Explain the basics of Data Structure, its classification, operations & its Representation / allocation in memory, arrays ,String operations and implement them with example programs |  |
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|  |  | CO2: Explain Stack, Queue and recursion operations & their applications and implement them with example programs |  |
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|  |  | CO3:  Explain different types of Linked List with their operations, and implement them with example programs |  |
|  |  | CO4: Explain Binary Tree representations, Properties, its types, and Operations and implement them with example programs  CO5:  Explain and Analyse the Graphs, Searching, Sorting hashing, and file organizations and implement them with example programs |  |
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