| | Topics For End Semester Examination | Mark Division (Tentative) |
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| 1 | Introduction to Algorithms | |
| 2 | Pseudocode conventions | |
| 3 | Linear search | |
| 4 | Binary Search | |
| 5 | Correctness proof of simple algorithms | 15 Marks |
| 6 | Insertion sort, Selection sort - Algorithms, | 13 Marks |
| 7 | Divide and Conquer Paradigm | |
| 8 | Merge Sort & Quick Sort | |
| 9 | Heap Sort, Priority Queue and its applications | |
| 10 | Asymptotic notations | |
| 11 | Analysis of Algorithms.,recurrence | |
| 12 | Linked Lists | |
| 13 | Stack | |
| 14 | Queue | |
| 15 | Binary Tree : Inorder, Preorder and Postorder Traversals | 25 Marks |
| 16 | Infix, Postfix and Prefix expression and Conversions | |
| 17 | Expression Tree | |
| 18 | Expression evaluation | |
| 19 | Binary Search Tree and its operations | |
| 20 | Memory Management | |
| 21 | Garbage collection algorithms | |
| 22 | Storage allocation for objects | 10 Marks |
| 23 | Buddy systems | |
| 24 | Storage compaction | |