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| --- | --- | --- | --- | --- | --- |
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| 1. | Provide details for the platform, language and operating system used for the practical. | 1-4 | 11/08/22 | 18/08/22 |  |
| 2. | Sorting Algorithms:  2.1. Quick Sort  2.2. Bubble Sort  2.3 Insertion Sort  2.4 Heap Sort  2.5 Merge Sort  2.6 Counting Sort  2.7 Selection Sort  2.8 Compare all the sorting algorithms on the basis of their time complexity. | 5-23  5-6  7-9  10-11  12-14  15-17  18-20  21-22  23 | |  | | --- | | 11/08/22 | | 18/08/22 | | 18/08/22 | | 18/08/22 | | 25/08/22 | | 25/08/22 | | 01/09/22 | | 01/09/22 | | |  | | --- | | 18/08/22 | | 25/08/22 | | 25/08/22 | | 25/08/22 | | 01/09/22 | | 01/09/22 | | 08/09/22 | | 08/09/22 | |  |
| 3. | Searching Algorithms:  3.1 Binary Search  3.2 Linear Search | 24-27  24-25  26-27 | |  | | --- | | 08/09/22 | | 08/09/22 | | |  | | --- | | 15/09/22 | | 15/09/22 | |  |
| 4. | Greedy Technique:  4.1 Fractional knapsack  4.2 Huffman encoding  4.3 Prim’s Algorithm  4.4 Kruskal’s Algorithm  4.5 Dijkstra’s Algorithm  4.6 Belman Ford Algorithm | 28-40  28-29  30-31  32-33  34-35  36-37  38-40 | |  | | --- | | 15/09/22 | | 15/09/22 | | 22/09/22 | | 22/09/22 | | 13/10/22 | | 13/10/22 | | |  | | --- | | 22/09/22 | | 22/09/22 | | 13/10/22 | | 13/10/22 | | 20/10/22 | | 20/10/22 | |  |
| 5. | Dynamic Programming:  5.1 0/1 Knapsack  5.2 Travelling salesman  5.3 Sum of subsets  5.5 Transitive closure  5.6 Floyd Warshall’s Algorithm | 41-51  41-42  43-44  45-47  48-49  50-51 | |  | | --- | | 20/10/22 | | 20/10/22 | | 27/10/22 | | 27/10/22 | | 03/11/22 | | 03/11/22 | | |  | | --- | | 27/10/22 | | 27/10/22 | | 03/11/22 | | 03/11/22 | | 10/11/22 | | 10/11/22 | |  |
| 6. | Backtracking:  6.1 BFS  6.2 DFS  6.3 N-Queen | 52-59  52-54  55-56  57-59 | |  | | --- | | 10/11/22 | | 10/11/22 | | 17/11/22 | | |  | | --- | | 17/11/22 | | 17/11/22 | | 24/11/22 | |  |

**DESIGN AND ANALYSIS OF ALGORITHM**

**(PRACTICAL FILE)**



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**BE IT, 5th Semester**

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