

Lecture Plan : SEM IV- AOA-CSC402

| No. | Portion to be covered | Planned date | Actual date | Content Delivery -Reference /Assessment Method |
|-----|---|--------------|-------------|---|
| 1 | Performance analysis, space, and time complexity Growth of function, Big-Oh, Omega | 9-1-23 | 9-1-23 | PPT , Black Board |
| 2 | Performance analysis, space, and time complexity Growth of function, Big-Oh, Omega | 10-1-23 | 10-1-23 | PPT , Black Board |
| 3 | Complexity class: Definition of P, NP, NP-Hard | 11-1-23 | 11-1-23 | PPT , Black Board |
| 4 | NP-Complete Analysis of selection sort, | 16-1-23 | 16-1-23 | PPT , Black Board |
| 5 | Analysis of insertion sort | 17-1-23 | 17-1-23 | PPT , Black Board |
| 6 | Recursion tree method, Master method | 18-1-23 | 18-1-23 | PPT , Black Board |
| 7 | Recursion tree method, Master method | 23-1-23 | 23-1-23 | PPT , Black Board |
| 8 | Recursion tree method, Master method | 24-1-23 | 24-1-23 | PPT , Black Board |
| 9 | General method, Merge sort, Quick sort | 25-1-23 | 25-1-23 | PPT , Black Board |
| 10 | Finding minimum and maximum algorithms | 30-1-23 | 30-1-23 | PPT , Black Board |
| 11 | Finding minimum and maximum algorithms and their Analysis | 31-1-23 | 31-1-23 | PPT , Black Board |
| 12 | Analysis of Binary search. | 1-2-23 | 1-2-23 | PPT , Black Board |
| 13 | Analysis of Binary search. | 6-2-23 | 6-2-23 | PPT , Black Board |
| 14 | General Method | 7-2-23 | 7-2-23 | PPT , Black Board |
| 15 | Single source shortest path: Dijkstra Algorithm | 8-2-23 | 8-2-23 | PPT , Black Board |
| 16 | Fractional Knapsack problem | 13-2-23 | 13-2-23 | PPT , Black Board |
| 17 | Job sequencing with deadlines, | 14-2-23 | 14-2-23 | PPT , Black Board |

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| 18 | Minimum cost spanning trees: Kruskal and Prim's algorithms | 15-2-23 | 15-2-23 | PPT , Black Board |
| 19 | Minimum cost spanning trees: Kruskal and Prim's algorithms | 20-2-23 | 20-2-23 | PPT , Black Board |
| 20 | General Method, Multistage graphs | 21-2-23 | 21-2-23 | PPT , Black Board |
| 21 | General Method, Multistage graphs | 22-2-23 | 22-2-23 | PPT , Black Board |
| 22 | General Method, Multistage graphs | 27-2-23 | 27-2-23 | PPT , Black Board |
| 23 | All pair shortest path: Floyd Warshall Algorithm | 6-3-23 | 6-3-23 | PPT , Black Board |
| 24 | Assembly-line scheduling Problem 0/1 knapsack Problem | 8-3-23 | 8-3-23 | PPT , Black Board |
| 25 | Assembly-line scheduling Problem 0/1 knapsack Problem | 13-3-23 | 13-3-23 | PPT , Black Board |
| 26 | Travelling Salesperson problem, Longest common subsequence | 14-3-23 | 14-3-23 | PPT , Black Board |
| 27 | Travelling Salesperson problem, Longest common subsequence | 15-3-23 | 15-3-23 | PPT , Black Board |
| 28 | Backtracking and Branch and bound General Method | 20-3-23 | 20-3-23 | PPT , Black Board |
| 29 | Backtracking: N-queen problem, | 21-3-23 | 21-3-23 | PPT , Black Board |
| 30 | Backtracking: N-queen problem, | 22-3-23 | 22-3-23 | PPT , Black Board |
| 31 | Sum of subsets, | 27-3-23 | 27-3-23 | PPT , Black Board |
| 32 | Graph coloring | 28-3-23 | 28-3-23 | PPT , Black Board |
| 33 | Branch and Bound: Travelling Salesperson Problem | 3-4-23 | 3-4-23 | PPT , Black Board |
| 34 | 15 Puzzle problem | 5-4-23 | 5-4-23 | PPT , Black Board |
| 35 | String Matching Algorithms | 10-4-23 | 10-4-23 | PPT , Black Board |
| 36 | String Matching Algorithms | 11-4-23 | 11-4-23 | PPT , Black Board |
| 37 | The Rabin Karp algorithm | 12-4-23 | 12-4-23 | PPT , Black Board |

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| 38 | The Rabin Karp algorithm | 17-4-23 | 17-4-23 | PPT , Black Board |
| 39 | The Knuth-Morris-Pratt algorithm | 18-4-23 | 18-4-23 | PPT , Black Board |
| 40 | The Knuth-Morris-Pratt algorithm | 19-4-23 | 19-4-23 | Online class |
| 41 | Remedial classes: Revision | 20-4-23 | 20-4-23 | Online class in the evening |
| 42 | Remedial classes: Revision | 21-4-23 | 21-4-23 | Online class in the evening |

Total Lectures: 42