

M.Sc. (DDE) 3rd Semester Examination, 2019

(Old Syllabus)

Subject: Computer Science

Paper: MCS-304 (Elective-I: Analysis of Algorithm)

Full Marks: 22.5

Time: 1 Hour

Answer Question 1 and any *three* from the rest.

1. Write any one question.
(a) Discuss BFS algorithm with example. 7.5
Or
(b) Discuss DFS algorithm with example. 7.5
2. State the paradigms of Dynamic Programming. Differentiate between Dynamic Programming and Divide-and-Conquer method. 5
3. Discuss any one Greedy algorithm with example. 5
4. Write Graham Scan algorithm for computing convex hull. 5
5. Analyze the best case time complexity of Quick sort. 5
6. Write down Kruskal's algorithm for finding minimum spanning tree (MST). 5