

**Delhi Institute of Technology and Management, Sonipat**

**Assignment No. – I**

**Subject: Algorithms Design and Analysis**

**Time: Submit within 7 days**

**Subject Code: ETCS-301**

**Max. Marks: 30**

**Date: 1 Nov. 2021**

**Note: Attempt any five questions. All questions carry equal marks.**

1. Explain Asymptotic Notations.
2. Explain Algorithm Complexity
3. Explain Recurrence relation for iteration method and recursion tree method with proof.
4. Explain in detail about linear search.
5. Write a pseudocode for divide and conquer algorithm.
6. Write algorithm for Strassen Matrix Multiplications.
7. Explain in detail about Ingredients of Dynamic Programming.
8. Explain longest common subsequence problem.

**Prepared By:**

**Mrs. Preeti Nehra**