



# COMSATS University Islamabad, Attock Campus

## Department of Computer Science

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Program: BAI

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### Assignment 2

Course: - Design and Analysis of Algorithms

Deadline: October 5, 2023.

Marks: 10

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1. In previous lecture we discussed the problem of  $n \times n$  matrix multiplication using recursion. We concluded that the time complexity of the problem is  $O(n^3)$ . Using Strassen's algorithm show that this problem can be solved in less than  $O(n^3)$ . Give an example to prove your answer.

Your solution should be handwritten on A-4 paper in hard form. Sharing will lead to zero marks. You will present your solution in the class.