



### Competitive Coding Practice - CS

**Course Type**

**LP**

**Course Code**  
**PLA1004**

**Credits**

**3**

**Prerequisite:**

#### Course Objectives:

1. To discuss various code complexities and to compare various possible approaches.
2. To teach the various problem solving strategies.
3. To explain String matching algorithms.
4. To explain various techniques to solve geometric problems.
5. To explain approximation algorithms to solve complex problems.

<b>Module</b>	<b>Topics to be discussed</b>	<b>No. of hours</b>
1	Fundamentals, Intro to Algorithms, Math based problems	08
2	Bitwise algorithms, Greedy Algorithm, Searching, Sorting	10
3	String, Recursion, Backtracking, Greedy Algorithm	10
4	Interview Prep, Linked List, Stack, and Queue.	10
5	Tree, Graph	7
	<b>Total Lectures:</b>	<b>45</b>

*Recommendation by the Board of Studies on* **23.02.2023**

*Approval by Academic council on:* **-**

*Compiled by:* **Dr. Sandip Mal**