

## QUOTATION

Sir/Madam,

Sub: Quotation for **DevLustro – BRIDGE - Placement Fit - Training & Hiring Program.**

- ❖ **Training – 300 Hours of Technical, Aptitude & SoftSkills Training.**
- ❖ **AI Enabled LMS (Learning Management System) & Talent Hiring Platform based on EMPLOYABILITY INDEX SCORE (EIS).**
- ❖ **Hiring – Marquee (salary > 20lakhs per annum), Super Dream (salary 10 lakhs to 20lakhs per annum), Dream (salary 5 lakhs to 10lakhs per annum), and Service (salary < 5 lakhs per annum) Companies Placements.**

➤ **Opportunity 1:** During our training **program** enroll students in MySlate LMS. Follow up and motivate students to complete the courses in LMS. Award **reward points (EMPLOYABILITY INDEX SCORE)** for each problem/program a student solves in the LMS. Categorize Talent in 7th Semester based on scores accumulated (**EMPLOYABILITY INDEX SCORE**) in our LMS. Place students in Marquee, Super Dream, Dream & Services companies based on scores accumulated.

✓ **Outcome based placements based on below target**

### **EMPLOYABILITY INDEX SCORE.**

- **Marquee Students >25000 points**
- **Super Dream Students > 20000 && < 25000 points**
- **Dream Students >15000 && <20000 points**
- **Service Students >12000 && <15000 points**

**Opportunity 2:** Identify **Special Talent** in 7th Semester based on Employability Index Score accumulated in our LMS. Train the identified students on **Future Skills** (AI, ML, DS, Big Data, Cloud, Cyber Security, Full Stack etc...) and Deploy them. Students will **not be charged for Future Skills Training.**

➤ **Opportunity 3:** Identify Talent who wish to **Upgrade** their existing service offer to product offer at the end of 7th or beginning of 8th Semester

**Employability / Placement Training | Technical Training | Aptitude & SoftSkills Training  
 | LMS - ELearning & Online Assessment Portal | English Language & Cambridge English  
 Training | Finance Training**

(after Day1 placements). Train them on Future Skills and Deploy them. Students will **not be charged** for Future Skills Training.

- **Opportunity 4:** *Identify **Unplaced & Deserving Talent** at the end of 7th or beginning of 8th Semester (after Day1 placements). Hire them with a **Stipend** of 15k to 20k per month and train the students for services companies and Deploy them.*

In line with the discussion we had with you we have here with detailed the program details along with the cost for conducting the **PRIME - Placement Fit - Training & Hiring Program**. Please find below the program details.

Program Duration:	PRIME - Prod Fit – 300 Hours / 50 Days – Aptitude & Technical Training Program PRIME - Code Fit – 300 Hours / 50 Days – Aptitude & Technical Training Program ✓ 6 <sup>th</sup> Semester – 30 Days (each month 6 days for 5 months) & 7 <sup>th</sup> Semester – 20 Days ✓ Company Specific Training will be complimentary
Target Audience:	BE Students – Third Year Students
Cost Per Student:	Rs. per student (exclusive of taxes) ( <b>negotiable</b> )
Program Type:	PRIME - PROD FIT (Product Batch Students): Aptitude – Level 3 Technical – Basic & Advanced C, Basic & Advanced Data Structure, Algorithm PRIME - CODE FIT (Service Batch Students): Aptitude – Level 2 Technical – Basic C, Basic Data Structure
Target Outcome:	✓ Continuous Performance Monitoring using DevLustro Learning Management System (LMS) - <a href="https://devlustro.com">https://devlustro.com</a> ✓ Outcome based training with the below mentioned target scores <ul style="list-style-type: none"> <li>○ Marquee Students &gt;25000 points</li> <li>○ Super Dream Students &gt; 20000 points</li> <li>○ Dream Students &gt;18000 points</li> <li>○ Service Students &gt;12000 points</li> </ul>
Online Test Portal:	One year access to 600+ Online Tests (Aptitude, Technical, 150+ Company Specific Tests) using My Slate. Technical:

	Basic C – 330 Practice Programs & 15 Video Lectures Advanced C – 330 Practice Programs & 30 Video Lectures Basic DS – 300 Practice Programs & 61 Video Lectures Advanced DS – 300 Practice Programs & 30 Video Lectures Algorithms – 300 Practice Programs & 84 Video Lectures Java – 330 Practice Programs & 52 Video Lectures Python – 330 Practice Programs & 30 Video Lectures  Aptitude: Quantitative Aptitude – 120 Tests & 35 Video Lectures Reasoning Aptitude – 120 Tests & 25 Video Lectures Verbal Aptitude – 90 Tests & 15 Video Lectures Company Specific Tests: 150+ Product & Service Companies Specific Tests & Video Lectures Competitive Programming: Google Code Jam – 10 Tests & 27 Video Lectures TCS CodeVita - 20 Tests & 27 Video Lectures Infy TQ - 20
	Tests & 15 Video Lectures Hack with Infy - 10 Tests & 10 Video Lectures
Demo Login Details:	<a href="http://www.talentely.com">www.talentely.com</a> (Built on Progressive Web App) Login ID – <a href="mailto:engg.student@vidh.ai">engg.student@vidh.ai</a> Password – test@12345

## **Aptitude Syllabus**

### ➤ **QUANTITATIVE**

- |                                       |  |
|---------------------------------------|--|
| ✓ Time And Work                       | ✓ Functions                              |
| ✓ Time, Speed, Distance               | ✓ Mensuration                            |
| ✓ Averages                            | ✓ Sudoku                                 |
| ✓ Ratios & Proportions                | ✓ Percentage                             |
| ✓ Sequence, Series And Progressions   | ✓ Trigonometry                           |
| ✓ Co-Ordinate Geometry                | ✓ Set Theory                             |
| ✓ Statistics                          | ✓ Theory Of Equation                     |
| ✓ Combinatorics                       | ✓ Logarithm                              |
| ✓ Linear Algebra                      | ✓ Functions And Graph                    |
| ✓ Probability                         | ✓ Data Interpretation On Multiple Charts |
| ✓ Percentages                         | ✓ Profit And Loss                        |
| ✓ Permutations & Combinations         | ✓ Simple Equation                        |
| ✓ Numbers                             | ✓ Algebra                                |
| ✓ Geometry                            | ✓ Clocks & Calendars                     |
| ✓ Data Interpretation                 | ✓ Problems On Ages                       |
| ✓ Alligations And Mixtures            | ✓ Surds & Indices                        |
| ✓ Simple Interest & Compound Interest | ✓ Data Sufficiency                       |
| ✓ Pipes And Cisterns                  | ✓ Logarithms                             |
| ✓ Problems On Hcf And Lcm             | ✓ Problems On Trains                     |
| ✓ Areas, Shapes, Perimeter            | ✓ Cryptarithmic                          |
| ✓ Height And Distance                 | ✓ Divisibility                           |
| ✓ Partnership                         | ✓ Numbers And Decimal Fractions          |

- ✓ Races And Games
- ✓ Simplification

➤ **REASONING**

- ✓ Data Arrangements
- ✓ Number Series
- ✓ Lr – Arrangements
- ✓ Lr – Ranking
- ✓ Assertion And Reason
- ✓ Team Formations
- ✓ Conditional Syllogisms
- ✓ Statement And Conclusions
- ✓ Statement - Courses Of Action
- ✓ Syllogism
- ✓ Statement And Assumptions
- ✓ Critical Reasoning
- ✓ Coding And Decoding
- ✓ Odd Man Out
- ✓ Direction Sense
- ✓ Image Based Problems
- ✓ Blood Relationship
- ✓ Seating Arrangements
- ✓ Logical Deduction
- ✓ Character Puzzles
- ✓ Clock Puzzles
- ✓ Dot Situation
- ✓ Embedded Images
- ✓ Figure Matrix
- ✓ Grouping Of Images
- ✓ Fill In The Blanks
- ✓ One Word Substitution
- ✓ Theme Detection

- ✓ Spatial Ability
- ✓ Chain Rule
- ✓

- ✓ Image Analysis
- ✓ Logical Puzzles
- ✓ Mirror And Water Images
- ✓ Missing Letters Puzzles
- ✓ Number Puzzles
- ✓ Paper Cutting
- ✓ Paper Folding
- ✓ Pattern Completion
- ✓ Playing Cards Puzzles
- ✓ Rule Detection
- ✓ Shape Construction
- ✓ Attention To Details
- ✓ Flowcharts
- ✓ Puzzles
- ✓ Cubes
- ✓ Sequence And Series
- ✓ Statements
- ✓ Venn Diagrams
- ✓ Analogies
- ✓ Data Sufficiency
- ✓ Inferred Meaning
- ✓ Logical Order
- ✓ Mathematical Operations
- ✓ Logical Choice
- ✓ Analytical Reasoning
- ✓ Parts Of Speech
- ✓ Idioms And Phrases
- ✓ Spellings

## **SoftSkills Syllabus**

- Dressing Etiquette
- Resume Writing Skills
- Group Discussion
- Interview Skills
- Mock Interview Sessions

## **Technical Syllabus**

### **C, DataStructure & Algorithm Syllabus**

<b>Basic C Programming - Topics</b>
C - Basic - Part 1 - Introduction to Programming
C - Basic - Part 2 - Data Types, Variables, Operators
C - Basic - Part 3 - Expressions, Precedence , Operators
C - Basic - Part 4 - Conditional Statements , Switch Statements
C - Basic - Part 5 - Looping
C - Basic - Part 6 - Digit Manipulation, Nested Loops, Patterns
C - Basic - Part 7 - Patterns , Number Problems
C - Basic - Part 8 - Array Basics
C - Basic - Part 9 - Structure
C - Basic - Part 10 - Pointers
C - Basic - Part 11 - Functions
C - Basic - Part 12 - Function Parameters
C - Basic - Part 13 - Abstract Data types, Array Operations
C - Basic - Part 14 - Time Complexity Analysis
C - Basic - Part 15 - Strings
<b>Advanced C Programming - Topics</b>
C - Advanced - Part 1 - Introduction to Bit Manipulation
C - Advanced - Part 2 - Problems on Bit Manipulation
C - Advanced - Part 3 - Introduction to Recursion
C - Advanced - Part 4 - Types of Recursion
C - Advanced - Part 5 - Solving Recurrence Relation I
C - Advanced - Part 6 - Solving Recurrence Relation II
C - Advanced - Part 7 - Solving Recurrence Relation III
C - Advanced - Part 8 - Time Complexity Analysis
C - Advanced - Part 9 - Indirect Recursion
C - Advanced - Part 10 – Solving Recurrence Relation for Indirect recursion and Nested Recursion
C - Advanced - Part 11 - Tree Recursion
C - Advanced - Part 12 - Recursion - Sum of Natural Number
C - Advanced - Part 13 - Recursion - Factorial Number
C - Advanced - Part 14 - Recursion - Exponent/Power Function
C - Advanced - Part 15 - Recursion - Taylor Series
C - Advanced - Part 16 - Recursion - Taylor Series - Optimization Method 1
C - Advanced - Part 17 - Recursion - Taylor Series - Optimization Method 2
C - Advanced - Part 18 - Fibinocci Series
C - Advanced - Part 19 - Fibinocci Series - Optimization
C - Advanced - Part 20 - Combination Formula
C - Advanced - Part 21 - Tower of Hanoi
C - Advanced - Part 22 - Tower of Hanoi Implementation



C - Advanced - Part 23 - Introduction to Array
C - Advanced - Part 24 - Static vs Dynamic Array
C - Advanced - Part 25 - Two Dimensional Matrix
C - Advanced - Part 26 - Arrays in Compilers
C - Advanced - Part 27 - Matrix Representation - Row-Major , Column-Major
C - Advanced - Part 28 - Array ADT - display , append, insert, delete
C - Advanced - Part 29 - Array ADT - delete, get, set, search
C - Advanced - Part 30 - Array ADT - shift / rotate
C - Advanced - Part 31 - Inserting in a sorted Array and checking if an Array is sorted
C - Advanced - Part 32 - Segregating positive and negative numbers
C - Advanced - Part 33 - Merging two sorted arrays
C - Advanced - Part 34 - Set Operations - Union, Intersection
C - Advanced - Part 35 - Set Operations - Difference, Set Membership
C - Advanced - Part 36 - Finding missing elements in Arrays - Different Methods
C - Advanced - Part 37 - Finding duplicate elements in a Integer array
C - Advanced - Part 38 - Check for Anagrams in a String and Permutations of a String
C - Advanced - Part 39 - Matrices - Diagonal Matrix
C - Advanced - Part 40 - Matrices - Lower Triangular Matrix
C - Advanced - Part 41 - Matrices - Upper Triangular Matrix
C - Advanced - Part 42 - Matrices - Symmetric Matrix
C - Advanced - Part 43 - Matrices - Tri-diagonal Matrix
C - Advanced - Part 44 - Matrices - Square Band Matrix
C - Advanced - Part 5 - Solving Recurrence Relation I
C - Advanced - Part 6 - Solving Recurrence Relation II
C - Advanced - Part 7 - Solving Recurrence Relation III
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C - Advanced - Part 43 - Matrices - Tri-diagonal Matrix
C - Advanced - Part 44 - Matrices - Square Band Matrix
Part 35 - Queue using Single Pointer and Two Pointer
Part 36 - Queue using Array and it's drawback
Part 37 - Circular Queue
Part 38 - Queue using Linked list
Part 39 - Double ended queue - Dequeue
Part 40 - Priority Queue
Part 41 - Queue using two Stacks
Advanced Data Structure Programming – Topics (Prod Fit)
Part 1 - Trees ( Terminology )
Part 2 - Number of Binary Trees using N Nodes
Part 3 - Height vs Nodes in Binary Tree
Part 4 - Internal Nodes Vs External Nodes in Binary Tree
Part 5 - Strict Binary Tree and Height vs Node of strict Binary Tree
Part 6 - Internal vs External Nodes of Strict Binary Tree
Part 7 - n-ary Trees
Part 8 - Analysis of n-ary Trees
Part 9 - Representation of binary Tree
Part 10 - Linked Representation of Binary Tree
Part 11 - Full vs Complete Binary Tree
Part 12 - Strict vs Complete Binary Tree

Part 13 - Binary Tree Traversals - method 1
Part 14 - Binary Tree Traversals - method 2 and method 3
Part 15 - Creating Binary Tree
Part 16 - Preorder Tree Traversal
Part 17 - Inorder Tree Traversal
Part 18 - Iterative Preorder and Inorder
Part 19 - Level Order Traversal
Part 20- Generating Tree from Traversal
Part 21 - Height and count of Binary Tree
Part 22 - Count Leaf Nodes of a Binary Tree
Part 23 - Introduction to Binary Search Tree
Part 24 - Searching in Binary Search Tree
Part 25 - Inserting in a Binary Search Tree - Iterative
Part 26 - Inserting in a Binary Search Tree - Recursive
Part 27 - Creating Binary Search Tree
Part 28 - Deleting from Binary Search Tree
Part 29 - Generating BST from Preorder
Part 30 - Drawbacks of Binary Search Tree
Part 31 - Introduction to AVL Trees
Part 32 - Inserting in AVL with Rotations
Part 33 - General form of AVL Rotation
Part 34 - Generating AVL Tree
Part 35 - Deletion from AVL Tree with Rotations
Part 36 - Height Analysis of AVL Tree
Part 37 - 2-3 Trees
Part 38 - 2-3-4 Trees
Part 39 - Red Black Tree - Introduction
Part 40 - Red Black Tree Creation
Part 41 - Red Black Tree vs 2-3-4 Trees
Part 42 - Red Black Tree - Deletion
Part 43 - Introduction to Heap
Part 44 - Inserting in a Heap
Part 45 - Creating a Heap
Part 46 - Deleting from Heap and Heap Sort
Part 47 - Heapify - Faster Method for creating Heap
Part 48 - Heaps as Priority Queue
Part 49 - Introduction to Graphs
Part 50 - Representation of Undirected Graphs
Part 51 - Representation of Directed Graph
Part 52 - Breadth First Search
Part 53 - Depth First Search
Part 54 - Spanning Trees



Part 55 - Prim's Minimum Spanning Tree
Part 56 - Kruskal's Minimum Spanning Tree
Part 57 - Disjoint Subsets
Part 58 - Asymptotic Notations Big oh, Omega, Theta
Algorithms (Prod Fit)
Part 1 - Introduction to Algorithms and Backtracking
Part 2 - N Queen Problem
Part 3 - Knight's Tour Problem
Part 4 - Rat in a Maze Problem
Part 5 - Subset Sum Problem
Part 6 - Graph Coloring Problem
Part 7 - Hamiltonian Cycle
Part 8 - Sudoku Solver
Part 9 - Prime Numbers after Prime P with sum S
Part 10 - Permutations of a given String
Part 11 - Print all possible paths from top left to bottom right of a m x n matrix.
Part 12 - Introduction to Divide and Conquer
Part 13 - Binary Search explored
Part 14 - Merge Sort
Part 15 - Quick Sort
Part 16 - Strassen's Matrix Multiplication
Part 17 - Introduction to Dynamic Programming
Part 18 - Longest Common Subsequence
Part 19 - Longest Palindromic Subsequence
Part 20 - 0/1 Knapsack Problem
Part 21 - Subset Sum Problem
Part 22 - Minimum Cost Path
Part 23 - Coin Change Problem
Part 24 - Kadane's Algorithm
Part 25 - Minimum Edit Distance
Part 26 - Longest Increasing Subsequence
Part 27 - Introduction to Greedy Algorithm
Part 28 - Activity Selection Problem
Part 29 - Kruskal's Minimum Spanning Tree
Part 30 - Prim's Minimum Spanning Tree
Part 31 - Boruvka's Minimum Spanning Tree
Part 32 - Dijkstra's Shortest Path Algorithm
Part 33 - Minimum cost to connect all cities
Part 34 - Introduction to Pattern Searching
Part 35 - Naive Pattern Searching
Part 36 - KMP Algorithm

Part 37 – Rabin-Karp Algorithm
Part 38 – Boyer Moore Algorithm – Bad Character Heuristic
Part 39 – Boyer Moore Algorithm – Good Suffix Heuristic
Part 40 – Manacher’s Algorithm

