

# Placement Oriented Technical (POT) Training

By Prof. Dipak Baral & Dr. Rajesh Kumar Panda

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Placement Oriented Technical (POT) Training consists of following papers which is mandatory knowledge required for most of the companies.

1. Coding using C. (Complete Syllabus)
2. Data Structure (Complete Syllabus)
3. OOP concepts with Tech PI
4. RDBMS concepts with Tech PI

➤ Brief Syllabus of above papers in the next page.

We focus on the following points.

- Conceptual Clarity
- Converting your logic into program
- Enhancing Problem solving ability
- On the spot doubt clear
- Competitive Problem Solving

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## 1. Coding Using C with More than 500 programs

Note: Adding CODE TUNING TECHNIQUE in programming.

SI No	Chapter Name
1	Introduction to Programming Language and 'C'
2	Fundamental of C Language
3	Data Types
4	Variable
5	Input / Output
6	Operators
7	Control Statements
8	Storage class & Scope
9	Pointer And its implementations
10	Array
11	Pointer & Array
12	String
13	Pointer & String
14	Function
15	Function & Array
16	Function & String
17	Function & Storage class
18	Recursion
19	Structure, union, enum
20	Preprocessor
21	File

### Chapter Wise Approx. No of Programs will be solved with explanation

SI No.	Chapter Name	Approx. No of Programs
1	Operator	30
2	Input/ Output	10
3	Scope of variables	6
4	Control statements	<ul style="list-style-type: none"><li>• Star Pyramid - 30</li><li>• Number Pyramid- 30</li><li>• Alphabet Pyramid- 10</li><li>• Number Program- 24</li><li>• Series Program-10</li></ul>
5	Array (1-d, 2-d)	30
6	String	50
7	Pointer	30
8	Function	20
9	Recursion	25
10	Structure, union, enum	10
11	Preprocessor	15
12	File	10
Total No. of Long Program: <b>340 (Approximately)</b>		
MCQ & Find Out the Output More than <b>200</b>		

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## 2. Brief Syllabus of Data Structure Using C

Sl. No	Data Structure
	Chapter Name
1	Time Complexity
2	Array
3	Linked list
4	Stack (Using Array & Linked List)
5	Queue (Using Array & Linked List)
6	Tree (Using Array & Linked List)
7	Graph (Using Array & Linked List)
8	Searching
9	Sorting
10	Hashing
11	Dynamic programming
12	Back Tracking
13	Greedy Algorithm
14	Divide and Conquer
Total No of program= 135 programs And Numerous MCQ.	

## 3. Brief Syllabus of OOP

Sl. No	OOP
	Chapter Name
1	Explaining Object and Object Oriented Programming
2	Feature of OOP
3	Class and its Features
4	Constructor & Destructor
5	New and delete
6	Polymorphism
7	Explaining Method Overloading with example
8	Inheritances
9	Explaining Method Overriding with example
10	Dynamic Binding
11	Abstract class & Abstract Method

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## 4. Brief Syllabus of RDBMS mapping with CAMPUS test.

RDBMS
Chapter Name
<p><b>Database Management System Concepts:</b> DBMS Vs RDBMS.</p> <p><b>Database System Architecture:</b> Three Level Architecture of DBMS.</p> <p><b>Database Models:</b> Data Model and Types of Data Model, Relational Data Model, Hierarchical Model, Network Data Model, Object/Relational Model, Object-Oriented Model; Entity-Relationship Model, Modeling using E-R Diagrams, Notation used in E-R Model,</p> <p><b>An Introduction to RDBMS:</b> An informal look at the relational model; Relational Database Management System; RDBMS Properties, The Entity-Relationship Model;</p> <p><b>Normalization:</b> Functional Dependency; Anomalies in a Database; Properties of Normalized Relations; First Normalization; Second Normal Form Relation; Third Normal Form; Boyce-Codd Normal Form (BCNF); Fourth and Fifth Normal Form.</p> <p><b>Query Processing:</b> Join operation.</p>