

New Pre-Placement Activity Batch

Pre-Placement Activity batch help you stand out of the crowd with the knowledge and confidence which is unbeatable.

Pre-Placement Activity batch covers below modules :

- Module 1 : Computer Architecture**
- Module 2 : Computer Fundamentals**
- Module 3 : Operating Systems Essentials**
- Module 4 : C programming Language**
- Module 5 : Advanced C Programming**
- Module 6 : C++ Programming Language (C++ 17)**
- Module 7 : Advanced C++ Programming**
- Module 8 : System Programming Concepts**
- Module 9 : Industrial Programminng Techniques**
- Module 10 : Core Java (Java 15)**
- Module 11 : Advanced Java**
- Module 12 : Networking Concepts**
- Module 13 : Database Programming using SQL**
- Module 14 : Industrial Resume Preparation**

Module 1 : Computer architecture

- o Introduction to computer (Von Neomon architecture)
- o Components of computer
- o Microprocessors and its internals
- o Types of storage devices
- o Components of motherboard and its working

Module 2 : Computer fundamentals

- o Introduction to programming languages
- o X86 tool chain and its components
- o Working of preprocessor
- o Working of compiler
- o Phases of compiler
- o Working of assembler
- o Working of linker
- o Working of loader
- o CPU registers and its types

- o Layout of executable file
- o Address space of process
- o Practical demonstration of tool chain

Module 3 :

Operating systems essentials

- o Introduction to operating system
- o Types of operating system
- o Tasks of operating system
- o Operating systems ring model
- o Real mode and protected mode
- o Concepts of Multi paradigms
- o Multitasking concept
- o Multiprocessing concept
- o Multithreading concept
- o Multiprogramming concept
- o Multi-core programming concept

Module 4 :

C programming language

- o History of C language
- o Characteristics of C
- o Data Types concepts
- o StorageClass
- o Array in C
- o Types of array
- o Memory representations of array
- o Character array and string
- o String manipulation functions
- o Typedef and its use
- o Typedef for user defined and primitive data types
- o Storage classess
- o auto storage class
- o register storage class
- o static storage class
- o extern storage class
- o Scope of variable
- o Lifetime of variable
- o Linkage and its types
- o Dynamic memory allocation techniques
- o Internal flow of dynamic memory allocations

- o Dynamic memory allocation functions
- o Library functions applicable on memory
- o Dynamic memory allocations on array(1D,2D,3D)
- o Structure&Union
- o Memory layout of structure and union
- o Enumeration
- o Use of Enumerations constants
- o File handling using C
- o Internal working of file manipulation functions
- o Library functions for file handling
- o Character input output
- o String input output
- o Block input output

Module 5:

Advanced C Programming

- o Pointer in C
- o Memory layout of pointers
- o Types of pointers
- o Pointer arithmetic
- o Operations on void pointer
- o Null pointer and Dangling pointer
- o Function pointers
- o Pointer to array and array of pointers
- o C Preprocessor
- o Macro expansion
- o Types of macros
- o Header files contents and its inclusion
- o Conditional compilation techniques
- o Tokenization process
- o Writing user defined functions
- o Working of User stack
- o Contents of stack frame
- o Function Calling Techniques
- o Call by value technique
- o Call by address technique
- o Function Returning Mechanism
- o Return by value technique
- o Return by address technique
- o Padding and memory alignment
- o Contents inside structure and union

- o Pragma directives
- o Bitfield use in structure

Module 6 :

C++ programming language

- o History of C++ language
- o Characteristics of C++
- o Data Types concepts
- o Numbering systems
- o Decimal numbering system
- o Octal numbering system
- o Hexadecimal numbering system
- o Binary numbering system
- o Numbering system conversion
- o Object oriented concepts from C++
- o Class design strategy
- o Access specifier
- o Constructors and Destructors
- o Types of constructors
- o Default arguments
- o Encapsulation using class
- o Reference concept
- o Function calling technique
- o Inheritance and composition
- o Types of inheritance
- o Polymorphism and types
- o Function overloading
- o Name mangling
- o Constant in C++
- o Static in C++

Module 7 :

Advanced C++ Programming

- o Operator overloading
- o Upcasting and downcasting
- o Runtime polymorphism using virtual
- o Pure virtual functions
- o Generic programming using template
- o Friend concepts
- o Namespaces as predefined and user defined

- o Dynamic memory allocations in C++
- o This pointer
- o Inline functions

Module 8 : System Programming Concepts

Module 9 : Industrial Programming techniques

Module 10 : Core java Programming

- o History of JAVA language
- o Characteristics of JAVA
- o Data Types concepts of JAVA
- o Operators in JAVA
- o Input and Output
- o Arrays in JAVA
- o String , StringBuffer & StringBuilder
- o Concepts of OOP in JAVA
- o Methods in JAVA
- o Polymorphism
- o Abstract class and abstract method
- o Interface & its use
- o Packages in JAVA
- o Exception handling
- o File handling in java

Module 11 : Advanced java

- o The Collection framework
- o Event driven programming in JAVA
- o Servlet applications
- o JSP applications
- o MVC architecture
- o Sessions and cookies
- o Network programming in JAVA
- o Multithreading in JAVA
- o JAVA Database connectivity
- o Graphics programming using AWT & Swing
- o Wrapper classes

Module 12 :

Networking concepts

- o Network designs
- o Socket programming concepts
- o Client and server architecture
- o Networking protocols
- o IP Addressing scheme
- o Router, Hub, Switch, Gateway and its working
- o Port numbers and its use

Module 13 :

Database programming using SQL

- o Concept of database design
- o Database management system
- o DBMS driver architecture
- o Query writing using SQL
- o Retrieving data from database using select query
- o Create database : CREATE DATABASE
- o Create table: CREATE TABLE
- o Constraints for table: NOT NULL, UNIQUE, PRIMARY KEY
- o Insert row into table : INSERT INTO
- o Display data : SELECT FROM
- o Conditions : WHERE clause
- o ORDER BY clause
- o SQL wild card characters
- o Aggregate functions of SQL
- o GROUP BY clause
- o HAVING clause

Module 14 :

Finally we prepare our resume based on all the above things.

**For more information please call / WhatsApp
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