

**COURSE PLAN**

<b>Session No</b>	<b>Topics to be covered</b>	<b>Teaching Methodology</b>
<b>UNIT - I</b>		
1	Subject Introduction and Syllabus Discussion	BB
2	Introduction To C++	BB
3	Tokens, Keywords, Identifiers, Variables	GD
4	Basic Data Types	PPT
5	Operators, Manipulators, Expressions	GD
6	Control Structures In C++	Assignment
7	Pointers - Introduction, Manipulation Of Pointers	BB
8	Pointers With Arrays, Array Of Pointers, Pointers And Strings	BB
9	Pointers To Functions And Objects, This Pointer	BB
10	Functions In C++ - Main Function - Function Prototyping	Seminar
11	Parameters Passing In Functions - Values Return By Functions - Inline Functions	GD
12	Friend Functions	Seminar
13	Revision On UNIT I	BB
<b>Unit Test - I</b>		
<b>UNIT - II</b>		
14	Classes And Objects - Introduction, Creating Objects & Accessing Members	BB
15	Defining Member Functions, Static Data Members & Functions	BB
16	Array Of Objects , Objects As Function Arguments, Returning Objects	BB
17	Function Overloading	Seminar
18	Constructors And Destructors, Type Of Constructors	Seminar
19	Operator Overloading - Introduction	Seminar
20	Operator Overloading Using Member & Friend Function	Seminar
21	Type Conversions	GD

22	Inheritance : Single Inheritance - Multilevel Inheritance	PPT
23	Multiple Inheritance - Hierarchical Inheritance - Hybrid Inheritance	PPT
24	Virtual Functions And Polymorphism	BB
25	Managing Console I/O Operations - C++ Streams	GD
26	Unformatted I/O Operations	BB
27	Formatted Console I/O Operations	BB
28	Revision On UNIT II	BB
<b>CIA TEST - I</b>		
<b>UNIT - III</b>		
29	Classes For File Stream Operations - Opening And Closing A File	BB
30	End- Of- File Deduction, File Modes	BB
31	File Pointers updating A File	BB
32	Updating A File	BB
33	Error Handling During File Operations - Command- Line Arguments	BB
34	Definition Of A Data Structure - Primitive And Composite Data Types	GD
35	Asymptotic Notations	BB
36	Arrays, Operations On Arrays, Order Lists	GD
37	Revision On UNIT III	BB
<b>Unit Test - III</b>		
<b>UNIT - IV</b>		
38	Stacks	Practical Demonstration
39	Applications Of Stack - Infix To Postfix Conversion	BB
40	Evaluation Of Postfix Expression, Recursion	BB
41	Maze Problems	Puzzle
42	Queues - Operations On Queues	Practical Demonstration
43	Queue Applications, Circular Queue	BB
44	Singly Linked List - Operations, Application	BB
45	Representation Of A Polynomial, Polynomial Addition	Seminar

46	Doubly Linked List - Operations, Applications	BB
47	Revision On UNIT IV	BB
<b>CIA TEST - I</b>		
<b>UNIT - V</b>		
48	Binary Trees - Conversion Of Forest To Binary Tree	BB
49	Tree Traversals	BB
50	Graph - Definition, Types Of Graphs	PPT
51	Hashing Tables And Hashing Functions	BB
52	Traversal - Shortest Path; Dijkstra's Algorithm	BB
53	Revision On UNIT V	BB
<b>REVISION</b>		
54	Revision of UNIT I	BB
55	Revision of UNIT II	BB
56	Revision of UNIT III	BB
57	Revision of UNIT IV	BB
58	Revision of UNIT V	BB
<b>CIA TEST - III</b>		

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