## Batch Name: BCA AKU 3RD SEM

## Subject : OBJECT ORIENTED PROGRAMMING

## Teacher's Name : Amit Kumar Shukla

## Batch Time :

Торіс	Chapter / Topic / Schedule of Class	Topics Covered	Date	No. of Students Present	Days Ahead / Behind of planned Schedule	Signature of the Faculty Member	Signature of a Student
1		Introduction to Migration from C to C++					
2		Generation of Programming Languages-1GL,2GL,3GL,4GL,5GL					
3		Programming Paradigms					
4		Introduction to Object Oriented Programming					
5	<b>UNIT-I :</b> Introduction to Programming Paradigms	Features of Object Oriented Programming-Classes, Objects, Method and Message Passing					
6		Features of Object Oriented Programming-Inheritance, Polymorphism-Static Binding and Dynamic Binding, Containership, Genericity					
7		Features of Object Oriented Programming- Delegation, Data Abstraction and Encapsulation, Data Hiding, data Security					
8		Merits and Demerits of OOP					
9		Application of OOP					
10		Difference between C and C++					
11		Introduction to C++					
12		Structure of C++ Program					
13		Compiling and Executing C++, Using Comments					
14		Tokens in C++- Character Set, Keywords, Identifier					
15	UNIT-II : Basics of C++ Programming	Data Types in C++					
16		Variables, Constants, Input Output in C++					
17		Operators in C++					
18		Operators in C++, Operators Precedence and Associativity					
19		Type Conversion and Typecasting					

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20	MARQ/PPT/ASSIGNMENT	MARQ/ASSIGNMENT					
21		Doubt Clarification					
22	Monthly Test - 1	Monthly Test - 1					
23	<b>UNIT-III :</b> Decision Control and Looping Statements	Introduction to Control Statements- Conditional Branching Statement					
24		Iterative Statements, Nested Loops, break, continue, goto statement					
25	Test - 1	Paper Showing of Monthly Test - 1					
26		Need for Functions, Using Functions, Parts of Functions					
27		Passing parameters to the functions- Call by Value, Call by Address, Call by Reference					
28	UNIT-IV :	Default Arguments, Return by Reference					
29	Functions	Storage Classes-auto, extern, register, static					
30		Inline functions, Function Overloading, Recursive functions					
31		Recursion versus Iteration					
32		Specifying a Class-Class Declaration, Function Definition, Creating Objects					
33		Function Definition- Within the Class and Outside of Class					
34	-	Accessing Object Members, Access Specifier-private, public, protected					
35		Memory Allocation for Class- Static Data Members, Static Member Functions					
36	UNIT-IV :	Array of Objects, Friend Function and Friend Class					
37	Classes and Objects	Constructors, Characteristics of Constructor					
38		Types of Constructors					
39		Constructor Overloading, Destructors, Characteristics of Destructor					
40		this Pointer, Proxy Classes					

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41		Creating and Destroying objects dynamically using new and delete operators					
42	MARQ/PPT/ASSIGNMENT	MARQ/ASSIGNMENT					
43		Doubt Clarification					
44	Monthly Test - 2	Monthly Test - 2					
45	UNIT-V :	Introduction to Operator Overloading, Syntax of operator function					
46	Operator Overloading	Rules for Operator Overloading, operator functions as class members v/s as friend functions					
47	Paper Showing of Monthly Test - 2	Paper Showing of Monthly Test - 2					
48		Overloading Unary Operators					
49		Overloading Binary Operators					
50	Operator Overloading	Overloading Binary Operators					
51		Overloading stream function					
52		Type Conversion-Converting between types					
53		Introduction to Inheritance, Base classes and derived classes					
54		Access Specifiers- public, private, protected mode of inheritance					
55		Type of Inheritance					
56	UNIT-VI :	Type of Inheritance					
57	Inheritance	Constructors and Destructors in derived classes					
58	-	Virtual Base Classes, Run time Polymorphism-Virtual Functions					
59		Rules for Virtual Functions, Pure Virtual Functions					
60		Abstract Base Classes, Virtual Constructors and Destructors					
61		Introduction to Templates, Types of Templates					
62	UNIT-VII : Templates	Function Template					

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63		Class Template					
64	UNIT-VIII : Exception Handling	Introduction to Exception, Types of Exception					
65		try block, catch block, throw					
66	UNIT-IX : File Handling	Introduction to File and Types, File mode					
67		Input stream object, output stream object, Binary file operation	n				
68	MARQ/PPT/ASSIGNMENT	MARQ / ASSIGNMENT					
69		Doubt Clarification					
70	Monthly Test - 3	Monthly Test - 3					
71		Doubt Clarification					
72		Doubt Clarification					
73	Paper Showing of Monthly Test - 3	Paper Showing of Monthly Test - 3					