

**Panipat Institute of Engineering & Technology****Department of CSE-AI&DS****LESSON PLAN****Subject:** Object Oriented Programming**Subject code:** PC-CSE-AIDS-203A**Session:** Aug.- Dec 2023-24**Semester:** 3<sup>rd</sup>

S No	Topic	CO Covered	Assignment No.	Teaching Methodology
1	Introduction to C++, C++ Standard Library, Illustrative Simple C++ Programs.	CO1	Assignment-1	White Board
2	List Header Files, Namespaces, Application of OOP	CO1		White Board
3	Introduction to Objects and Object-Oriented Programming,	CO1		White Board
4	Encapsulation, Polymorphism,	CO1		White Board
5	Overloading, Inheritance,	CO1		White Board
6	Abstract Classes, Accessifier	CO1		White Board
7	Class Scope and Accessing Class Members	CO1		Smart Board, White Board
8	Controlling Access Function, Constant, Class Member, Structure and Class	CO1		Smart Board, White Board
9	Revision			PPT
10	Friend Function and Friend Classes, Static Class Members	CO2	Assignment-2	Smart Board, White Board
11	This Pointer, Dynamic Memory Allocation and Deallocation (New and Delete)	CO2		Smart Board, White Board
12	Revision			PPT
13	Constructors, parameter Constructors and Copy Constructors, De constructors	CO2		Smart Board, White Board
14	Introduction of inheritance, Types of Inheritance	CO2		Smart Board, White Board
15	Overriding Base Class Members in a Derived Class	CO2		Smart Board, White Board
16	Public, Protected and Private Inheritance	CO2		Smart Board, White Board
17	Effect of Constructors and Destructors of Base Class in Derived Classes.	CO2		Smart Board, White Board
18	Revision			Test
19	Polymorphism, Pointer to Derived class	CO3	Assignment-3	Smart Board, White Board
20	Virtual Functions, Pure Virtual Function	CO3		Smart Board, White Board
21	Abstract Base Classes, Static and Dynamic Binding	CO3		Smart Board, White Board
22	Fundamentals of Operator Overloading	CO3		Smart Board, White Board

23	Rules for Operators Overloading	CO3		Smart Board, White Board
24	Implementation of Operator Overloading Unary Operators, Binary Operators	CO3		Smart Board, White Board
25	Revision			Presentation
26	Virtual Destructors.	CO3		Smart Board, White Board
27	Revision			Smart Board, White Board
28	Text Streams and binary stream, Sequential and Random-Access File	CO4	Assignment- 4	Smart Board, White Board
29	Stream Input/ Output Classes, Stream Manipulators.	CO4		Smart Board, White Board
30	Revision			White Board
31	Basics of C++ Exception Handling, Try, Throw, Catch	CO4		Smart Board, White Board
32	Multiple catch, Re-throwing an Exception, Exception specifications.	CO4		Smart Board, White Board
33	Templates: Function Templates, Overloading Template Functions,	CO4		Smart Board, White Board
34	Class Template, Class Templates and Non- Type Template arguments.	CO4		Smart Board, White Board
35	Revision			PPT
36	Revision			White Board
37	Revision			