

STATE INSTITUTE OF ENGINEERING & TECHNOLOGY

Department of Computer Science and Engineering(AI & ML)

LESSON PLAN

Teachers Name: Nisha Raheja

Subject Name:-Object Oriented Programming System

Year:-2nd Year

Subject Code: B23 CSE-205

Semester:-3rd

Lecture No	Unit No	Topic	COs Covered
L 1	Unit-I	Introduction to C++, C++ Standard Library	CO1
L 2		Illustrative Simple C++ Programs. Header FilesNamespaces	
L 3		Application of object oriented programming	
L 4		Control flow, variables and assignments statements	
L 5		Conditional execution, looping	
L 6		Function calls including recursion.	
L 7		Object Oriented Concepts, Introduction to Objects and Object Oriented Programming	
L 8		Encapsulation, Polymorphism, Overloading, Inheritance	
L 9		Abstract Classes, Accessifier (public/ protected/ private)	
L 10		Class Scope and Accessing Class Members, Constant.	
L 11		Class Member, Structure and Class.	
L 12		Macro vs Inline Functions	
L 13		Revision	
L 14		Home Assignment 1	
L 15	UNIT II	Friend Function and Friend Classes	CO2
L 16		This Pointer, Dynamic Memory Allocation and Deallocation (New and Delete)	
L 17		Static Class Members, Constructors, parameter Constructors,and Copy Constructors	
L18		Deconstructors, Introduction of inheritance	
L19		Types of Inheritance, Overriding Base Class Members in a Derived Class	
L20		Public, Protected and Private Inheritance	
L21		Effect of Constructors and Deconstructors of Base	

		Class in Derived Classes.	
L 22		Revision	
L 23		Home Assignment 2	
L24	Unit-III	Polymorphism, Pointer to Derived class	CO3
L25		Virtual Functions, Pure Virtual Function, Abstract Base Classes	
L26		Static and Dynamic Binding, Virtual Destructors	
L27		Fundamentals of Operator Overloading, Rules for Operators Overloading, Implementation of Operator Overloading Like <<, >>	
L28		Unary Operators, Binary Operators.	
L29		Revision	
L30		Home Assignment 3	
L31	Unit-IV	Text Streams and binary stream, Sequential and Random Access File creation and updation	CO4
L32		Stream Input/ Output Classes, Stream Manipulators	
L33		Basics of C++ Exception Handling, Try, Throw, Catch, multiple catch, Re-throwing an Exception, Exception specifications	
L34		Templates: Function Templates, Overloading Template Functions, Class Template	
L35		Class Templates and Non- Type Template arguments.	
L36		Revision	
L37		Home Assignment 4	

Text Books:

1. Byron Gottfried, Schaum's Outline of Programming with C, McGraw-Hill.
2. E. Balaguruswamy, Programming in ANSI C, Tata McGraw-Hill.
3. Brian W. Kernighan and Dennis M. Ritchie, The C Programming Language, Prentice Hall of India.

Web resources:

1. https://onlinecourses.nptel.ac.in/noc21_ee10/preview
2. <https://web.iitd.ac.in/~shouri/eel201/lectures.php>