

Department of Computer Engineering & IoT

LESSON PLAN

DISCIPLINE: computer sc and IOT		SEMESTER 3RD	NAME OF THE TEACHING FACULTY ABINAS PARIDA
SUBJECT: : Programming with C++ SUBJECT CODE:TH 1		NO. OF DAYS /WEEK CLASS ALLOTTED 03/WEEK	SEMESTER FROM DATE : 15/7/26 to 5/11/26 NO. OF WEEKS:15
MONTH	WEEK	NO. OF PERIOD AVAILABLE	THEORY TOPICS TO BE COVERED
JULY	1	03	Unit-1 : Introduction to object oriented programming - Getting started with C++ syntax Data type, variables, user defined types, Namespaces, Operators
	2	03	Flow Control Looping Statement Strings, Pointers
AUGUST	1	03	Arrays Functions, default values in functions Recursion of function
	2	03	Structures, Unions Polymorphism, Encapsulation Question and answer session
	3	03	Unit - 2 : Abstraction: Class and object, Private class, Public class Data Member and Member functions, static members
	4	03	Inline function Friend Functions Constructors, Destructors
SEPTEMBER	1	03	Inheritance: Class hierarchy, derived classes Single Inheritance, Multiple, Multilevel, Hybrid Inheritance Role of virtual base class
	2	03	Constructor and Destructor execution Base initialization using derived class constructors
	3	03	Question and answer session Unit - 3 : Polymorphism : Static polymorphism - Function Overloading
	4	03	Ambiguity in function overloading Dynamic polymorphism: Base class pointer object slicing
OCTOBER	1	03	Binding, Static binding, Dynamic binding, Late binding Method overriding with virtual functions
	2	03	Pure virtual functions, abstract classes Question and answer session Unit - 4 : Operator Overloading - Introduction and Application of - "this" pointer
	3	03	Introduction to Operator Overloading - Syntax and basic rules of operator overloading with example Member vs Non-member Operator Functions Overloading Binary Operators (Member Functions)
	4	03	Overloading Binary Operators (Non-member Functions) Overloading Unary Operators Overloading I/O Operators
NOVEMBER	1	02	Unit- 5: Basics of Exception Handling - try, throw, and catch Advanced Exception Concepts - exceptions and derived classes Function Exception Specifications & Unexpected Exceptions Question and answer session

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