



GANAPATI INSTITUTE OF ENGINEERING AND TECHNOLOGY(POLYTECHNIC)  
Mathasahi , Jagatpur , Cuttack - 754200

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING  
LESSONPLAN

Discipline: Computer Science & Engineering	Semester: 3 <sup>RD</sup>	Name of the Faculty: S.R PATTNAIK
Subject: Programming with C++	No. of Days/week: 03	Start Date: 14.07.2025 End Date: 15.11.2025

Week	Class Day	Theory Topics
1st	1st	Unit-1: INTRODUCTION TO OOPS Programming languages, oops concepts..
	2nd	User defined types and declaration
	3rd	Polymerphism, Encapsulations
2nd	1st	Types of user defined types – Structure, Its syntax, examples
	2nd	Union, its syntax, examples
	3rd	Enumeration, its syntax, examples
3rd	1st	A first c++ program, Basic program structure
	2nd	Variable & data types
	3rd	Primitive data types & declarations
4th	1st	Non-primitive data types & declarations
	2nd	Array & types of array, its syntax, examples
	3rd	String literals
5th	1st	Functions, default value in functions
	2nd	Recursions & examples, namespaces
	3rd	Pointer & its syntax, control flow statements
6th	1st	Operators & types of operators
	2nd	UNIT-2 ABSTRACTION MECHANISMS Concepts & syntax of class, defining a class
	3rd	Accessing class members, defining member function
7th	1st	Creating an objects
	2nd	Access specifier (Private, Public, Protected)
	3rd	Inline function & key aspects of inline functions & examples
8th	1st	Friend function & its examples

	2nd	Inheritance in c++, base class & derived class
	3rd	Types of inheritance, single inheritance
9th	1st	Multiple inheritance with examples, multilevel inheritance with examples
	2nd	Hybrid inheritance, Constructor, types of constructor
	3rd	Default constructor, Parameterised constructor with examples
10th	1st	Copy constructor with examples & destructor & its syntax
	2nd	Quiz test
	3rd	<b>UNIT-3 POLYMORPHISM</b> Polymorphism & types of polymorphism
11th	1st	Static binding and dynamic binding
	2nd	Function overloading in c++ with examples
	3rd	Compile time polymorphism & runtime polymorphism
12th	1st	Method overloading with examples
	2nd	Virtual function, Pure virtual function
	3rd	
13th	1st	<b>UNIT-4 OPERATOR OVERLOADING</b> Operator overloading & its example
	2nd	This pointer & its application of this pointer
	3rd	Member & non member operator function
14th	1st	I/O Operators
	2nd	Reading and writing to fields
	3rd	<b>UNIT-5 EXCEPTION</b> Exception overview, exception keyword
15th	1st	Try, throw, catching exceptions
	2nd	Declaring exception, Unexpected exceptions
	3rd	Revision & Semester Question & Answer

S.R. Pathan  
14.7.25  
Sign of faculty

S.R. Pathan  
10.7.25  
Depl. of Sign of Sr. Section & Engr.

11.7.25  
Sign of Principal  
Principal  
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