

**PNS SCOOOL OF ENGINEERING & TECHNOLOGY MARSHAGHAI,  
KENDRAPARA**  
**LESSON PLAN**  
**Session (2025-2026)**

<b>Discipline:</b> Computer Science & Engineering	<b>Semester:</b> 3rd, Winter/2025	<b>Name of the Faculty:</b> Jyotsnamayee Biswal <b>Email ID:</b> 1619jb22@gmail.com
<b>Subject: Programming with C++</b>	<b>No. of Days/week:</b> 04	<b>Start Date:</b> 14/07/2025 <b>End Date:</b> 15/11/2025
<b>Week</b>	<b>Class Day</b>	<b>Theory Topics</b>
1st	1st	UNIT-1 <b>Introduction</b> to object oriented programming, user defined types,
	2nd	Structures
	3rd	unions, polymorphism
	4th	Encapsulation, Getting started with C++ syntax, data- type
2nd	1st	Data Type, Variables
	2nd	Strings, functions, default values in functions,
	3rd	recursion, namespaces, operators
	4th	Operators, Flow control
3rd	1st	flow control
	2nd	Arrays
	3rd	Question and Answers
	4th	Question and Answers
4th	1st	UNIT-2 Abstraction mechanism: Classes, private, public, constructors
	2nd	constructors, destructors, member data, member functions
	3rd	member functions, inline function, friend functions
	4th	static members, and references.
5th	1st	Question and Answers

	2nd	Question and Answers
	3rd	Inheritance: Class hierarchy, derived classes, single inheritance, multiple
	4th	multilevel, hybrid inheritance, role of virtual base class
6th	1st	constructor and destructor execution
	2nd	base initialization using derived class constructors
	3rd	Question and Answers
	4th	Question and Answers
7th	1st	<b>UNIT-3</b> Polymorphism: Binding, Static binding
	2nd	Dynamic binding
	3rd	Static polymorphism: Function Overloading
	4th	Ambiguity in function overloading
8th	1st	Dynamic polymorphism: Base class pointer, object slicing, late binding,
	2nd	Question and Answers
	3rd	Question and Answers
	4th	method overriding with virtual functions
9th	1st	pure virtual functions, abstract class
	2nd	Question and Answers
	3rd	<b>UNIT-4</b> Operator Overloading: This pointer,
	4th	applications of this pointer, Operator function
10th	1st	Member and non-member operator function
	2nd	operator overloading
	3rd	I/O operators
	4th	Question and Answers
11th	1st	Question and Answers
	2nd	Question and Answers
	3rd	Question and Answers
	4th	<b>UNIT-5</b> Exception handling
12th	1st	Exception handling
	2nd	Try, throw, and catch
	3rd	Try, throw, and catch

	4th	exceptions and derived classes
13th	1st	exceptions and derived classes
	2nd	function exception declaration
	3rd	function exception declaration,
	4th	Question and Answers
14th	1st	Question and Answers
	2nd	Question and Answers
	3rd	unexpected exceptions
	4th	unexpected exceptions
15th	1st	unexpected exceptions
	2nd	Question and Answers
	3rd	Question and Answers
	4th	Question and Answers

Biswaranjan Swain

Signature of HOD

Yotsnamayee Biswal

Signature of Lecturer