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

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
LESSONPLAN

Discipline: Computer Science & Engineering	Semester:3rd Winter/2025	Name of the Teaching Faculty: Miss Smaranika Moharana.
Subject: PROGRAMMING WITH PYTHON CSEPC 203	No. Of Days/Week:03	Start Date:14.07.2025 End Date:15.11.2025

Week	Class Day	Theory Topics
1st	1st	UNIT: 01 INTRODUCTION TO PYTHON Overview of Python Features and Application
	2nd	Setting up the Python Environment
	3rd	Python Syntax: Variable and datatype
2nd	1st	Operator Writting
	2nd	Executing and Debugging Python Scripts
	3rd	UNIT: 02 CONTROL STRUCTURES AND FUNCTIONS Conditional Statement: "if" statement with example
3rd	1st	"else" statement with example
	2nd	"elif" statement with example
	3rd	Loop: "for" loop with example
4th	1st	Loop: "while" loop with example
	2nd	Nested loop with example: Defining
	3rd	Calling and Practice Questions
5th	1st	Scope of Variables Introduction to Lambda function
	2nd	Recursion with example
	3rd	Unit:03 DATA STRUCTURE IN PYTHON List data structure with example
6th	1st	Tuple data structure with example
	2nd	Set data structure with example
	3rd	Dictionaries: Operation and Application
7th	1st	List Comprehension

	2nd	Dictionary Comprehension
	3rd	Working with String: Method
8th	1st	String Manipulation
	2nd	Introduction to Python's Collections Module
	3rd	**UNIT:04 FILE HANDLING AND MODULE** File Operation
9th	1st	Read Operation with Example
	2nd	Write Operation with Example
	3rd	Appending Files working with CSV files
10th	1st	Appending Files working with JSON files
	2nd	Python Module : Built in Modules "math" with example
	3rd	Built in Modules "os" with example
11th	1st	Built in Modules "datetime" with example
	2nd	Creating and using Custom Modules
	3rd	**UNIT:05 OBJECT ORIENTED PROGRAMMING IN PYTHON(OOP)** Understanding Class and Object
12th	1st	Encapsulation with Example
	2nd	Inheritance with Example
	3rd	Polymorphism with Example
13th	1st	Working with Magic Method
	2nd	Operator Over Loading with Example
	3rd	Exception Handling in Python with Example
14th	1st	**UNIT:06 ADVANCE PYTHONB AND APPLICATIONS** Introduction to Libraries: NumPy
	2nd	NumPy with example
	3rd	Pandas with example
15th	1st	Mini Project: Developing a Python Script for a real world problem
	2nd	Mini Project: Developing a Python Script for a real world problem
	3rd	Resivion and Practice Questions