PNS SCHOOL OF ENGG. & TECH., MARSHAGHAI
DEPARTMENT OF COMPUTER SCIENCE ENGINEERING LESSON PLAN

BRANCH : CSE	SEMESTER : 5TH	NAME OF THE TEACHING FACULTY : **MR. BISWARANJAN SWAIN**
SUBJECT : PYTHON PROGRAMMING	NO. OF DAYS PER WEEK CLASS ALLOTTED : 02	SEMESTER FROM DATE: 01.07.2024 TO 08.11.2024

WEEK	CLASS DAY	LAB TOPICS
1ST	1st	Introduction Brief History of Python, Python Versions, Installing Python Environment Variables, Executing Python from the
	2nd	Editing Python Files, Python Documentation, Getting Help Dynamic Types, Python Reserved Words, Naming
2ND	1st	Basic Python Syntax Basic Syntax, Comments, String Values, String Methods The format Method
	2nd	String Operators, Numeric Data Types, Conversion Functions Simple Output, Simple Input, The % Method, The print
3RD	1st	Language Components Indenting Requirements, The if Statement, Relational and Logical Operators, Bit Wise Operators, The while Loop
	2nd	Collections Introduction, Lists, Tuples, Sets, Dictionaries, Sorting, Dictionaries, Copying Collections, Summary
4TH	1st	Functions Introduction, Defining Your Own Functions, Parameters Function Documentation, Keyword and Optional Parameters
	2nd	Functions - "First Class Citizens", Passing Functions to a Function, map, filter, Mapping Functions in a Dictionary
5TH	1st	Modules Modules, Standard Modules - sys, Standard Modules - math
	2nd	Exceptions Errors, Runtime Errors, The Exception Model, Exception Hierarchy, Handling Multiple Exceptions,
	1st	Input and Output Introduction, Data Streams, Creating Your Own Data Streams, Access Modes

6TH	2nd	Writing Data to a File, Reading Data From a File, Additional File Methods, Using Pipes as Data Streams, Handling IO Exceptions
7TH	1st	Classes in Python Classes in Python, Principles of Object Orientation Creating Classes, Instance Methods
	2nd	File Organization, Special Methods, Class Variables Inheritance, Polymorphism
8TH	1st	Regular Expressions Introduction, Simple Character Matches, Special Characters
	2nd	Character Classes, Quantifiers, The Dot Character Greedy Matches, Grouping, Matching at Beginning or
9TH	1st	Match Objects, Substituting, Splitting a String, Compiling Regular Expressions, Flags
	2nd	Create a string containing at least five words and store it in a variable. Print out the string. Convert the string to a list of words using the string split method.
10TH	1st	Sort the list into reverse alphabetical order using some of the list methods (you might need to use dir(list) or help(list) to find appropriate methods). Print out the sorted, reversed list of words.
	2nd	Write a program that determines whether the number is prime. Find all numbers which are multiple of 17, but not the multiple of 5, between 2000 and 2500?
11TH	1st	Swap two integer numbers using a temporary variable. Repeat the exercise using the code format: a, b = b, a. Verify your results in both the cases.
	2nd	Find the largest of n numbers, using a user defined function largest(). Write a function my Reverse() which receives a string as an input and returns the reverse of the string.
12TH	1st	Check if a given string is palindrome or not. WAP to convert Celsius to Fahrenheit
	2nd	Find the ASCII value of characters WAP for simple calculator

Biswaranjan Swain

SIGNATURE OF H.O.D

Biswaranjan Swain

SIGNATURE OF LECTURER