

## E. Lecture Plan:

Lect No	Topics	Session Objective	Mode of Delivery	Corresponding CO	Mode of Assessing the Outcome
1	Introduction to Python (H)	Make the students familiarize with the development environment which has been used throughout this course series to run python code.	Lab	AI2132.1	Internal Evaluation Home Assignments External Evaluation
2	Variables, Keywords, Identifiers, Literals, Operators, Comments and datatype.	Program to demonstrate how to declare Keywords, Variables, Datatypes, and Comments in python.	Lab	AI2132.1	Internal Evaluation Home Assignments External Evaluation
		Program to demonstrate different datatypes and arithmetic operations in python.			
		Program to create a list and perform various operations on the list.	Lab	AI2132.2	Internal Evaluation Home Assignments External Evaluation
3	Dictionary, Tuple, Graph	Program to demonstrate list slicing in python			
		Program to create set and perform various operations on the set.			
		Program to create Dictionary and perform various operations on the dictionary	Lab	AI2132.2	Internal Evaluation Home Assignments External Evaluation
4	Control Statement: If, If else, else if, nested if	Program to create Tuple and perform various operations on the Tuple.			
		Program to create Graph using third party library.			
		Program to check whether a number is even or not.	Lab	AI2132.1	Internal Evaluation Home Assignments External Evaluation
		Program to find the largest number among the three input numbers			
5-6	For loop, while loop, do while, Break, Continue.	Python program to print prime numbers in a given range.			
		Python program to check whether a number is an Armstrong number or not.			
		Python program to check if a year is a leap year			
		Python program to construct various '*' patterns	Lab	AI2132.1	Internal Evaluation Home Assignments External Evaluation
7	Functions	Python program to find factorial of a number provided by user			
		Program to find sum of natural numbers up to nth term			
		Program to display the Fibonacci sequence up to nth term			
		Python program to demonstrate break and continue			
		Python program to make a Simple Calculator using function	Lab	AI2132.1	Internal Evaluation Home Assignments

	Python program to print LCM and HCF for the given numbers Python program to print factorial of a number using recursion Python program to print Fibonacci series up to nth term using recursion			External Evaluation
8	<b>Python OOPs:</b> OOPs Concepts, Object, Class, and object. Constructors.	Lab	AI2132.3	Internal Evaluation Home Assignments External Evaluation
9	Inheritance, Multilevel Inheritance, Multiple Inheritance. Python program to demonstrate the concept of multiple inheritance.	Lab	AI2132.3	Internal Evaluation Home Assignments External Evaluation
10	<b>The Python Library</b> Python program to demonstrate the use of various python library (use of libraries in string and text handling)	Lab	AI2132.4	Internal Evaluation Home Assignments External Evaluation
11	Networking and Web Programming Write a simple client server program in python using sockets.	Lab	AI2132.4	Internal Evaluation Home Assignments External Evaluation
12	Python GUI Build a temperature converter using tkinter Build a Calculator using tkinter Build a text editor using tkinter	Lab	AI2132.4	Internal Evaluation Home Assignments External Evaluation

### G. Course Articulation Matrix: (Mapping of COs with POs)

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