

ASSIGNMENT-1

Subject/ Subject Code	Semester/ Branch	Issue Date	Due Date
Python Programming / 01CE1705	7 th – C.E(FOT1-MU)	29-08-2023	12-09-2023

- 1. What is Python? Explain any five features of Python.
- 2. Explain the different data types of Python.
- 3. Explain different variations of for and while loop with range using suitable syntax and examples.
- **4.** Explain the following Terms:
 - i) PVM
 - ii) Lambda Functions
 - iii) Mutable and Immutable Variables
 - iv) Membership Operator
- 5. With example explain the use of break and continue statements.
- 6. Difference between list, tuple and dictionaries.
- **7.** With examples explain the use of following functions:
 - i) String: strip(), replace, format()
 - ii) List: append(),insert(),extend()
- **8.** What are different types of Error? Explain the use of Exception handling in python using try and execute block with example.
- **9.** Write a python program to show the concept of user defined exceptions with example.
- **10.** Write a program to convert two lists into a dictionary.
- **11.** Write a program that accepts a string from user and performs the following operations:
 - i) Print the string in reverse order
 - ii) Print all the odd indexed characters of the string
 - iii) Print the count of all the vowels in the string
 - iv) Print the count of the frequency of an input character in the string
- **12.** Write a Python program to check if each number is prime in a given list of numbers. Return True if all numbers are prime otherwise False.
- 13. Write a program to calculate GCD of two numbers.
- **14.** Write a Python program to compute the difference between two lists.

Sample data: ["red", "orange", "green", "blue", "white"], ["black", "yellow", "green", "blue"] Expected Output:

Color1-Color2: ['white', 'orange', 'red']

Color2-Color1: ['black', 'yellow']

15. Write a program to print the largest and smallest number of three numbers input from user with and without using library functions.