CCAD-1-01P: Problem Solving using Python Lab

Total Marks: 100
External Marks: 70
Internal Marks: 30
Credits: 4
Pass Percentage: 40%

Besides below given practical, other List of Lab Assignments – Session wise will be provided to the students.

1) Find the sum of two numbers. (Python basics)
2) Find the maximum of three numbers in python (Comparison Operators)
3) Print all the prime numbers between two numbers. (Loops)
   Define a function to return the number of vowels in a string. (Methods and functions in python)
5) Delete an item from a tuple (List, tuple, Type conversions)
6) Demonstrate the use of polymorphism by creating different functions for sum. (Polymorphism)
7) Suppose you are given two strings. Compare if the two strings are good or not.
   Strings will be good if they contain same words but the order and case of the words can vary.
    For example:
      "Samsung galaxy s10" and "galaxy SAMSUNG s10" are both good strings.
      "Punjab State Open University Patiala" and "Punjab State Open University Chandigarh" are not good strings. (Concept: Strings)
8) Create Fibonacci series using Generators (Python generators)
9) Write an exception for divisibility of a number by 0. (Exception handling)
10) Print the first 10 lines in text file using python (File handling)
11) Find the words in a string that are greater than k length, k is the user's input.
12) Find the number of pairs in a given list.
    e.g. [10,20,20,10,2,20,7] has 3
13) Take a list of integers. Find the pairs which give the minimum difference
14) Take a string as user's input and print the words from the string that doesn't contain any letter between 0 to 9 between them.
15) Copy content from a file in a computer and paste it into another file.
16) Find out all the numbers from a list in python that has sum k, where k is the user's input.
17) Create a linked list using python
18) Find out the sums of all the "strictly decreasing" numbers from a list of numbers.
19) A strictly decreasing number is the one in which all the numbers from the left to right are decreasing. e.g. 542 and 431 are strictly decreasing but 411 and 424 are not.
20) Rearrange words of a string, according to the sum of ASCII values of the letters of the words, the answer should be a single string of the words.