Name of student _____ Enrollment No. _____

BENNETT UNIVERSITY, GREATER NOIDA
B.TECH
TEST – Make-up
FALL(ODD) SEMESTER-I, A.Y. 2017- 2018

COURSE CODE: ECSE101L   MAX. TIME: 1 hour
COURSE NAME : Computational Thinking with Python   COURSE CREDIT : 5
MAX . MARKS: 30

Signature of Invigilator: _____

Signature of Examiner: _____

Instructions:
* Attempt all questions and marks for each question are written against them.
* Use the last two pages of your answer sheet for rough work.

1. **[Marks 6]** Write a Python program to count the number of digits of a given integer literal using **recursion**.

2. **[Marks 6]** Write a Python program to find the first repeated element in a list of integer literals. The length of the input list and each element of the list must be taken from user. Assume that, there must be at least one repeated element in the list.

3. **[Marks 6]** Write a Python program to count the number of vowels in a given string literal and subsequently, replace each vowel with the next alphabet. For example, if the input string is: "university", then the output will be "vnjvfrsjty".

4. **[Marks 6]** Consider the following dictionary dict_1 which contains the runs scored by Virat Kohli in last 5 matches. Write a Python program to display the match **(i.e. either m1/ m2/ m3/ m4/ m5)** in which he scored the maximum runs (**DON'T use any built-in function** to find out the maximum run scored by him).

dict_1={'m1':13, 'm2 ':65, 'm3 ':26, 'm4 ':113, 'm5 ':29}

5. **[Marks 6 (2*3)]** What will be the output of the following Python programs:

(a) temp = dict()
  temp['key1'] = {'key1' : 44, 'key2' : 566}
  temp['key2'] = [1, 2, 3, 4]
  for (key, values) in temp.items():
    print(values, end = "")
	Answer:

(b) def func_1(n,x):
    i=2
    j=2
    t=1
    sum=0
    while t<=n:
      sum=sum+x**i*(-1)**j
      print(sum)
      i=i+2
      j=j+1
      t=t+1
    print(sum)
  func_1(3,2)
	Answer:

(c) str = 'Bennett University'
  list_enumerate = list(enumerate(str))
  list_enumerate[0][1]='b'
  print(list_ enumerate)
	Answer:

Rough Work

Rough Work