I Mid-Term Examination (Sample Paper)

Even Semester, 2019-20

Programme: B.Tech Branch: CSE Year: 1st year

Subject with Code: Python Programming, (BCSG0001)

Time: 2 Hour **Maximum Marks: 30**

Section – A

Three questions of 02 marks each (with no internal choice). 3 x 2 = 6 Marks

Q1. Write a program which will find all such numbers which are divisible by 7 but are not a multiple of 5, between 2000 and 3200 (both included). The numbers obtained should be printed in a comma-separated sequence on a single line.

Q2. Write a program which accepts a sequence of comma-separated numbers from console and generate a list and a tuple which contains every number. Suppose the following input is supplied to the program:

34,67,55,33,12,98

Then, the output should be:

['34', '67', '55', '33', '12', '98']

('34', '67', '55', '33', '12', '98')

Q3. Write a program which can compute the factorial of a given numbers. The results should be printed in a comma-separated sequence on a single line.

Section-B

Three questions of 03 marks each (with no internal choice). 3 x 3 = 9 Marks

Q1. Write a program that calculates and prints the value according to the given formula:

Q = Square root of [(2 * C * D)/H]

Following are the fixed values of C and H:

C is 50. H is 30.

D is the variable whose values should be input to your program in a comma-separated sequence.

Example

Let us assume the following comma separated input sequence is given to the program:

100,150,180

The output of the program should be:

18,22,24

Q2. Python has many built-in functions, and if you do not know how to use it, you can read document online or find some books. But Python has a built-in document function for every built-in functions.

write a program to print some Python built-in functions documents, such as abs(), int(), input(), map() and write any 10 python built-in function that works on python collections

Q3. Write the program where the user enters a string and a substring. You have to print the number of times that the substring occurs in the given string. String traversal will take place from left to right, not from right to left.

NOTE: String letters are case-insensitive.

sample input	sample output
'adcdcd' 'dcd'	2

Section C

Three questions of 05 marks each (with no internal choice). 3 x 5 = 15 Marks

1. Write a program in python to push all zeroes at the end of the list of N length, where list and length is provided by user.
2. What is the validation for the identifier in Python and use of function id() and type(). Define any 10 keywords in Python3 with example.
3. Write a program in python to find all missing numbers in the list containing a series of 1 to 100.

   Sample Input

   [1, 2, 3, 5, 7, 9, 10]

   Sample output

   [4, 6, 8]
4. Determine if a sentence is a pangram. A pangram is a sentence using every letter of the alphabet at least once. The best known English pangram is:

   The quick brown fox jumps over the lazy dog".

   The alphabet used consists of ASCII letters A to Z, inclusive, and is case insensitive. Input will not contain non-ASCII symbols