

Total No. of Questions : 5]

SEAT No. :

P-1306

[Total No. of Pages : 3

[6055]-307

T.Y.B.Sc.

COMPUTER SCIENCE

CS-3510: Python Programming

(2019 Pattern) (CBCS) (Semester - V)

Time : 2 Hours]

[Max. Marks : 35

Instructions to the candidates :

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*
- 3) *Total number of questions are five.*

Q1) Attempt any Eight of the following:

[8 × 1 = 8]

- a) How are comments written in Python?
- b) Give the use of index() in string.
- c) Explain the range() function and its parameters.
- d) How to create a void function in Python?
- e) What is the difference between pop() and del in list.
- f) Compare list and tuple (any two points).
- g) What does the following functions return - clock() and localtime().
- h) List the syntax for handling exception.
- i) List any two functions in math module.
- j) Explain the function enumerate().

P.T.O.

Q2) Attempt any Four of the following:

[4 × 2 = 8]

- a) Which methods are used to read from a file? Explain any two with example.
- b) What are the usage of dictionary copy(), gets(), items() and keys() methods?
- c) Explain union and intersection with example.
- d) Explain the following statement
 - i) if b) if else c) break d) continue
- e) List features of Python.

Q3) Attempt any Two of the following :

[2 × 4 = 8]

- a) Write a program to get a single string from two given strings, separated by space and swap the first two characters of each string
Sample input: 'abc', 'pqr'
Output: pqc abr
- b) Write a program to display power of 2 upto a given number using anonymous function
Example
N = 2
2 raised to 0 is 1
2 raised to 1 is 2
2 raised to 2 is 4
- c) Write a program to read an entire text file.

Q4) Attempt any Two of the following:

[2 × 4 = 8]

- a) Write a python program to Count Vowels and Consonants in a String.
- b) Write a Python script to print a dictionary where the keys are numbers between 1 and 15 (both included) and the values are the square of the keys.
Sample Dictionary
{1: 1, 2:4, 3:9, 4: 16, 5:25, 6:36, 7:49, 8:64, 9:81, 10: 100, 11: 121, 12: 144, 13: 169, 14: 196, 15: 225}
- c) Write a Python function that accepts a string and counts the number of upper and lower case letters.

Q5) Attempt any one of the following :

[1 × 3 = 3]

a)

a = True

b = False

c = False

if not a or b:

 print (1)

elif not a or not b and c:

 print (2)

elif not a or b or not b and a:

 print (3)

else:

 print (4)

b) def f1(x, l=[]):

 for i in range(x):

 l.append(i*i)

 print(l)

f1 (2)

f1 (3,[3,2,1])

f1 (3)

