

Total No. of Questions : 5]

SEAT No. :

PA-1029

[Total No. of Pages : 3

[5902]-57

T.Y. B.Sc. (Semester - V)

COMPUTER SCIENCE

CS-3510 : Python Programming
(2019 Pattern) (CBCS)

Time : 2 Hours]

[Max. Marks : 35

Instructions to the candidates:

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

Q1) Attempt any Eight of the following (Out of Ten).

[8 × 1 = 8]

- a) What are the advantages of Python?
- b) List out main differences between lists & tuple.
- c) Python is a scripting language. Comment.
- d) Demonstrate set with example.
- e) What is dictionary? Give example.
- f) What is regEx? give example.
- g) What is user defined Module? Give example.
- h) Python is case sensitive language. Comment.
- i) What is dry run in Python?
- j) What is lambda function? Give example.

Q2) Attempt any four of the following (Out of Five).

[4 × 2 = 8]

- a) Write a python program to calculate X^Y .
- b) Write a python program to accept a number and check whether it is perfect number or not.

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- c) What is the use of seek() & tell () functions?
- d) Demonstrate list slicing.
- e) A tuple is ordered collection of items. Comment.

Q3) Attempt any Two of the following (Out of Three). **[2 × 4 = 8]**

- a) Write a short note on datatypes in Python.
- b) Write a short note on exception handling.
- c) What is a module? What is package? Explain with example.

Q4) Attempt any Two of the following (Out of Three). **[2 × 4 = 8]**

- a) Write a recursive function in Python to display addition of digits in single digit.
- b) Write a program in python to accept 'n' integers in a list, compute & display addition of all squares of these integers.
- c) Write a Python program to count all occurrences of "India" and "Country" in a text file "pledge.txt".

Q5) Attempt any One of the following (Out of Two). **[1 × 3 = 3]**

- a) What is the output of following code :

```
X = 5
def f1():
    global X
    X = 4

def f2(a, b):
    global X
    return a+b+X

f1()
total = f2(1, 2)
print (total)
```

b) What is the output of following code :

```
def f(X) :  
    def f1(a, b) :  
        print ("hello")  
        if (b==0) :  
            print ("NO")  
        return  
    return f(a, b)  
    return f1  
@ f  
def f(a, b) :  
    return a%b  
f(4, 0)
```

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