

**SRI SIDDHARTHA INSTITUTE OF TECHNOLOGY, TUMAKURU**  
(A constituent college of Sri Siddhartha Academy of Higher Education, Tumakuru )

**CS4TH4: Programming with Python**

Date:10/05/2022

TEST 1

Time: 3:00 PM to 4:00 PM

Answer all the questions

Maximum Marks :30

- |   | M | C | B |
|---|---|---|---|
| 1 Identify and explain the type of error in each of the following python statements:  | 6 | 1 | 2 |
| i.    >>>celcius=37<br>>>>fahrenheit=9/5*(celcius-32)   |   |   |   |
| ii.   >>>n=5<br>>>>7 = n  |   |   |   |
| iii.  >>>a=4<br>>>>b=0<br>>>>c=a // b   |   |   |   |
| 2 What is the difference between / and // operators in python? Develop a python program to convert the given number of Seconds to Hours, Minutes and Seconds. | 6 | 1 | 2 |
| 3 Interpret the output of the following python statements:  | 6 | 2 | 2 |
| i.    >>>int("23 bottles")  |   |   |   |
| ii.   >>>"Hello" * 3  |   |   |   |
| iii.  >>> 2 ** 2 ** 3   |   |   |   |
| 4 Construct python code snippets for the following:   | 6 | 2 | 3 |
| iii)    To count the digits 0 and 5 in a given number.  |   |   |   |
| iv)     To find the sum of the elements in a list.  |   |   |   |
| 5 Develop a Python program that generates multiplication table of given size.   | 6 | 2 | 3 |

*NOTE: M-Marks, C- Course Outcome and B – Bloom's level*

# SRI SIDDHARTHA INSTITUTE OF TECHNOLOGY, TUMAKURU

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## CS4TH4: Programming with Python

Date:07/06/2022

TEST 2

Time: 3:00 PM to 4:00 PM

Answer all the questions

Maximum Marks :30

M C B

6 4 3

1 Develop Python functions for the following:

- a) To remove all the vowels from a string.
- b) To count the number of times the letter 'a' appears in a string.

2 Explain the following string methods with an example for each: 6 3 2

- a) find( )
- b) split( )
- c) format( )

3 What are tuples? Develop a Python program to sort a list of tuples based on the sum of elements in each tuple. 6 4 3

4 Interpret the output of the following: 6 3 5

a) `a_list = ["a", "b", "c", "d", "e", "f"]`  
`a_list[1:3] = ["x", "y"]`  
`print(a_list)`

b) `a_list = ["a", "d", "f"]`  
`a_list[1:1] = ["b", "c"]`  
`print(a_list)`

c) `fruits=["banana", "apple", "pear", "lemon"]`  
`for (i, v) in enumerate(fruits):`  
`print(i, v)`

5 Explain the following dictionary methods with an example. 6 3 2

- a) keys( )
- b) values( )
- c) items( )

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**CS4TH4: Programming with Python**

Date:28/06/2022

TEST 3

Time: 3:00 PM to 4:00 PM

Answer all the questions

Maximum Marks :20

- |  | M | C | B |
|--|---|---|---|
| 1 Develop Python code snippets to perform the following operations:<br>a) Reading a file one line at a time<br>b) Reading the whole file at once                       | 5 | 4 | 3 |
| 2 What are the different ways of importing modules? Explain them with suitable Python code snippets.   | 5 | 2 | 2 |
| 3 What is the difference between set and frozen set? Demonstrate the set operations union, intersection and difference with a suitable Python code snippet.            | 5 | 3 | 2 |
| 4 Develop a Python program to draw a Polygon of given number of sides. The program should raise and handle appropriate exception when the number of sides is negative. | 5 | 4 | 3 |

*NOTE: M -Marks, C- Course Outcome and B - Bloom's level*