Seat No.: _____   Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY
BE – SEMESTER- V EXAMINATION-SUMMER 2023

Subject Code: 3151108   **Date: 23/06/2023**
Subject Name: Python Programming
Time: 02:30 PM TO 05:00 PM   **Total Marks: 70**
Instructions:
1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**
4. **Simple and non-programmable scientific calculators are allowed.**

			MARKS
Q.1	**(a)**	What are key features of python?	**03**
	(b)	Differentiate between compiler and interpreter. How is the python an interpreted language?	**04**
	(c)	What is the difference between list and tuple in python? Explain with suitable example.	**07**
Q.2	**(a)**	What are local variable and global variable in python?	**03**
	(b)	Explain dictionary in python with the help of example.	**04**
	(c)	What are common built-in data types in python?	**07**
		OR	
	(c)	What is type conversion in python? Explain with the help of suitable example.	**07**
Q.3	**(a)**	Discuss the following function of List in python. a) append( ) b) count( ) c) reverse( )	**03**
	(b)	Explain the use of break, continue and pass statement in python.	**04**
	(c)	Explain Logical Operator and bitwise operator in python.	**07**
		OR	
Q.3	**(a)**	Write the output of the following code.	**03**

```
txt = "Python Programming"
x = txt.casefold()
print(x)
y = txt.count("P")
print(y)
x = txt.split()
print(x)
```

	(b)	Write a python program to check if given string is palindrome or not.	**04**
	(c)	Explain arithmetic operator and assignment operator in python.	**07**
Q.4	**(a)**	Write a Python function to sum all the numbers in a list.	**03**
	(b)	Explain nested if else statement in python	**04**
	(c)	Explain the different methods available for manipulating the CSV files in python.	**07**
		OR	
Q.4	**(a)**	Explain the structure of while loop in python.	**03**
	(b)	What is meant by module in python. List some of the built in module and built in functions of python.	**04**

(c) Write a function in python to count the number of lines from a text file "sample.txt" which is not starting with an alphabet "T". If the file "sample.txt" contains the following lines: What will be the output? **07**

A boy is playing there.
There is a playground.
An aeroplane is in the sky.
The sky is pink.
Alphabets and numbers are allowed in the password.

Q.5 **(a)** What are keywords in python? **03**
(b) What is micro python? Where is it use? **04**
(c) Describe the different access mode of file in python. **07**

OR

Q.5 **(a)** What are the rules for naming a variable in python? **03**
(b) Explain the difference between python and micro python. **04**
(c) Describe the need for catching exceptions using try and except statements with suitable example. **07**

****