

GUJARAT TECHNOLOGICAL UNIVERSITY**BE – SEMESTER- VIII EXAMINATION-SUMMER 2023****Subject Code: 2180711****Date: 19/06/2023****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) Define the terms: 1) Mutability 2) readline() 3) Cloning	03
	(b) Write a program to implement Caesar Cipher.	04
	(c) Define exception. Explain exception handling in python with suitable example.	07
Q.2	(a) Explain Hash Table with suitable example.	03
	(b) Define the terms: 1) Assertion 2) Lambda Abstraction 3) Recursion 4) Regular Expression	04
	(c) Compare list, tuple and dictionary data types in python.	07
	OR	
	(c) Define Testing. Explain Black Box Vs Glass Box testing.	07
Q.3	(a) Explain scoping of local variables in Python.	03
	(b) Explain different functions which allow searching a string for a match. 1) search 2) match 3) group 4) findall	04
	(c) Define inheritance. Explain multiple inheritances with suitable example.	07
	OR	
Q.3	(a) Write a python code to establish socket connection between two machines.	03
	(b) Define specifications. Explain “docstring” in python.	04
	(c) Explain the use of PyLab in python. Explain use of plot(), show() and title() functions of PyLab.	07
Q.4	(a) Define Turtle. Explain the use of it in Python.	03
	(b) Write a python program to implement Binary Search algorithm.	04
	(c) Define Lambda function. Write a program to find area of circle using Lambda function.	07
	OR	
Q.4	(a) Explain the following Turtle methods in Python. 1) Turtle() 2) begin_fill() 3) stamp()	03
	(b) Define default argument. Explain with suitable example.	04
	(c) A company having turnover = [100000, 120000, 154000, 180000, 205000] and profit percentage = [9, 9.5, 9.25, 9, 9.5] of past 5 years. Draw line chart showing growth of profit (in amount) and turnover using pylab module in python. Draw both graphs in same figure.	07

- Q.5** (a) Define the terms: **03**
1) Abstraction 2) Encapsulation 3) Dynamic Binding
- (b) Explain if...else in python with suitable example. **04**
- (c) Write a python program to implement class named "Account" having methods deposit, withdraw, show_balance and account_no, name, amount as the variables. **07**

OR

- Q.5** (a) Write a python program to remove the leading zeros from the IP address. **03**
- (b) Enlist the steps to create chat application using python. **04**
- (c) Write a python program using Tkinter as below. **07**

