

Enrollment No./Seat No.:

GUJARAT TECHNOLOGICAL UNIVERSITY
M.SC INTEGRATED - SEMESTER - V EXAMINATION - SUMMER 2025

Subject Code: 1350505

Date: 20-05-2025

Subject Name: Python Programming-1

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. Use of simple calculators and non-programmable scientific calculators are permitted.**

	Marks
Q.1 (a) Explain features of python.	03
(b) Describe membership operator and identity operator with example.	04
(c) Explain data types available in python.	07
Q.2 (a) What are local variable and global variable in python?	03
(b) Explain the use of break, continue and pass statement in python.	04
(c) Explain List, Tuple and Set with its built-in functions.	07
OR	
(c) Explain while loop and for loop in python. How to create infinite while loop? Explain with example.	07
Q.3 (a) Explain dictionary in python with example.	03
(b) Explain Module in python	04
(c) What is function? Explain its types with arguments.	07
OR	
(a) Write a Python function to sum all the numbers in a list.	03
(b) Enlist different modes of opening file. Describe any three method with example.	04
(c) What is inheritance in python? Explain with example.	07
Q.4 (a) Give difference between black-box and glass-box testing.	03
(b) Explain built-in class attributes with suitable example.	04
(c) What do you mean by abstract data types and classes? Explain with example.	07
OR	
(a) Explain Assertions in python.	03
(b) Discuss Pie Chart and Histograms with an example.	04
(c) What is String in python? How to create String in python? How to accessing characters in python String? Explain with Proper example.	07

- Q.5 (a)** Write a Python program to Swapping of two numbers with and without using temporary variable. **03**
- (b)** Explain lambda function. **04**
- (c)** Explain Searching algorithm with an example. **07**
- OR**
- (a)** Explain nested if else statement in python. **03**
- (b)** Explain Bar chart and Box plot with an example. **04**
- (c)** Explain any two sorting algorithm with an example. **07**
