

GUJARAT TECHNOLOGICAL UNIVERSITY**B.VOC - SEMESTER- IV EXAMINATION – SUMMER 2024****Subject Code: 21140204****Date:22-05-2024****Subject Name: Python Programming****Time:10:30 AM TO 12:30 PM****Total Marks:50****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) Explain features of Python Programming.	05
(b) Write a code that prints your full name and your Birthday as separate strings.	05
Q.2 (a) Explain difference between Interactive mode and Script mode.	05
(b) Write a Python Program to find whether a given number is odd or even.	05
OR	
(b) Write a Python Program for How to check if a given number is a Fibonacci number?	05
Q.3 (a) Explain different math modules used in Python with examples.	05
(b) Write a program to input 'n' numbers and store it in list.	05
OR	
Q.3 (a) Explain break and continue statements with example.	05
(b) Write a Python code to find minimum, maximum and mean of given 10 numbers.	05
Q.4 (a) Explain errors and exceptions in Python.	05
(b) What is tuple? Explain tuple assignment and tuple slices.	05
OR	
Q.4 (a) Explain debugging with pdb using suitable examples.	05
(b) What is a dictionary? Explain creation, initialization and access to the element in the dictionary with suitable examples.	05
Q.5 (a) Explain any five built-in string functions in Python with examples.	05
(b) Write a Python code to perform bubble sort.	05
OR	
Q.5 (a) Explain the notion of states and transitions using state transition diagrams.	05
(b) Write a Python code to perform insertion sort.	05
