GUJARAT TECHNOLOGICAL UNIVERSITY
MCA INTEGRATED– SEMESTER IV- EXAMINATION –SUMMER-2024

Subject Code: 2648601   **Date: 13/05/2024**
Subject Name: Python
Time: 10:30 AM TO 01:00 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.

Q.1	**(a)**	What is REPL?	**02**
	(b)	Discuss use of assert statement.	**05**
	(c)	Explain constructor having more than one parameter with a suitable program.	**05**
	(d)	Explain None value and its applicability.	**02**
Q.2	**(a)**	Write a python program to define a function inside another function.	**07**
	(b)	Discuss creation of data frames from different sources.	**07**
		OR	
	(b)	Write a program to create a bar graph. Assume and display necessary data used for the same.	**07**
Q.3	**(a)**	Explain Tuples with an example.	**07**
	(b)	Write a python program to count number of lines, words and characters in a text file.	**07**
		OR	
Q.3	**(a)**	Write a program to retrieve date of births from a string using regular expression.	**07**
	(b)	Discuss File opening and different file opening modes.	**07**
Q.4	**(a)**	Discuss describe() method. Write a program for the same.	**07**
	(b)	Explain filter, reduce and map with suitable examples.	**07**
		OR	
Q.4	**(a)**	Explain the concept of Inheritance with suitable example.	**07**
	(b)	Explain regular expressions and its usage.	**07**
Q.5	**(a)**	Explain the concepts of cloning with an example.	**07**
	(b)	Discuss Encapsulation and Information Hiding.	**07**
		OR	
Q.5	**(a)**	Write a program to replace a string with new string using regular expression.	**07**
	(b)	Explain method overloading with suitable program.	**07**

****