GUJARAT TECHNOLOGICAL UNIVERSITY
BE- SEMESTER–VIII (NEW) EXAMINATION – WINTER 2020

Subject Code:2180711   **Date:28/01/2021**
Subject Name:Python Programming
Time:02:00 PM TO 04:00 PM   **Total Marks: 56**

Instructions:
1. Attempt any FOUR questions out of EIGHT questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

Q.1	**(a)**	What is dictionary in Python? Explain any four built-in dictionary methods with example.	**03**
	(b)	What are the key features of Python?	**04**
	(c)	Consider the list lst=[9,8,7,6,5,4,3]. Write the Python program which performs the following operation without using built-in methods.	**07**
		1) Insert element 10 at beginning of the list.	
		2) Insert element 2 at end of the list.	
		3) Delete the element at index position 5.	
		4) Print all elements in reverse order.	
Q.2	**(a)**	"List is mutable." - Justify with suitable example.	**03**
	(b)	Explain all augments print() method.	**04**
	(c)	Write a Python program to generate list of fibonacci number upto n fibonacci numbers.	**07**
Q.3	**(a)**	Differentiate List and Tuple in Python.	**03**
	(b)	What is negative indexes and how they are used in Python?	**04**
	(c)	What is monkey patching in Python explain with suitable example.	**07**
Q.4	**(a)**	What is map in Python? Explain with example.	**03**
	(b)	What is the difference between range and xrange?	**04**
	(c)	Explain while loop & for loop with syntax and example in detail.	**07**
Q.5	**(a)**	Explain usage of continue, break, and pass keyword in python.	**03**
	(b)	Explain the exception handling in Python.	**04**
	(c)	Write a program to sort the given list without using built-in methods.	**07**
Q.6	**(a)**	Explain use of import keyword with suitable example.	**03**
	(b)	Write a program which demonstrates multiple inheritance.	**04**
	(c)	Write a program to search given number from list using binary search.	**07**
Q.7	**(a)**	Explain inheritance in Python.	**03**
	(b)	Explain any four methods for regular expression with proper example.	**04**
	(c)	Write a program which draw square and hexagon using turtle.	**07**
Q.8	**(a)**	Explain multi threaded programming in Python.	**03**
	(b)	Explain any four method for TCP socket in Python.	**04**
	(c)	Write GUI program using Tkinter which handle the button click event.	**07**

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