Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

MCA - SEMESTER– III • EXAMINATION – SUMMER - 2017

Subject Code: 3630006 **Date:07-06-2016**

Subject Name: PROGRAMMING WITH PYTHON

Time:02:30 pm - 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.**

Q.1	**(a)**	(I)Define a) Assertion b) Singleton c)Lambda Abstraction d) docstring	**04**
		(II) Explain Slicing of strings in python using examples	**03**
	(b)	**Do as Directed.**	
		1) Give example for implementing multiple variable assignment in python (use single statement).	**01**
		2) Define "numFibCalls" as a global variable.	**01**
		3) Give one difference between overt and covert bug.	**01**
		4) Explain operator "+" and "*" overloading in Python using suitable example	**04**
Q.2	**(a)**	What is magic Methods in? Discuss using suitable example.	**07**
	(b)	Explain how to write function using a program to compute sum of first N integers.	**07**
		OR	
	(b)	What is function? Explain default argument using suitable example.	**07**
Q.3	**(a)**	What is module? Discuss various ways to use module in a python program.	**07**
	(b)	Compare Black Box and White Box Testing techniques.	**07**
		OR	
Q.3	**(a)**	What is List in Python? How list is different from tuple? Discuss any four methods associated with list with suitable example.	**07**
	(b)	Explain in detail Dynamic Programming.	**07**
Q.4	**(a)**	Write a program to implement class named "Account" having methods deposit, withdraw, change Name and show balance.	**07**
	(b)	What is exceptions? Discuss how exceptions simplify programs.	**07**
		OR	
Q.4	**(a)**	Write a program to implement class named "Cart" having methods Add Item, Remove Item, Show Cart details and change Item Quantity.	**07**
	(b)	What is exceptions? Discuss various ways to handle exceptions in python with suitable example.	**07**
Q.5	**(a)**	Write a code to plot graph for (1,2),(2,3),(3,4) and (4,5) and explain various methods used to plot graph in python.	**07**
	(b)	What is recursion? Explain recursion using a program to compute Factorial.	**07**
		OR	
Q.5	**(a)**	Discuss various file handling methods available in python.	**07**
	(b)	Explain binary search using example.	**07**

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