

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**
