

GUJARAT TECHNOLOGICAL UNIVERSITY
MCA– SEMESTER –III EXAMINATION –SUMMER-2019

Subject Code:4639304**Date: 29-05-2019****Subject Name: Programming in Python****Time:02.30 pm to 5.00 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)** Fill the blanks. **07**
- (1) In Function, _____ is an argument that can accept any number of values.
 - (2) It is not possible to create object of _____
 - (3) _____ is a function that written inside the class.
 - (4) _____ is an example of process
 - (5) _____ is a logical point of connection between a server and client.
 - (6) After installing the MySQL interface, we can see a new module by the name _____ in python library.
 - (7) _____ is to communicate information clearly and efficiently using statistical graphs, plots and diagrams.
- (b)** Do as directed.
- (1) Listout different modes of opening the file? **01**
 - (2) What are the uses of threads? **02**
 - (3) Give syntax of the methods which can be used to take input from the user in python program. **02**
 - (4) Is tuple mutable? Lisout three methods of tuple. **02**
- Q.2 (a)** Write the general syntax of class declaration in python. Explain declaration of class and its object with example. **07**
- (b)** What is inheritance? What are the different types of inheritance available in python? Explain each with example. **07**
- OR**
- (b)** What is dictionary in Python? Explain with an example. **07**
- Q.3 (a)** (1) What are the built-in datatypes of python? **03**
 (2) Write a note on Abstract class. **04**
- (b)** What is lambda function in python? Explain lambda function with example. Explain filter(), map() and reduce() functions in brief. **07**
- OR**
- Q.3 (a)** List out keywords used in exception handling and explain with example. Write a Python program which will throw exception if the value entered by user is less than zero. **07**
- (b)** What is Decorators? What is Generators? Explain both with example. **07**
- Q.4 (a)** What is polymorphism? Explain method overloading and operator overloading with example. **07**

- (b) Briefly describe the methods of regular expression. How to use regular expressions on file? Explain with example. **07**
- OR**
- Q.4** (a) What are the advantages of storing data into file? What are the different types of File in python? Write a program to read a text file in Python and print no. of lines and no. of unique words. **07**
- (b) Which are the different ways of creation of threads? Explain each with an example. **07**
- Q.5** (a) What is Protocol? What are the different types of protocol model based on which other protocol model developed? Write a Python program for TCP/IP chat application. **07**
- (b) What is Data Frame? List out ways of creating data frame and explain any one with example. Also list out operations on data frame and explain anyone with example. **07**
- OR**
- Q.5** (a) How to insert, update and delete rows into mysql database using python? Write a program to demonstrate all these operations. **07**
- (b) (1) What is PyLab? Write simple program to plot using PyLab. **04**
- (2) Explain the function which is used to retrieve the parts of URL. **03**
