

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**MCA INTEGRATED– SEMESTER -IV EXAMINATION –SUMMER-2021**

**Subject Code: 2648601****Date: 17/09/2021****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.

- Q.1 (a) Answer the following questions.(Any Seven) 07**
1. What is iteration in python?
  2. What is slicing?
  3. What is generator?
  4. How can you convert string to number?
  5. Mention the use of // operator in python?
  6. What is dictionary in python?
  7. What is the meaning of range function used in for loop?
  8. How can you find the data type of an object in python?
- (b) Explain branching and iteration operation in python with example. 07**
- 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 lambda function in python? Explain lambda function with example. 07**  
Explain filter(), map() and reduce() functions in brief.
- OR**
- (b) What is dictionary in Python? Explain with an example. 07**
- Q.3 (a) Give a comparison between List, Tuple and Dictionaries in Python. 07**
- (b) What is module? Discuss various ways to use module in a python program. 07**
- OR**
- Q.3 (a) What is Decorators? What is Generators? Explain both with example. 07**
- (b) What is Exception? Explain exception handling with example. 07**
- Q.4 (a) What is the use of PyLab in Python? Explain the use of plot(), show() and title() functions of PyLab. 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.4 (a) What is Mortgages? Explain various methods of Mortgages. 07**
- (b) Briefly describe the methods of regular expression. How to use regular expressions on file? Explain with example. 07**

- Q.5 (a)** Discuss various file handling methods available in python. **07**
- (b)** What is inheritance? What are the different types of inheritance available in python? Explain each with example. **07**

**OR**

- Q.5 (a)** Explain various python function used to connect with Mysql database. **07**
- (b)** What do you mean by Assertions? Support your answer with code. **07**

\*\*\*\*\*