

GUJARAT TECHNOLOGICAL UNIVERSITY**MCA INTEGRATED– SEMESTER -IV EXAMINATION –WINTER-2021****Subject Code: 2648601****Date: 24/12/2021****Subject Name: 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) Do as Directed. 07**
1. Recursive Functions.
 2. The assert Statement.
 3. Use of seek() and tell() methods.
 4. What is Tuples and List.
 5. What is IDLE.
 6. What is Dictionaries.
 7. What is use of filter() and map() function.
- (b) 03**
1. Explain indexing and slicing with example.
 2. Explain Dictionaries in python. **04**
- Q:-2 (a) Explain how we can create our own module in python 07**
With example.
- (b) Explain function decorators and generators. 07**
- OR**
- (b) Write syntax for function in python. 07**
Write a code to find maximum of two given numbers. Explain the use and creation, parameter passing function.
- Q:-3 (a) Explain various blocks of exception handling with example. 07**
- (b) What are regular Expressions? Explain it. 07**
- OR**
- (a) Explain user define exception with example. 07**
- (b) How many types of files in python? Write the different operation on file with example. 07**
- Q:-4 (a) Explain the sequence character, Quantifiers and special character 07**
in Regular expression.
- (b) Explain different types of variables. 07**
- OR**
- (a) Explain List, Tuple and Dictionary data types. 07**
- (b) 03**
1. Write a program to implement Factorial series up to user entered number by using recursive Function.
 2. Write python program to retrieve information from a HTML File using a regular expression. **04**
- Q:-5 (a) What is Data visualization? Explain Histogram with Example. 07**
- (b) Write a program to retrieve all rows from Student table and display 07**
the Column values and how to handling the missing values.
- OR**
- (a) What is Data frame? Write different operation on data frames. 07**
- (b) Explain Abstract datatypes and classes. 07**