

**R18**

**Code No: 157EY**

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**

**B. Tech IV Year I Semester Examinations, December-2023/January-2024**

**PYTHON PROGRAMMING**

**(Common to CE, ME, ECE, EIE, MCT, MMT)**

**Time: 3 Hours**

**Max.Marks:75**

**Note:** i) Question paper consists of Part A, Part B.

ii) Part A is compulsory, which carries 25 marks. In Part A, Answer all questions.

iii) In Part B, Answer any one question from each unit. Each question carries 10 marks and may have a, b as sub questions.

**PART – A**

**(25 Marks)**

- 1.a) List out the unsupported types in Python [2]
- b) Distinguish between map and set types. [3]
- c) What is an assertion? How are they used in python? [2]
- d) Differentiate between absolute import and relative import. [3]
- e) Give examples for usage of group and groups methods. [2]
- f) Define the terms process and thread. [3]
- g) What is the importance of client-server architecture in GUI application? [2]
- h) Mention the network location components. [3]
- i) Mention the table showing Database Parameter Styles. [2]
- j) Explain about connection object in Python. [3]

**PART – B**

**(50 Marks)**

2. Explain in detail the classification of standard types in python. [10]
- OR**
- 3.a) Determine the greatest common divisor and least common multiple of a pair of integers with the help of a python code.
  - b) Take a dictionary as input and return one as output, but the values are now the keys and vice versa using python script. [5+5]
- 4.a) What are command line arguments, and why are they useful? Write code to display the command-line arguments which were entered.
  - b) Explain the use of 'sys' module in exception handling with example script. [5+5]
- OR**
- 5.a) Describe the module built-in functions.
  - b) Discuss about the file built-in attributes. [5+5]

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- 6.a) Write regular expressions to i) match the set of the string representations of all Python integers, ii) match the set of the string representations of all Python longs, iii) match the set of the string representations of all Python floats, iv) match the set of the string representations of all Python complex numbers.

b) Explain the multithreading process using threading module. [5+5]

**OR**

- 7.a) Describe the special symbols and characters used in regular expressions.

b) Write multithreaded program by Create Thread Instance, Passing in Callable Class Instance. [5+5]

- 8.a) Describe the steps used to develop a GUI application using tkinter.

b) Explain the functions in urlparse module? [5+5]

**OR**

- 9.a) Develop GUI application using Label, Button, and Entry Widgets.

b) Briefly explain the urllib Module Functions. [5+5]

- 10.a) Describe the different types of cursor fetch methods.

b) With an example, explain the use of Database Adapters with MySQL. [5+5]

**OR**

- 11.a) Write notes on Object Relational Managers.

b) Discuss the basic Database Operations using SQL. [5+5]

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