

**R18****Code No: 157EY****JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****B. Tech IV Year I Semester Examinations, January/February - 2023****PYTHON PROGRAMMING****(Common to CE, ME, ECE, EIE, MCT)****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) How does a computer run a python program? [2]
- b) Explain Running python commands using the REPL. [3]
- c) What is the sys module in Python? [2]
- d) What is file object attribute in Python? Explain. [3]
- e) What are regular expressions in Python? [2]
- f) Explain the special symbols in Python. [3]
- g) How to make a web browser in Python? [2]
- h) Discuss the Web (HTTP) Servers. [3]
- i) Which database is best for Python programming? [2]
- j) Which is the best ORM for Python? [3]

**PART – B****(50 Marks)**

- 2.a) What is Python? Explain the history of Python. [5+5]
  - b) Explain the Standard Type Built-in Functions. [5+5]
- OR**
- 3.a) Discuss Python Objects in detail. [5+5]
  - b) List and explain the Other Built-in Types. [5+5]
4. Explain the Detecting and Handling of Exceptions. [10]
- OR**
- 5.a) What type of object are SYS modules? Explain. [5+5]
  - b) Describe the Exceptions and the sys Module. [5+5]
6. Discuss the Thread Module and Threading Module. [10]
- OR**
7. Explain how the global interpreter lock works. [10]

8. Write a Python program that creates a GUI with a textbox, Ok button, and Quit button. On clicking Ok, the text entered in the textbox is to be printed in Python shell; on clicking Quit, the program should terminate. [10]

**OR**

9. Explain the reusable GUI components with classes. [10]
- 10.a) Give the differences between database programming and distributed database Programming.
- b) How many modules are there in Python? Explain. [5+5]
- OR**
11. Explain the Object Relational Managers (ORMs). [10]

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