

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

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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]

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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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