



MARRI LAXMAN REDDY INSTITUTE OF TECHNOLOGY AND MANAGEMENT

(AN AUTONOMOUS INSTITUTION)

(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad)

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IV B.Tech I Sem Regular End Examination, Nov/Dec 2022

Python Programming (OE-II)

(MECH)

Time: 3 Hours.**Max. Marks: 70**

Note: 1. Question paper consists: Part-A and Part-B.

2. In Part - A, answer all questions which carries 20 marks.

3. 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

(10*2 Marks = 20 Marks)

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|-------|---|----|-----|-----|
| 1. a) | Python supports four different numerical types. List them. | 2M | C01 | BL1 |
| b) | Illustrate string repetition operator. | 2M | C01 | BL2 |
| c) | What are exceptions? | 2M | C02 | BL1 |
| d) | What is meant by pickling? | 2M | C02 | BL1 |
| e) | Create a regular expression to match any pair of words separated by a single space, i.e., first and last names. | 2M | C03 | BL3 |
| f) | What is the significance of global interpreter lock? | 2M | C03 | BL1 |
| g) | Define callbacks. | 2M | C04 | BL1 |
| h) | What is the need of a crawler? | 2M | C04 | BL1 |
| i) | How to create a database? | 2M | C05 | BL1 |
| j) | What is ORM? | 2M | C05 | BL1 |

PART- B

(10*5 Marks = 50 Marks)

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| 2 | Discuss the features of Python and compare them with C language features. | 10M | C01 | BL2 |
|---|---|-----|-----|-----|

OR

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| 3 | a) Write a program that calculates and prints the number of minutes in a year. | 5M | C01 | BL3 |
| | b) Write a program to convert a string representation of a number from octal base to hexa decimal base. | 5M | C01 | BL3 |

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|---|--|-----|-----|-----|
| 4 | Write Python script that looks for a search word in a file and displays each matching line as well as a summary of how many matching lines were found. | 10M | C02 | BL3 |
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OR

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| 5 | a) Discuss the modules for serialization and persistency. | 5M | C02 | BL2 |
| | b) Write a program to handle arithmetic exception. | 5M | C02 | BL3 |

- 6 Discuss the most popular of the meta characters, special characters and symbols, which give regular expressions their power and flexibility 10M C03 BL2
- OR**
- 7 a) What is a thread? How does it differ from a process? 5M C03 BL1
b) List the methods of Thread module. 5M C03 BL1
- 8 a) There are basically five main steps that are required to get GUI up and running .Discuss them. 5M C04 BL2
b) What is the significance of Tix module? 5M C04 BL1
- OR**
- 9 a) Describe any two methods of urllib module. 5M C04 BL2
b) How to build CGI application? 5M C04 BL1
- 10 Illustrate the layers involved in writing a Python database application and briefly explain. 10M C05 BL2
- OR**
- 11 Write a python program to display student results after reading the hall ticket number from user. Consider student results data in Database table. 10M C05 BL3

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