



MARRI LAXMAN REDDY
INSTITUTE OF TECHNOLOGY AND MANAGEMENT

(AN AUTONOMOUS INSTITUTION)

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

Accredited by NBA and NAAC with 'A' Grade & Recognized Under Section 2(f) & 12(B) of the UGC act, 1956

III B.Tech I Sem Supply End Examination, July 2022

Principles of Programming Languages

(CSE & IT)

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) | Differentiate between static and dynamic semantic? | 2M | C01 | BL2 |
| b) | List out language categories? | 2M | C01 | BL1 |
| c) | Explain about the problems in unconditional branching? | 2M | C02 | BL2 |
| d) | Differentiate between user defined and primitive data types with an example? | 2M | C02 | BL2 |
| e) | Differentiate between function and procedure? | 2M | C03 | BL2 |
| f) | Explain about the local referencing environments? | 2M | C03 | BL2 |
| g) | What is message passing? | 2M | C04 | BL1 |
| h) | What are the operations on semaphores? | 2M | C04 | BL1 |
| i) | What are the applications of functional programming languages? | 2M | C05 | BL1 |
| j) | What are the benefits of data abstraction? | 2M | C05 | BL1 |

PART- B

(10*5 Marks = 50 Marks)

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|------|--|----|-----|-----|
| 2 a) | Explain formal methods of describing syntax. | 5M | C01 | BL4 |
| b) | Explain the criteria of success for a good programming language? | 5M | C01 | BL4 |

OR

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|------|---|-----|-----|-----|
| 3 | Discuss about language recognizers and language generators? | 10M | C01 | BL2 |
| 4 a) | Discuss the structure and implementation of an associative array with an example? | 5M | C02 | BL2 |
| b) | What are the design issues for names? Explain. | 5M | C02 | BL2 |

OR

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|---|---|-----|-----|-----|
| 5 | Explain about the control structures with an example? | 10M | C02 | BL6 |
|---|---|-----|-----|-----|

- 6 a) Explain how subprogram is overloaded? Give example 5M C03 BL4
b) Discuss user defined overloaded operators? 5M C03 BL2

OR

- 7 Explain the different parameter passing methods with an example? 10M C03 BL4

- 8 a) Explain the different types of semaphores? 5M C04 BL4
b) Explain how to handle the exceptions in C++ ? 5M C04 BL4

OR

- 9 Explain in detail about the concurrency? 10M C04 BL4

- 10 a) Discuss the key concepts of scripting languages? 5M C05 BL2
b) Explain the comparison between functional and imperative Languages? 5M C05 BL4

OR

- 11 Explain various storage and control statements available in Python? 10M C05 BL4

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