



MARRI LAXMAN REDDY INSTITUTE OF TECHNOLOGY AND MANAGEMENT

(AN AUTONOMOUS INSTITUTION)

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

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I B.Tech II Sem Supplementary Examination, September 2022

Programming for Problem Solving

(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) | Name any five features of C programming Language. | 2M | C01 | BL1 |
| b) | Describes primary and secondary memory | 2M | C01 | BL1 |
| c) | How to declare, define and initialize a pointer? | 2M | C02 | BL1 |
| d) | What is meant by an array of pointers? when it will be useful. | 2M | C02 | BL1 |
| e) | What is file? Write two advantages? | 2M | C03 | BL1 |
| f) | Describes text and binary file | 2M | C03 | BL2 |
| g) | Write an algorithm for printing the n terms in the Fibonacci sequence. | 2M | C04 | BL1 |
| h) | Defines a recursive function. | 2M | C04 | BL1 |
| i) | What is linear search algorithm? | 2M | C05 | BL1 |
| j) | Write any two advantages of binary search algorithm. | 2M | C05 | BL1 |

PART- B

(10*5 Marks = 50 Marks)

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|------|--|----|-----|-----|
| 2 a) | Draw a flow chart to find the maximum of the given three numbers | 5M | C01 | BL5 |
| b) | Explain Storage classes with examples | 5M | C01 | BL2 |

OR

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|------|--|----|-----|-----|
| 3 a) | Distinguish between if and switch statements | 5M | C01 | BL2 |
| b) | Write the syntax of while and do while | 5M | C01 | BL1 |
| 4 a) | Write a C program for the finding the minimum element in an array. | 5M | C02 | BL1 |
| b) | What is Enumeration data type explain with example | 5M | C02 | BL1 |

OR

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|------|--|----|-----|-----|
| 5 a) | Describe various control structures available c | 5M | C02 | BL2 |
| b) | What is an array? Explain the two-dimensional array with a suitable example program in c | 5M | C02 | BL1 |

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|---|----|--|----|-----|-----|
| 6 | a) | Explain preprocessor directives with suitable examples | 5M | C03 | BL1 |
| | b) | Write a C program to count number of occurrences of a character in a given file. | 5M | C03 | BL3 |

OR

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| 7 | a) | Discuss the significance of Preprocessor commands with example | 5M | C03 | BL2 |
| | b) | Discuss the file handling functions feof, fseek with examples | 5M | C03 | BL2 |

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|---|----|---|----|-----|-----|
| 8 | a) | Write a program to swap two numbers using functions | 5M | C04 | BL4 |
| | b) | What is meant by binary file? Discuss about file positioning functions. | 5M | C04 | BL2 |

OR

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|---|----|---|----|-----|-----|
| 9 | a) | Explain the difference between 'call by value' and 'call by reference' using pointers | 5M | C04 | BL5 |
| | b) | Classify what are the standard functions and libraries in c | 5M | C04 | BL2 |

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|----|----|--|----|-----|-----|
| 10 | a) | Compare selection sort with insertion sort with suitable examples. | 5M | C05 | BL2 |
| | b) | Explain linear search technique with suitable example | 5M | C05 | BL2 |

OR

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|----|----|--|----|-----|-----|
| 11 | a) | Explain binary search technique with suitable example | 5M | C05 | BL2 |
| | b) | Compare insertion with bubble sort with suitable examples. | 5M | C05 | BL2 |

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CO: Course Outcome

BL - Blooms Taxonomy Levels