



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

I B.Tech I Sem Supplementary Examination, October 2022

Programming for Problem Solving

(CE, ECE, 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)

- | | | | | |
|-------|--|----|-----|----|
| 1. a) | What is a compiler | 2M | C01 | L1 |
| b) | What is library functions in c | 2M | C01 | L1 |
| c) | How to define a union? | 2M | C02 | L2 |
| d) | Define what is an array | 2M | C02 | L2 |
| e) | What is random access file | 2M | C03 | L1 |
| f) | What is static file | 2M | C03 | L1 |
| g) | What is call by reference | 2M | C04 | L1 |
| h) | What is call by value | 2M | C04 | L1 |
| i) | Define what is searching. | 2M | C05 | L1 |
| j) | Diff between sorted and unsorted order | 2M | C05 | L2 |

PART- B

(10*5 Marks = 50 Marks)

- | | | | | |
|-------|---|----|-----|----|
| 2. a) | What are the C operators? Explain their usage with suitable examples to each of them. | 5M | C01 | L1 |
| b) | Discuss different bit wise operators in 'C' using suitable examples. | 5M | C01 | L2 |

OR

- | | | | | |
|-------|---|----|-----|----|
| 3. a) | Explain about arithmetic operators with examples | 5M | C01 | L2 |
| b) | What is dynamic memory allocation? Explain the dynamic memory allocation functions with syntax. | 5M | C01 | L1 |
| 4. a) | What is Union explain the suitable example | 5M | C02 | L2 |
| b) | interprets what are the basic string functions in c | 5M | C02 | L2 |

OR

- | | | | | |
|-------|---|----|-----|----|
| 5. a) | Discuss about pointers to pointers with suitable examples. | 5M | C02 | L2 |
| b) | Explain the difference between the structures, arrays and array of structures | 5M | C02 | L2 |

- | | | | | | |
|-----------|----|---|----|-----|----|
| 6 | a) | Write a c program to find whether the given no is Armstrong or not | 5M | C03 | L2 |
| | b) | Explain the functions for reading and writing operations in files. | 5M | C03 | L2 |
| OR | | | | | |
| 7 | a) | Explain the functions for reading and writing operations in files. | 5M | C03 | L2 |
| | b) | What is meant by the state of the file? Write c program to copy the content of one text file to another text file | 5M | C03 | L1 |
| 8 | a) | Write a function to find the sum of given n numbers | 5M | C04 | L1 |
| | b) | Explain Dynamic memory allocation with suitable examples | 5M | C04 | L2 |
| OR | | | | | |
| 9 | a) | Example program for passing parameters to functions using c | 5M | C04 | L1 |
| | b) | Write a C program to find factorial of a given number using functions | 5M | C04 | L1 |
| 10 | a) | Explain linear search with suitable example | 5M | C05 | L2 |
| | b) | Compare selection sort with bubble sort with suitable examples. | 5M | C05 | L4 |
| OR | | | | | |
| 11 | a) | Write the step-by-step procedure to search the given key using Binary Search method.(3,54,67,99,101,342,573,789) key=54 | 5M | C05 | L4 |
| | b) | What is insertion sort? Sort the following elements using insertion sort method. 24 56 47 35 10 90 82 31. | 5M | C05 | L4 |

---oo0oo---

CO: Course Outcome

BL - Blooms Taxonomy Levels