



I B.TECH I Sem Regular End Examination, July 2021

PROGRAMMING FOR PROBLEM SOLVING**(CE, CSC, CSD, ECE & MECH)****Time: 3 Hours.****Max. Marks: 70**

Note: 1. Answer any FIVE questions.

2. Each question carries 14 marks and may have a, b as sub questions.

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| 1 | a) Explain in detail about relational operators with examples. | 7M | C03 | L2 |
| | b) Discuss the concept of type conversion in C. | 7M | C03 | L2 |
| 2 | a) List and explain various storage classes available in C. | 7M | C03,4 | L2 |
| | b) Define Flowchart. Draw a flowchart to find roots of quadratic equation. | 7M | C02 | L5 |
| 3 | Describe the various control statements available in 'C'. | 14M | C03 | L2 |
| 4 | a) Write a C program to find whether the given no is prime or not. | 7M | C03 | L3 |
| | b) Write a C program for addition of given two matrices. | 7M | C03,5 | L3 |
| 5 | a) Explain any FIVE string handling functions with syntax and program. | 7M | C03,5 | L2 |
| | b) Differentiate between structure and union in C. | 7M | C05 | L4 |
| 6 | a) List and explain the functions used to allocate and free memory dynamically. | 7M | C04 | L2 |
| | b) Define Recursion. Write a recursive function for factorial of a given number n. | 7M | C04 | L1,3 |
| 7 | a) Explain call by value parameter passing mechanism with an example. | 7M | C04 | L2 |
| | b) Write a C program to merge two files into third file. | 7M | C04 | L5 |
| 8 | a) List and explain various file read/write functions available in C with examples illustrating their usage and implementation. | 7M | C03 | L1,2 |
| | b) Explain about preprocessor commands: define, undef, ifdef | 7M | C03 | L2 |