

Code No: 152AF

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**B.Tech I Year II Semester Examinations, June - 2022****PROGRAMMING FOR PROBLEM SOLVING****(Common to EEE, CSE, IT, CSIT, ITE, CE(SE), CSE(CS), CSE(DS), CSE(Networks))****Time: 3 Hours****Max. Marks: 75**

Answer any five questions
All questions carry equal marks

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- 1.a) Explain briefly about the components of a computer.
- b) Write an algorithm to find the factorial of a given number. [8+7]
2. Define operator? List and explain various operators used in C programming language. [15]
- 3.a) Develop a C Program to perform matrix multiplication.
- b) What is the syntax for Structure? Explain with an example. [7+8]
- 4.a) Explain in detail about various types of string handling functions with an example.
- b) Describe briefly about Enumerated Data Types. [8+7]
- 5.a) Explain briefly about Commonly used Preprocessor commands include and define.
- b) Develop a C program to write contents in to file using file I/O. [8+7]
- 6.a) Illustrate recursive function with a suitable example.
- b) Differentiate call by value and call by reference. [7+8]
- 7.a) Explain in detail about user defined functions with an example program.
- b) Develop a C program to print the Fibonacci series using recursion. [8+7]
- 8.a) Write an algorithm to find the roots of a quadratic equations.
- b) Develop a C program to search an element using Binary search technique. [7+8]

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