

NATIONAL INSTITUTE OF TECHNOLOGY, KURUKSHETRA
THEORY EXAMINATION

ROLL NO._____

Date of the Examination: **10-03-2021**

Semester...1st

Course No.....CSIR-11.....

Number of Questions to be attempted...06...

Total No. of Questions.....06.....

Programme:B.Tech.....

Subject: Basics of Programming

Maximum Marks...50.....

Time allowed ...2 Hours.....

Total No. of Pages used...2....

Instructions: 1. All questions are compulsory.

2. Marks for every part of question are indicated against it.

Q1.	(A) Explain the functioning of each unit of computer with the help of block diagram.	5
	(B) What are variables in C language? Write rules for naming any identifier.	3
Q2.	(A) Differentiate between break and continue statement with suitable example of each.	5
	(B) Write a program that compares two given dates. To store a date use a structure that contains three members namely date, month and year. If dates are equal then display the message "EQUAL" otherwise "UNEQUAL".	5
Q3.	(A) Can relational operations be performed on a string? Explain.	2
	(B) What is the null character and what it is used for, in the context of the strings?	2
	(C) WAP to remove all the characters of a string except alphabets.	3
Q4.	(A) What are various bitwise operators available in C? How are they different from logical operators?	2
	(B) Find and store transpose of a non-square matrix (i) into a new matrix, (ii) into itself without using any extra array/matrix. Display the result as row-wise matrix.	6

Q5.	<p>(A) Write a modular program to find sum of 2 matrices. Matrices could be non-square and orders should be read in main. Make separate functions for (i) reading a matrix (ii) adding two matrices (iii) displaying a matrix</p> <p>(B) Write a program to print following pattern:</p> <pre> 1 1 1 1 2 1 1 3 3 1 1 4 6 4 1 1 5 10 10 5 1 </pre>	<p>8</p> <p>5</p>
Q6.	<p>(A) Write a program to generate fibonacci series upto n (i.e. given number) using while loop as well as do- while loop.</p>	4