



# CAMBRIDGE INSTITUTE OF TECHNOLOGY

K.R. PURAM, BENGALURU-560036

## Department of Computer Science and Engineering

Program: B.E. ☒ M.Tech. ☐ Specialization:

### Second Internal Assessment - Even Semester 2018-19

Sub. Name: C Programming for Problem Solving

Sub. Code: 18CPS23

Semester: II

Date: 13-05-2019

Time: 2:30 PM

Duration: 90 Minutes

Max. Marks: 30

[Instructions: Answer any two full questions as indicated below]

Sl. No.	QUESTIONS	COs	RBT Levels	Marks
1.	a) What is the syntax of the jumping statement <b>break</b> within loops in C language? b) Explain in detail the elements of a user defined function with suitable example. c) Write a C program to display the binomial coefficient of given n and r value.	CO2 CO4 CO2	L1 L2 L3	02M 06M 07M
	OR			
2.	a) List the advantages and disadvantages of binary search. b) Write a C program for the following: i) To check if a given number is prime or not ii) To find GCD of 2 numbers using Euclid's method. c) Write a C program to print the factorial of a given number.	CO2 CO4 CO2	L1 L2 L3	02M 06M 07M
3.	a) What is a one dimensional array? b) Explain the declaration and initialization of two dimensional (2-D) arrays with examples. c) Write a C program to sort a given set of n elements using bubble sort.	CO3 CO3 CO3	L1 L2 L3	02M 06M 07M
	OR			
4.	a) Draw the memory layout of two dimensional array <b>int a[3][2]</b> by considering the starting address as 8000. b) Explain the following string handling functions with syntax and example: i) <code>strcat()</code> ii) <code>strcmp()</code> iii) <code>strcpy()</code> . c) Write a C program to find the length of the string without using string handling functions.	CO3 CO3 CO3	L1 L2 L3	02M 06M 07M

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