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PRESIDENCY UNIVERSITY

BENGALURU

Mid - Term Examinations – October 2025

Date: 11-10-2025

Time: 09.30am to 11.00am

School: SOIS	Program: BCA	
Course Code: CSA1500	Course Name: Problem Solving using C	
Semester: I	Max Marks: 50	Weightage: 25%

CO - Levels	CO1	CO2	CO3	CO4	CO5
Marks	24	26	-	-	-

Instructions:

- (i) *Read all questions carefully and answer accordingly.*
- (ii) *Do not write anything on the question paper other than roll number.*

Part A

Answer ALL the Questions. Each question carries 2marks.

5Q x 2M=10M

1	Name the four basic data types in C language.	2 Marks	L1	CO1
2	List the arithmetic operators available in C.	2 Marks	L1	CO1
3	Differentiate between break and continue statements with examples.	2 Marks	L1	CO2
4	List the different types of looping statements in C.	2 Marks	L1	CO2
5	Write the syntax of the for loop in C	2 Marks	L1	CO2

Part B

Answer the Questions.

Total Marks 40M

6.	a.	1. Describe the basic structure of a C program with an example code skeleton. Name all the sections. (5M) 2. What are operators? Explain Relational and Logical Operators with examples and their truth tables. (5M)	10 Marks	L1	CO1
	b.	Write an algorithm and draw a flowchart to find the largest of three numbers. Then, write its C program.	10 Marks	L1	CO1

Or

7.	a.	Write a C program for Swapping of two numbers with temporary variable and without temporary variable	10 Marks	L1	CO1
	b.	Explain the role of keywords, identifiers, constants, operators, and special symbols in C programming with examples.	10 Marks	L1	CO1

8.	a.	Write a program using loops to generate the multiplication table of a given number as below and write Algorithm and flow chart for the same. 1*2=2 2*2=4 2*3=6 2*4=8 2*5=102*10=20	10 Marks	L3	CO2
	b.	Write a program using the switch statement to display the name of the day based on day number (1-7) write a algorithm and flow chart for the same.	10 Marks	L3	CO2

Or

9.	a.	Explain all types of looping statements (for, while, do-while) with syntax, flowchart, and examples.	10 Marks	L3	CO2
	b.	1. Evaluate the expression $10 + 4 * 3 / 2$ step by step. 2. Write a program using the for loop to find the sum of the first 10 natural numbers.	10 Marks	L3	CO2