

Roll No.								
----------	--	--	--	--	--	--	--	--



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.	<p>1. Describe the basic structure of a C program with an example code skeleton. Name all the sections. (5M)</p> <p>2. What are operators? Explain Relational and Logical Operators with examples and their truth tables. (5M)</p>	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.	<p>Write a C program for Swapping of two numbers with temporary variable and without temporary variable</p>	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.	<p>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.</p> <p>1*2=2 2*2=4 2*3=6 2*4=8 2*5=102*10=20</p>	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.	<p>Explain all types of looping statements (for, while, do-while) with syntax, flowchart, and examples.</p>	10 Marks	L3	CO2
	b.	<p>1. Evaluate the expression $10 + 4 * 3 / 2$ step by step.</p> <p>2. Write a program using the for loop to find the sum of the first 10 natural numbers.</p>	10 Marks	L3	CO2