



# PRESIDENCY UNIVERSITY

BENGALURU

Roll No.

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## 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	C01	C02	C03	C04	C05
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	C01
2	List the arithmetic operators available in C.	2 Marks	L1	C01
3	Differentiate between break and continue statements with examples.	2 Marks	L1	C02
4	List the different types of looping statements in C.	2 Marks	L1	C02
5	Write the syntax of the for loop in C	2 Marks	L1	C02

## Part B

**Answer the Questions.**

**Total Marks 40M**

<b>6.</b>	<b>a.</b>	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)	<b>10 Marks</b>	<b>L1</b>	<b>CO1</b>
	<b>b.</b>	Write an algorithm and draw a flowchart to find the largest of three numbers. Then, write its C program.	<b>10 Marks</b>	<b>L1</b>	<b>CO1</b>
<b>Or</b>					
<b>7.</b>	<b>a.</b>	Write a C program for Swapping of two numbers with temporary variable and without temporary variable	<b>10 Marks</b>	<b>L1</b>	<b>CO1</b>
	<b>b.</b>	Explain the role of keywords, identifiers, constants, operators, and special symbols in C programming with examples.	<b>10 Marks</b>	<b>L1</b>	<b>CO1</b>

<b>8.</b>	<b>a.</b>	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=10 .....2*10=20	<b>10 Marks</b>	<b>L3</b>	<b>CO2</b>
	<b>b.</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.	<b>10 Marks</b>	<b>L3</b>	<b>CO2</b>
<b>Or</b>					
<b>9.</b>	<b>a.</b>	Explain all types of looping statements (for, while, do-while) with syntax, flowchart, and examples.	<b>10 Marks</b>	<b>L3</b>	<b>CO2</b>
	<b>b.</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.	<b>10 Marks</b>	<b>L3</b>	<b>CO2</b>