Roll No: | | | | | | | | | | | |

PRESIDENCY UNIVERSITY

GAIN MORE KNOWLEDGE
REACH GREATER HEIGHTS

Presidency University Act, 2013 of the Karnataka Act No. 41 of 2013 | Established under Section 2(f) of UGC Act, 1956
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Bengaluru

Mid Term Examinations - October 2026

Date: 08/10/2026 **Time:** 02:00 PM - 03:30 PM

Course Code: CSA1500 **Course Name:** Problem Solving using C

Semester: First Semester **Max. Marks:** 50 **Weightage:** 50%

CO - Levels	CO1	CO2	CO3
Marks	72	132	66

PART A: Answer Following Questions. 10 M

Q.N.	Questions	M	CO	BT
1	Differentiate between a constant and a variable in C.	2	CO1	BT2
2	Explain printf() and scanf() with their syntax.	2	CO1	BT2
3	Illustrate the difference between the = and == operators with a suitable example?	2	CO2	BT2

4	**Find the Output:**
	#include <stdio.h>
	int main()
	{
	int a = 10;
	printf("%d", a + 5 * 2);
	return 0;
	}
		2	CO2	BT2

5	**Illustrate the output:**
	#include <stdio.h>
	int main()
	{
	int a[5] = {2, 4, 6, 8, 10};
	printf("%d", a[0] + a[4]);
	return 0;
	}
		2	CO3	BT2

PART B : Answer Any 1 Following Questions. 10 M

Q.N.	Questions	M	CO	BT
6	Explain the structure of a C program with a neat diagram. Describe the purpose of the header file, main() function, declarations, and statements with a suitable example.	10	CO1	BT2
7	Illustrate the different types of tokens used in C and discuss their significance in constructing a valid C program.	10	CO1	BT2

PART C: Answer Any 1 Following Questions. 10 M

Q.N.	Questions	M	CO	BT
8	Differentiate between relational, logical, and bitwise operators in C with suitable examples.	10	CO2	BT2

9	Evaluate the following expression step by step using operator precedence: i) 18+6∗4−20/5+(7−3)∗2 ii)15+3∗4−18/2+(8−5)∗6	10	CO2	BT3

PART D: Answer Any 1 Following Questions. 10 M				
Q.N.	**Questions**	**M**	**CO**	**BT**
10	Compare the for, while, and do–while loops in C with respect to their syntax, flowchart, execution, and suitable example.	10	CO2	BT3
11	Write a C program to print the multiplication tables for a given range of numbers using a for loop. Explain the working of the program.	10	CO2	BT3

PART E: Answer Any 1 Following Questions. 10 M				
Q.N.	**Questions**	**M**	**CO**	**BT**
12	Explain the declaration, initialization, and operations of a one & two dimensional array in C with a suitable example.	10	CO3	BT2
13	Develop a C program to perform the addition of two matrices of order 3 × 3 using two-dimensional arrays and display the resultant matrix.	10	CO3	BT3