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

GAIN MORE KNOWLEDGE
REACH GREATER HEIGHTS

PRESIDENCY UNIVERSITY

Presidency University Act, 2013 of the Karnataka Act No. 41 of 2013 | Established under Section 2(f) of UGC Act, 1956
Approved by AICTE, New Delhi | Approved By BCI
Bengaluru

Mid Term Examinations - October 2026

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

Course Code: CSC1500 **Course Name:** Problem Solving using C

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

CO - Levels	CO1	CO2	CO3
Marks	24	44	22

PART A: Answer Following Questions. 10 M

Q.N.	Questions	M	CO	BT
1	List any four features of C programming.	2	CO1	BT1
2	Explain character set with suitable example.	2	CO1	BT2
3	Illustrate break statement with an example.	2	CO2	BT2

4	Write the output of the below code. int a=7;
	if(a>5)
	printf("Yes");
	else
	printf("No");
		2	CO2	BT3

5	What is the output of the below code. int a[]={5, 10, 15, 20}; printf("%d", a[1]*a[3]);	2	CO3	BT3

PART B : Answer Any 1 Following Questions. 10 M

Q.N.	Questions	M	CO	BT
6	a) Explain the different problem solving techniques used in C programming. b) Elucidate the good characteristics of an algorithm.	10	CO1	BT2
7	Draw a flowchart and write an algorithm to read the marks of a student in six different subjects and calculate the total marks and percentage.	10	CO1	BT3

PART C: Answer Any 1 Following Questions. 10 M

Q.N.	Questions	M	CO	BT
8	Evaluate the following expression by showing each step of evaluation: 12/3∗(2+4∗2)−5∗(6/2)+7.	10	CO2	BT3
9	A college wants to determine the result of a student based on their marks. Write a C program using a nested if-else statement to read the marks of a student and display the result according to the following conditions: If the marks are 50 or above, check whether the marks are 75 or above. If yes, display "Distinction". Otherwise, display "Pass". If the marks are below 50, display "Fail".	10	CO2	BT3

PART D: Answer Any 1 Following Questions. 10 M

Q.N.	Questions	M	CO	BT

PTO (Please Turn Over)

10	Explain the while and do-while loops with syntax and suitable examples. Highlight the difference in their execution.	10	CO2	BT2
11	Write a C program using nested for loops to print the following pyramid pattern for n rows. Explain the role of the outer and inner loops in generating the pattern.	10	CO2	BT3

PART E: Answer Any 1 Following Questions. 10 M				
Q.N.	**Questions**	**M**	**CO**	**BT**
12	Explain the concept of arrays in C. Discuss the declaration, initialization, and accessing of elements of a one-dimensional array with suitable examples.	10	CO3	BT2
13	Write a C program to read n elements into an array and calculate and display the sum and average of the elements.	10	CO3	BT3