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
Approved by AICTE, New Delhi | Approved By BCI
Bengaluru

Mid Term Examinations - October 2026

Date: 08/10/2026 **Time:** 09:30 AM - 11:00 AM

Course Code: CSC1502 **Course Name:** Computational Thinking

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

CO - Levels	CO1	CO2	CO3
Marks	24	22	44

PART A: Answer Following Questions. 10 M

Q.N.	Questions	M	CO	BT
1	Differentiate between Computational Thinking and traditional problem-solving approaches.	2	CO1	BT2
2	Summarize the major steps involved in problem solving.	2	CO1	BT2
3	Explain how Computational Thinking helps in breaking down and solving complex problems.	2	CO2	BT2
4	What is an an algorithm? Describe any two characteristics of a good algorithm.	2	CO3	BT2
5	List any four commonly used flowchart symbols and state the purpose of each.	2	CO3	BT2

PART B : Answer Any 1 Following Questions. 10 M

Q.N.	Questions	M	CO	BT
6	A college wants to develop an online library management system. Using Computational Thinking, describe how principles of computational thinking can be used to make a problem definition.	10	CO1	BT2
7	Summarize the various steps involved, such as problem, desired solution, target O/P, process, I/P required to make a problem definition for a case where a student has low marks and wishes to achieve high marks.	10	CO1	BT2

PART C: Answer Any 1 Following Questions. 10 M

Q.N.	Questions	M	CO	BT
8	You are tasked with planning a total wedding app. Apply computational thinking in planning and executing this task. Apply decomposition principles and provide a final list of items/modules you would include in it.	10	CO2	BT3
9	A school wants to develop a system that identifies students who may need academic support based on their attendance and examination performance. Apply computational-thinking techniques to solve this problem. Your answer should include decomposition techniques to reduce into smaller sub-problems.	10	CO2	BT3

PART D: Answer Any 1 Following Questions. 10 M

Q.N.	Questions	M	CO	BT
10	Write structured pseudocode for a program that accepts the marks of a student and determines the student's grade according to the following criteria: 70–100 is Grade A 40–69 is Grade B, 0–39 isGrade C.	10	CO3	BT3

PTO (Please Turn Over)

11	A bank wants to determine whether a customer is eligible for a loan. The customer is eligible if their monthly income is at least 30,000 and their credit score is at least 700. Develop a suitable algorithm and flow chart.	10	CO3	BT3

PART E: Answer Any 1 Following Questions. 10 M				
Q.N.	**Questions**	**M**	**CO**	**BT**
12	Develop a structured pseudocode to calculate the factorial of a given positive integer.	10	CO3	BT3
13	A college wants to develop a simple student result-processing system. The system should accept marks in three subjects, calculate the total and average, and determine whether the student has passed. A student passes only if the average is 40 or above. Apply the concepts of algorithm design to develop a flowchart and pseudocode for a solution.	10	CO3	BT3