

 VIT-AP UNIVERSITY	Continuous Assessment Test - 1 Fall Semester (2025-26) - August 2025	
	Maximum Marks: 50	Duration: 90 Mins
Course Code: CSE1022	Course Title: Introduction to Programming	
Set No: 3	Exam Type : Closed Book	School: SCOPE
Date: 21/08/2025	Slot: D1	Session: FN
Keeping mobile phone/smart watch, even in 'off' position is treated as exam malpractice		
General Instructions if any Open Book/Open Notebook/Closed Book: 1. "fx series" - non Programmable calculator are permitted : NO 2. Reference tables permitted : NO		

PART – A: Answer any ALL Questions, Each Question Carries 10 Marks (5×10=50 Marks)

1. Imagine that you are working for a banking system, and your job is to make it easier to analyse transaction codes. Each transaction code is a six-digit number, where every digit holds specific information about the transaction. To simplify the process, you need a way to break down these codes, understand their details, and perform basic calculations. Write a program in C that reads a six-digit transaction code from the user, separates it into individual digits, then calculates the sum and product of those digits, and finally displays the results. **(10 M)**
2. Write a C program to generate bill of purchased items in the store. Discount Policy of the Online Store:
 - Item 1: Priced at ₹50. A 5% discount applies if the total purchase exceeds ₹500.
 - Item 2: Priced at ₹100. A 10% discount applies if the total purchase exceeds ₹1000.
 Overall Purchase Discounts:
 - 15% discount on total purchases above ₹5000
 - 10% discount on purchases between ₹4000 and ₹5000
 - No discount on purchases below ₹4000 **(10 M)**
3. Write a C program that prints the polynomial series $i, i + k, i + 2k, i + 3k, \dots$ upto n terms where $i=1$, and ' k ', ' n ' are given by user.
 Sample input: $k=3, n=3$
 Sample output: 1 4 7 **(10 M)**
4. A weather station records the daily maximum temperatures for a month. Develop a C program that takes these 30 temperature readings as input. The program should then:
 - Find the highest and lowest temperatures recorded during the month.
 - Calculate the average temperature for the month. **(10 M)**

5. A software company is developing a modular student management system in C. One requirement is to compute a student's final result based on multiple assignments, each having different weightage. However, the number of assignments are not fixed. Calculating the final result requires breaking the task into multiple functions:

- One function to take the number of assignments, marks of assignments and weightage of assignments from the user.
- One function to calculate the weighted average for 100 marks.
- One function to display the result of student.

(10 M)

QP MAPPING

Q. No.	E/A/T	Module Number	Marks	BL	CO Mapped	PO Mapped	PEO Mapped	PSO Mapped
Q1	E	1	10	3	1	1,3,4,5	1,4	-
Q2	A	1	10	3	1	1,3,4,5	1,4	-
Q3	A	1	10	3	1	1,3,4,5	1,4	-
Q4	T	2	10	3	2	1,3,4,5	1,4	-
Q5	T	2	10	3	2	1,3,4,5	1,4	-