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NMAM INSTITUTE OF TECHNOLOGY, NITTE											
Off-Campus Centre of Nitte (Deemed to be University)											
I Sem B.Tech (CBCS) Mid Semester Examinations - III, November 2024											
CS1001-2 – PROBLEM SOLVING THROUGH PROGRAMMING											
(For ACT, BT, CV, EC, EE, ME, VLSI, AD, AM, CB, CC, CS, IS, RI)											
	Durat	tion: 1 Hour		Max. Marks: 20							
Part – A: Multiple Choice Questions (1*4 = 4 marks)											
Note: Answer all Four questions in the Answer Book. Each question carries equal marks.											
1.	Ch	Choose a syntax for C Ternary Operator from the list.									
	A)	Condition ? expression1 : expression2	B)	condition ? expression1 < expression2							
	C)	condition < expression1 ? expression2	D	condition: expression1? expression2							
2.	In C, what happens if two variables with the same name are declared in different scopes (e.g., one										
		global and one local)?									
	A)	The program will result in a compilation error.	B)	The global variable will be accessible							
				throughout the program.							
	C)	3	D)	Both variables will be accessible, leading to							
		within its scope.		undefined behavior.							
3.		Which of the following arithmetic operator takes only integer operands?									
	A)	+	B)	-							
	C)	1	D)	%							
4.		What is the purpose of the return statement in a C function?									
	A)	To end the function and return control to the	B)	To repeat the function.							
		calling function, optionally returning a value.									
	C)	To print a value to the console.	D)	To declare a new function.							

<u>Part – B: Descriptive Answer Questions</u> (2*8 = 16 marks) Note: Answer any **One** full question from **each Unit**.

		Unit – I	Marks	BT*	CO*	PO*
1.	a)	Illustrate the process of compiling and executing C program using a flowchart.		L2	1	1
	b)	Develop a C program to find the largest of three numbers using ternary operator.	3	L3	1	2
2.	a)	Demonstrate the functioning of Bitwise operator in C	4	L2	1	1
	b)	Write a note on variables and data types in C, illustrate with examples.	4	L2	1	1
		Unit – II				
3.	a)	Write a C program to input N real numbers in 1-D array. Compute mean, variance and Standard Deviation. Mean=sum/N, Variance=Σ(Xi-mean)²/N, STD_Deviation= √variance	5	L3	3	2
	b)	What are actual parameters and formal parameters? Illustrate with example.	3	L2	3	1
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4.	a)	Write a C program to read two matrices A (M x N) and B (P x Q) and to compute the product of A and B if the matrices are compatible for multiplication.	5	L3	3	2
	b)	Illustrate the concept of 'scope of a variable' in c with an example program.	3	L2	3	1

BT* Bloom's Taxonomy, L* Level; CO* Course Outcome; PO* Program Outcome
