CBCS SCHEME

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BESCK204E

Second Semester B.E./B.Tech. Degree Examination, June/July 2025
Introduction to 'C' Programming

Time: 3 hrs. Max. Marks: 100

Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. M : Marks , L: Bloom's level , C: Course outcomes.

		Module – 1	M	L	C
Q.1	a.	Discuss the five generation of computer.	10	L1	CO1
	b.	Mention all input and output devices. Explain any one input and output device.	10	L1	CO1
		OR			
Q.2	a.	With an example, explain the structures of 'C' program.	8	L1	CO1
	b.	What are datatypes? Explain 'C' data types.	6	L1	CO1
	c.	Write short notes on : i) Input/output statements ii) Constants.	6	L1	CO1
		Module – 2			
Q.3	a.	Mention all 'C' operators. Explain any 3 operators with examples.	10	L1	CO2
	b.	Explain if-else and nested-if with their syntax and examples.	10	L1	CO2
		OR			
Q.4	a.	Write a 'C' program to find gcd (Greatest Common Divisor) of 2 numbers.	6	L2	CO2
	b.	With example explain break, continue and goto statements.	8	L2	CO2
	c.	Differentiate while and do-while.	6	L2	CO2
		Module – 3			
Q.5	a.	What are recursive functions? Give its 2 base properties. Write a 'C' recursive program to find factorial of a numbers.	8	L2	CO3
	b.	Explain 'C' storage classes with example for each.	8	L1	CO3
	c.	Explain the terms : i) Function definition ii) Function declaration.	4	L1	CO3

		OR			
Q.6	a.	What is an array? Explain various ways of initializing single dimension arrays. Write a 'C' program to search an element using binary search.	10	L2	CO3
	b.	Write a 'C' program to sort 'n' elements in a given list using Bubble sort.	6	L2	CO3
	c.	Write a note on operations on arrays.	4	L2	CO3
		Module – 4			
Q.7	a.	What is an 2-dimensional array? Explain various ways of initializing two-dimensional arrays. Write a 'C' program to find sum of all elements in a given matrix.	10	L3	CO4
	b.	Write a 'C' program to find product of two matrices.	10	L3	CO4
		OR			
Q.8	a.	What is a string? Give an example? Write a 'C' function to copy from one string to another.	6	L1	CO4
	b.	What is scanset? Explain the use of Caret (∧) symbol with an example.	6	L2	CO4
	c.	Write a 'C' program to find the length of the string.	4	L3	CO4
	d.	Explain the read and write character functions.	4	L2	CO4
		Module – 5			
Q.9	a.	Explain any 6 string manipulation function.	6	L2	CO5
	b.	Write a note on pointer arithmetic.	6	L2	CO5
	c.	What is Pointer? Write a 'C' program using pointers to compute sum, mean and standard deviation of all elements stored in an array of 'n' real numbers.	8	L3	CO5
		OR			
Q.10	a.	What is a structure? Give its syntax with example. Explain various ways of initializing structure members.	10	L3	CO5
	b.	Write a 'C' program to implement structure to read, write and compute average marks and the students scoring above and below the average marks for a class of 'N' students.	10	L3	CO5

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