CBCS SCHEME

BESCK104E

First Semester B.E/B.Tech. Degree Examination, Dec.2024/Jan.2025
Introduction 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
1	a.	Classify the different types of input devices and briefly explain the wireless keyboard.	7	L2	CO1
	b.	Provide a brief explanation of the process involved in compiling and executing a C program.	7	L2	CO1
	c.	Explain the structure of a C program, emphasizing key components through an example.	6	L2	CO1
		OR			
2	a.	Describe the working of a printer and an LCD monitor with detailed sketches.	8	L2	CO1
	b.	What are variables? Provide an example of how to declare and initialize a variable of different datatypes.	6	L2	CO1
	c.	Write a C program that demonstrates the use of standard libraries for performing input and output operations.	6	L3	CO1
		Module – 2			
3	a.	Classify the different types of binary operators supported in C language. Explain the bitwise logical operator.	7	L2	CO2
	b.	Use a simple if statement to determine if a person's age qualifies them to vote.	6	L3	CO2
	c.	Write a C program to calculate the sum of numbers from m to n.	7	L3	CO2
		OR			
4	a.	Write a program to convert integer number into the corresponding floating-point number.	6	L3	CO2
	b.	With a flow chart, explain the concept f switch statement.	7	L2	CO2
	c.	Write a C program to generate the pattern * * * * * * * * * *	7	L3	CO2
		Module – 3			
5	a.	What is the different between a function definition and a function prototype? Illustrate with an example code.	7	L2	CO3
	b.	Name the different storage classes and explain the purpose of each.	6	L2	CO3
	c.	Write a program to read n numbers into an array from the user and arrange them in ascending order using bubble sort.	7	L3	CO3

		OR			
6	a.	What is the difference between pass-by-value and pass-by-reference in function arguments? Provide an example for each.	7	L3	CO2
	b.	Write a program to call the function addNumbers(int a, int b) with values a = 5 and b = 10. Print the result inside the man function.	6	L3	CO3
	c.	Write a C program that prompts the user to enter a key element and searches for it with in an array. The program should return the index of the element if found, or indicate that the element is not present in the array.	7	L3	CO3

		Module – 4			
7	a.	Write a program to transpose the elements of a 3 × 3 matrix.	7	L4	CO3
	b.	Write a C program to input two m X n matrices and then calculate the sum of their corresponding elements and store it in a third m X n matrix.	8	L4	CO3
	c.	State the importance of using scanset to read a string. Explain.	5	L4	CO2

		OR			
8	a.	Write a program that multiplies tow 2D matrices.	10	L3	CO4
	b.	Discuss the different functions available for reading and writing strings along with syntax or example code.	10	L2	CO4

		Module – 5			
9	a.	Briefly explain string taxonomy.	6	L2	CO5
	b.	Write a C program to calculate area of circle using pointers.	7	L3	CO5
	c.	Describe a structure to store customer information.	7	L2	CO5

		OR			
10	a.	Write a program to find the length of a string without using the library function.	7	L3	CO5
	b.	Define a pointer. With an example show the declaration of pointers and their usage to assign value to a variable.	7	L2	CO5
	c.	Write the syntax and example to declare a structure.	6	L2	CO5

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