CBCS SCHEME

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BESCK104E/BESCKE104

First Semester B.E./B.Tech. Degree Examination, June/July 2024
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.

				M	L	C
Module – 1				**M**	**L**	**C**
Q.1	a.	Explain the organization of a computer with the help of a neat block diagram.		8	L2	CO1
	b.	Explain the data types in C along with the size of identifiers and write down the Guidelines for using identifiers with suitable programming example.		12	L2	CO2
OR						
Q.2	a.	Explain the formatted input and output statement with suitable programming example.		12	L2	CO2
	b.	Explain the structure of a C program with example.		8	L2	CO2
Module – 2						
Q.3	a.	Explain the working of switch case and break statement with syntax with suitable programming example.		16	L2	CO2
	b.	Write a C program to find Mechanical energy of a particle using $E = mgh + \frac{1}{2} mV^2$.		4	L2	CO2
OR						
Q.4	a.	Explain logical and relational operators with appropriate examples and detailed explanation of decision making statement.		16	L2	CO2
	b.	Write a C program to check the given character is lower case or uppercase or number or special character.		4	L2	CO2
Module – 3						
Q.5	a.	Explain for loop and nested for loop with syntax and programming example.		12	L2	CO2
	b.	Explain the various ways of passing parameter to the functions.		8	L2	CO4
OR						
Q.6	a.	Explain the function definition and declaration with syntax and examples.		12	L2	CO3
	b.	Write a C program to search a number in an array using Binary search.		8	L2	CO3
Module – 4						
Q.7	a.	Write a C program to implement matrix multiplication and validate the rules of multiplication.		7	L2	CO3

	b.	Describe the different ways of reading and writing the strings with an example for each.	7	L4	CO3
	c.	Explain the representation of 2D array in memory with a suitable example.	6	L2	CO3
		OR			
Q.8	a.	Write a C program to transpose a matrix and display it.	6	L2	CO3
	b.	Explain a string and how are strings declared and initialized. Explain with appropriate examples.	7	L3	CO3
	c.	Explain the logic to sort the given set of N number using bubble sort with suitable example.	7	L2	CO3
		Module – 5			
Q.9	a.	Write a C program to find the length of a given string without using built in functions.	7	L2	CO3
	b.	Explain the following string manipulation functions with examples : i) strcpy( ) ii) strcat( ).	7	L2	CO3
	c.	Define a pointer. Explain with syntax pointer declaration and initialization with a suitable programming example.	6	L2	CO3
		OR			
Q.10	a.	Write a C program to concatenate two strings without using string library function.	7	L2	CO3
	b.	Explain any five character manipulation functions.	7	L2	CO4
	c.	Explain with suitable examples, how the member of the structure are accessed initialized and declared in structure concept.	6	L2	CO3

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