CBCS SCHEME

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BESCK104E/ BESCKE104

First Semester B.E./B.Tech. Degree Examination, Jan./Feb. 2023
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.	Define Computer and its characteristics features in detail.	8	L1	CO1
	b.	Write the key characteristic features of stored program concept.	6	L2	CO1
	c.	Explain basic organization of a computer.	6	L2	CO1
		OR			
Q.2	a.	Discuss the broad classification of computers.	8	L2	CO2
	b.	Explain the formatted and unformatted input and output statement.	8	L2	CO2
	c.	Explain basic structure of a 'C' program.	4	L2	CO2
		Module – 2			
Q.3	a.	With syntax and an example, explain conditional operator.	5	L2	CO2
	b.	What is type conversion? Explain its types with examples.	8	L2	CO2
	c.	With Syntax, explain the functionality of "switch" statement. Write a 'C' program using switch to perform basic arithmetic operations.	7	L2	CO2
		OR			
Q.4	a.	Comprising between while and do-while.	6	L2	CO2
	b.	Write a 'C' program using while to check whether the given inter number is Palindrome or not.	6	L2	CO2
	c.	Explain 'for' statement with syntax and example and write a 'C' program using 'for' to print first 'n' Fibonacci numbers.	8	L2	CO2
		Module – 3			
Q.5	a.	Illustrate the term functions and purpose functions for using the functions in 'C' program.	8	L2	CO4
	b.	Discuss the terminologies used in functions.	6	L2	CO4
	c.	Explain different storage classes in detail with suitable programming, examples.	6	L2	CO3

		OR			
Q.6	**a.**	What are arrays? Explain how to declare and initialize 1-D arrays with examples.	**4**	**L2**	**CO3**
	b.	Write a 'C' program to search for a key element in an array using Linear search method.	**8**	**L2**	**CO3**
	c.	Write a 'C' program to sum all the elements of a matrix and print the result.	**8**	**L2**	**CO3**
		Module – 4			
Q.7	**a.**	What are 2-D arrays? How to access the elements of a 2-D array. Explain.	**6**	**L2**	**CO3**
	b.	Explain the string concept and ways of reading (entering) the strings and display the string with suitable C programming examples.	**8**	**L2**	**CO3**
	c.	Write a 'C' program to find the length of a string without using library functions.	**6**	**L2**	**CO3**
		OR			
Q.8	**a.**	Explain sprintf( ) and sscanf( ) functions with examples.	**6**	**L2**	**CO4**
	b.	Write a 'C' program to sort the elements of an array in ascending order using Bubble-Sort Technique.	**8**	**L2**	**CO3**
	c.	What is Recursion? Write a 'C' program using recursion to find the factorial of an integer number.	**6**	**L2**	**CO4**
		Module – 5			
Q.9	**a.**	Explain any five character manipulation functions with examples.	**10**	**L2**	**CO4**
	b.	Discuss any 4 string manipulation functions with programming, example.	**10**	**L2**	**CO4**
		OR			
Q.10	**a.**	How to declare the pointer variables? Discuss its applications.	**8**	**L2**	**CO3**
	b.	Discuss the different memory areas (other) available in 'C'.	**6**	**L2**	**CO3**
	c.	What are structures? Explain the declaration and intialization of structures.	**6**	**L2**	**CO3**

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