CBCS SCHEME

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BESCK104E/ BESCKE104

First Semester B.E./B.Tech. Degree Examination, June/July 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.	Explain with neat diagram different components of computer in detail.	10	L1	CO1
	b.	Define variable. List and explain with example the rules for declaring variables.	5	L1	CO1
	c.	Explain I/O statements in 'C' with syntax and example.	5	L1	CO1
		OR			
Q.2	a.	Explain with neat diagram the structure of 'C' program and explain all components.	8	L1	CO1
	b.	How the 'C' program can be compiled and executed. Explain with flow diagram all the steps.	8	L1	CO1
	c.	Define constants and explain different types of constants in 'C'.	4	L1	CO1
		Module – 2			
Q.3	a.	List and explain the different types of operators used in 'C' with example.	6	L1	CO2
	b.	Explain with syntax different conditional branching statements.	8	L1	CO2
	c.	Write a 'C' program to check the given character is lowercase or uppercase or special character.	6	L3	CO2
		OR			
Q.4	a.	Explain the use of break and continue statements with example program.	10	L1	CO2
	b.	Explain three looping statements with syntax and example.	10	L1	CO2
		Module – 3			
Q.5	a.	Define function. Explain different components of the functions with neat syntax.	5	L1	CO2
	b.	Program to balance the given chemical equation values x, y, p, q of a simple chemical equation of the type. The task is to find the values of constants b_1, b_2, b_3 such that the equation is balanced on both sides and it must be reduced form.	5	L3	CO2
	c.	List and explain the different types of function calls with example.	10	L2	CO2

		OR			
Q.6	**a.**	Define array. Explain how an array can be declared and initialized with example.	**6**	**L1**	**CO1**
	b.	Explain with example how an array can be passed as parameter to the function.	**8**	**L1**	**CO2**
	c.	Write a C program to sort the given set of elements using bubble sort technique.	**6**	**L3**	**CO4**
		Module – 4			
Q.7	**a.**	Explain with syntax. How the two dimensional arrays can be declared and initialized?	**6**	**L2**	**CO3**
	b.	Write a 'C' program to do the matrix multiplication and validate the rules of multiplication?	**8**	**L3**	**CO3**
	c.	Explain with syntax and example the use of scan set function.	**6**	**L1**	**CO3**
		OR			
Q.8	**a.**	Explain with example program how a two dimensional array can be passed to the functions.	**8**	**L1**	**CO3**
	b.	Demonstrate with example the functions used to read and write strings.	**12**	**L2**	**CO3**
		Module – 5			
Q.9	**a.**	List and illustrate the use of atleast 5 string handling functions in 'C'.	**10**	**L1**	**CO4**
	b.	Define pointer. Specify with syntax and example pointer declaration and initialization.	**6**	**L1**	**CO4**
	c.	Write a 'C' program to swap two numbers using pointer.	**4**	**L3**	**CO4**
		OR			
Q.10	**a.**	Illustrate the character handling functions with example.	**8**	**L2**	**CO4**
	b.	Define structure and explain with syntax different components of it.	**4**	**L2**	**CO4**
	c.	Write a 'C' program to read and display 'n' student information using structure.	**8**	**L3**	**CO4**

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