

CBCS SCHEME

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1BPLC105E

First Semester B.E./B.Tech. Degree Examination, Dec.2025/Jan.2026 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 Algorithm. Develop an algorithm to find the average of three numbers taken as input from the user.	5	L2	CO1
	b.	Define Variable? Explain the rules for constructing variables in C language. Identify whether the following variable is valid or invalid , State the reason for the same. i) int ii) area iii) 20group_one iv) \$type v) _ptr123.	10	L2	CO1
	c.	List the features of C programming language. Explain the process of compiling and executing a C Program.	5	L2	CO1
OR					
Q.2	a.	Define Flow chart. List the symbols used in designing a flowchart. Write a flowchart to calculate area of circle.	6	L2	CO1
	b.	Explain the basic structure of C program with a programming example.	10	L2	CO1
	c.	Explain Input and Output functions in C Programming with suitable example.	4	L2	CO1
Module – 2					
Q.3	a.	Define an Operator. List different types of operators of C and explain any FIVE operators with an example.	10	L2	CO1
	b.	Explain if else statement with syntax and a suitable program.	5	L2	CO2
	c.	Develop a C program to find whether a given number is prime or not.	5	L3	CO2
OR					
Q.4	a.	Differentiate between entry controlled loop and exit controlled loop.	6	L2	CO2
	b.	Explain switch statement with syntax and a suitable program.	8	L2	CO2
	c.	Develop a C program to find the roots of quadratic equations.	6	L3	CO2
Module – 3					
Q.5	a.	Define Array? Demonstrate the declaration and different initialization methods of One-Dimensional array with syntax and example.	7	L2	CO3
	b.	Develop a C program to find the length of a string without using built in function.	5	L3	CO3

	c.	Develop a C program to find key elements in an array using linear search.	8	L3	CO3
OR					
Q.6	a.	Define a String? Explain declaration and initialization of strings with example.	5	L3	CO3
	b.	List and explain any FIVE String-handling Functions with example.	7	L2	CO3
	c.	Develop a C program to concatenate two strings, find length of a string and copy one string to other using string operations.	8	L3	CO3
Module – 4					
Q.7	a.	Define a function? Explain the various elements of user defined functions with suitable example.	10	L2	CO4
	b.	Explain function with arguments and no return value with suitable programming example.	10	L2	CO4
OR					
Q.8	a.	Explain function with no arguments and no return value with suitable programming example.	10	L2	CO4
	b.	Develop a modular C program to find GCD and LCM of given numbers using user defined functions.	10	L3	CO4
Module – 5					
Q.9	a.	Define structure. Explain the general format of a structure definition with example.	7	L2	CO5
	b.	Differentiate between arrays and structures with an example.	7	L2	CO5
	c.	Define pointer. Illustrate declaring and initialization of a pointer variable with an example.	6	L2	CO5
OR					
Q.10	a.	Explain Arrays within Structure with suitable programming example.	10	L2	CO5
	b.	Develop a C program to declare the structure of employees and display the employee records with higher salary among two employees.	10	L3	CO5
