

Code: 23ES1102

I B.Tech - I Semester – Supplementary Examinations – MAY 2025**INTRODUCTION TO PROGRAMMING**
(Common for ALL BRANCHES)

Duration: 3 hours

Max. Marks: 70

Note: 1. This question paper contains two Parts A and B.

2. Part-A contains 10 short answer questions. Each Question carries 2 Marks.

3. Part-B contains 5 essay questions with an internal choice from each unit. Each Question carries 10 marks.

4. All parts of Question paper must be answered in one place.

PART – A

1.a)	Evaluate the expression $y - 3 * z + 7 / x$, given $x=2$, $y=3$ and $z=1$.
b)	Explain the concept of “Conditional Operator” in C language.
c)	List out any 3 features of C language.
d)	Demonstrate the use of nested-if control structure with an example.
e)	Describe the role of for loop in C language.
f)	Write the process of declaring and initializing a multidimensional array.
g)	State the significance of * operator when working with pointers.
h)	List out any two dynamic memory allocation functions.
i)	Define pointer-to-pointer.
j)	Explain the significance of fopen() and fclose() functions in C language.

PART – B

					Max. Marks
UNIT-I					
2	a)	Explain the different types of bitwise operators used in C.			5 M
	b)	Draw a flowchart to find the given number N is positive, negative or zero.			5 M
OR					
3	a)	Explain in detail about operator precedence and associativity with examples.			6 M
	b)	Explain basic Input and Output operations of C language.			4 M
UNIT-II					
4	a)	Show how break and continue statements are used in a C-program, with example.			6 M
	b)	Develop a C language program to swap two numbers without using a temporary variable.			4 M
OR					
5	a)	Develop a C program to compute the sum of the first 10 natural numbers using for control statement.			5 M
	b)	Compare and contrast entry and exit controlled loop statements of C-Language with an example.			5 M
UNIT-III					
6	a)	Develop a C program to print all unique elements in an array.			6 M
	b)	Write a short note on pre-defined string functions strcat () and strrev (). Explain them with an example.			4 M

OR			
7	a)	Define an Array. Explain how to declare an Array in C-Language.	4 M
	b)	Develop a program to add corresponding elements of two arrays with same size.	6 M
UNIT-IV			
8	Describe pointers in detail (Definition, Declaration, Pointer Operators, Initialization and Usage) with example.		10 M
OR			
9	a)	Define structure. Write the syntax of declaring a structure in C language with an example.	5 M
	b)	Distinguish between call by value and call by reference.	5 M
UNIT-V			
10	a)	Write some properties and advantages of user defined functions in C language.	4 M
	b)	Develop a C language program to copy the contents of a file to another file.	6 M
OR			
11	Distinguish between Library functions and User defined functions in C language. Give an example of each.		10 M