K. K. Wagh Institute of Engineering Education & Research, Nashik
(An Autonomous Institute From A.Y. 2022-23)

	InSem Examination-IWinter 2023		
	Exam Seat No.:		
	Academic Year:2023-2024	Semester:I	
	Name of Programme:B.Tech (Computer Engineering/AI and DS/ Computer Science and Design)	Pattern:2023	
	Name of Course:Programming in C	Course Code:2300108A	
	Max. Marks:30	Duration:1	

	Instructions: Candidates should read carefully the instructions printed on the Question Paper and on the cover page of the Answer Book, which is provided for their use. 1. This question paper contains two page(s). 2. Answer to each new question is to be started on a new page. 3. Assume suitable data wherever required, but justify it. 4. Draw the neat labelled diagrams, wherever necessary. 5. The last columns indicates the Course Outcome and level of Blooms Taxonomy of the Question/sub-question	

Question No. 1 Attempt following Question

a)	What is Computational thinking? Explain problem solving strategies.	(5)	CO1
	OR		
b)	How can computational thinking be used to solve problem? Explain decomposition in computational thinking with a real life example?	(5)	CO1
c)	Write an algorithm for finding area of a rectangle and draw the flowchart	(5)	CO1
	OR		
d)	Write pseudo-code for finding the greatest number among the two numbers and draw the flowchart.	(5)	CO1
e)	What is an error in programming? Explain syntax and logical error with suitable example.	(5)	CO1

OR

f) Identify the error in the following code and rewrite the error free code. (5) CO1

```
#include <stdio.h>
int main()
{
    int x=10;
    if( x >= 2) then
       printf("&d \n", x);
    return 0;
}
```

Question No. 2 Attempt following Question

a) What are the primary data types in C? Give an example of each data type declaration statement. (5) CO2

OR

b) What is a variable and what is meant by declaration and initialization of a variable? Explain with syntax and example. (5) CO2

c) Determine the hierarchy of operations and evaluate the following expression (5) CO2

K = 3/2*4+3/8

OR

d) Explain relational operators with suitable examples. (5) CO2

e) Write a program to take two numbers as an input from user and write a menu driven program using switch case to perform addition, subtraction, division and multiplication according to users choice. (5) CO2

OR

f) Write a program in C to take attendance as an input from user and check if attendance is greater than 75 then display a message as term is granted otherwise display a message as term is not granted. (5) CO2