



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

WINTER-2025	
Exam Seat No.:	
Academic Year:2025-2026	Semester:I
Class:FY	Program:B.Tech
Branch Code:FYE	Pattern:2022
Name of Course:Programming in C	Course Code:FYE221010
Max. Marks:60	Duration:2.30 Hrs.

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 3 pages.
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.

Marks CO

Question No. 1

- 1a) Define algorithm and flowchart. Write the characteristics of a good algorithm. (6) CO2

Question No. 2

- 2a) Explain - if and if-else statements in C with syntax and examples. (6) CO3

Question No. 3

- 3a) Identify the type of (if any) errors in the following code, rewrite the corrected code and write the expected output (5) CO5

```
int main()
{
    int i;
    for(i = 1; i < 5; i++);
    {
        printf("%d ", i);
    }
    return 0;
}
```

OR

- 3b) Explain for, while, and do-while loops with syntax and examples. (5) CO2, CO3
- 3c) Explain the concept of arrays in C. Write syntax, advantages, and limitations. (5) CO4

OR

- 3d) Explain array indexing and bounds in C with example. (5) CO4
3e) Write a C program to find the largest element in an array. (6) CO2, CO4

OR

- 3f) Write a C program to print even numbers from 1 to 20. (6) CO2

Question No. 4

- 4a) List and discuss the different types of functions in C. (5) CO1, CO2

OR

- 4b) Discuss the scope and lifetime of variables in C. (5) CO1, CO2
4c) Identify the type of (if any) errors in the following code, rewrite the corrected code and write the expected output (5) CO5

```
void abc (int a, int b)
{
    int c;
    .....
    c=a*b;
    return (c);
}
int main()
{
    int a=5,b=6,c;
    c=abc(a,b);
    printf("%d", c)
}
```

OR

- 4d) What are parameters used in a function declaration? How to pass the parameters to the function? (5) CO2, CO6
4e) Write a C program to calculate simple interest using a function. (6) CO2, CO6

OR

- 4f) Write a C program to calculate the square and cube of a number using functions (6) CO2, CO6

Question No. 5

- 5a) What is a structure in C? Explain its need with an example. (5) CO4

OR

- 5b) Explain structure initialization in C with a suitable example. (5) CO4
5c) Define a structure Book with members book id, title and price. Declare a variable of the structure and assign values. (5) CO4

OR

- 5d) Identify the type of (if any) errors in the following code, rewrite the corrected code and write the expected output. (5) CO5

```
int main()
{
    struct mobile
    {
        char brand[20];
        int price;
    };

    struct mobile m;
    m.brand = "Samsung";
    m.price = 15000;

    printf("%s %d", m.brand, m.price);
}
```

- 5e) Explain the concept of files in C programming. (6) CO4

OR

- 5f) Write a program to read and display the contents of a text file character by character. (6) CO4

..... End of question paper.....