



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

SUMMER-2024	
Exam Seat No.:	
Academic Year:2023-2024	Semester:II
Class:FY	Program:B.Tech
Branch Code: ADS/COM/CSD/ETC/INT/ELE/ROB	Pattern:2023
Name of Course:Programming in C	Course Code:2300108A
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 4 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

- 1a) Write a 'C' program to accept the number from user check given number is positive, negative (6) CO1 or zero

Question No. 2 Attempt following Question

- 2a) i) Explain symbols used in flowchart. (6) CO2
ii) Explain printf() and scanf() function with its use

Question No. 3 Attempt following Question

- 3a) Identify the type of (if any) errors in the following code, rewrite the corrected code and write (5) CO2 the expected output

```
int main()
{
    i=1;
    while(i<=10);
    {
        printf("%d\n", i);
        i++;
    }
    return 0;
}
```

OR

3b) Explain for loop with syntax and example (5) CO3

3c) What is an array? Explain the declaration and initialization of one and two dimensional arrays (5) CO3

OR

3d) Explain the nested while loop? Explain with the example (5) CO3

3e) Write a C program to read 10 numbers and calculate the sum of all numbers using a for loop. (6) CO3

OR

3f) Write a program in C to calculate the total marks of 5 students scored in a course “C Programming” using a one dimensional array (6) CO3

Question No. 4 Attempt following Question

4a) Explain function call, function definition and function declaration with examples (5) CO4

OR

4b) Enlist and state the use of any three mathematical and three string function (5) CO4

4c) Identify the type of (if any) errors in the following code, rewrite the corrected code and write the expected output (5) CO4

```
#include<stdio.h>
```

```
Int main()
```

```
{
```

```
int a=10;
```

```
void f( );
```

```
a=f( );
```

```
printf(“%d”,a);
```

```
return 0;
```

```
}
```

```
Void f ( )
```

```
{
```

```
Printf(“Hi”);
```

```
}
```

OR

4d) Identify the type of (if any) errors in the following code, rewrite the corrected code and write the expected output (5) CO4

```
int abc (int a, int b)
```

```
{
```

```
int c;
```

```

    c=a*b;
}
int main()
{
    int a=5,b=7,c;
    c=abc(a,b);
    printf("%d", c);
}

```

4e) Write an algorithm and C program to add two numbers using function (6) CO4

OR

4f) Write a C program to calculate the area and perimeter of a rectangle using functions. (6) CO4

Question No. 5 Attempt following Question

5a) What is the need for structure? State the difference between arrays and structure with examples (5) CO5

OR

5b) Explain syntax of declaring and initializing of structure (5) CO5

5c) Explain the array of structure concept in detail with example (5) CO5

OR

5d) How to find the size of structures in C? Calculate and write size of following structure - (5) CO5

```

struct item
{
    char name[10];
    float bill;
    int item;
};

```

5e) Write a program to maintain the student's record using structure to store the details of student's information such as name, branch, CRN number, mobile number and display the details for all 5 students.. (6) CO5

OR

5f) Write a 'C' program to declare structure employee having data members as empid, empname. Accept data for 5 employees and display it (6) CO5

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