



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 :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 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) i) Explain computational thinking and List all pillars of it. (6) CO1
ii) Define an algorithm and flowchart

Question No. 2 Attempt following Question

- 2a) i) Write a C program to take input a amount, calculate and display a discount of 6% of amount and final payable amount (6) CO2
ii) Write an algorithm or draw the flowchart to find the area and perimeter of the rectangle

Question No. 3 Attempt following Question

- 3a) Which statement is used to come out of the loop and to continue the loop ? Give an example (5) CO2

OR

- 3b) Explain the while loop with example (5) CO3

- 3c) Identify the type of (if any) error in the following code, Rewrite the corrected code and write the expected output (5) CO3

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

```
int main()
```

```
{
```

```
int i=2;
```

```

do
{
printf("\n Programming in C")
i=i+1;
}
while (i == 5)
return 0;
}

```

OR

- 3d) Identify the type of (if any) error in the following code. Rewrite the corrected code and write the expected output (5) CO5

```

#include<stdio.h>

int main()
{
int i;
for(i=0, i<3, i++)
{
printf("%d", i,j);
j++
}
return 0;
}

```

- 3e) Write a C program using an array to accept 10 numbers from the user and display the sum of it (6) CO3

OR

- 3f) Write a C program to accept and add two 2 x 2 matrices (6) CO3

Question No. 4 Attempt following Question

- 4a) Explain the function definition and calling in programming in C with suitable example (5) CO6

OR

- 4b) Explain any two string Library function with examples (5) CO6

- 4c) Identify type of errors (if any) in the following code, rewrite the corrected code and write expected output. (5) CO5

```

#include &lt;stdio.h&gt;

int main()
{
int array[6]={1,2,3,4,5,6};

```

```
for(i<=6;i++);  
printf("\n %d", array[i]);  
return 0;  
}
```

OR

- 4d) Identify the type of (if any) error in the following code, rewrite the corrected code, and write the expected output (5) CO5

```
#include<stdio.h>  
  
int f(int, int)  
  
int main()  
{  
int x, y;  
printf("%d",f(x,y));  
return 0;  
}  
  
int f(int a, int b)  
{  
int a;  
a = 20;  
return a;  
}
```

- 4e) Write a C program to find factorial of a number (6) CO6

OR

- 4f) Write a C program to swap the two numbers using function (6) CO6

Question No. 5 Attempt following Question

- 5a) Define structures in C. How to declare and access members in structures (5) CO4

OR

- 5b) Explain fscanf() and fprintf() with examples. (5) CO4

- 5c) Identify the type of (if any) error in the following code. Rewrite the corrected code and write the expected output. (5) CO5

```
#include<stdio.h>  
  
int main()  
{  
  
char str1[20] = "Hello World!";
```

```
char str2[20];
// Copy str1 to str2
strcpy(str2, str1);
// Print str2
printf("%s", &str2);
}
```

OR

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

```
#include<stdio.h>
int main()
{
char ch;
FILE *fptr1, *fptr2;
fptr1 = fopen("datafile1.txt", "w");
fp = fopen("datafile2.txt", "w");
printf("Thank you");
fclose(*fptr1, *fp);
return 0;
}
```

- 5e) Define a structure named Circle to represent a circle with a radius. Write a C program to calculate the area and perimeter of two circles and display the results (6) CO4

OR

- 5f) Write a program in C to create and store information in a text file. (6) CO4

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