



Avinashilingam Institute for Home Science and Higher Education for Women
(Deemed to be University under Category 'A' by MHRD, Estd. u/s 3 of UGC Act 1956)
Re-accredited with 'A++' Grade by NAAC. Recognized by UGC Under Section 12B
Coimbatore - 641 043, Tamil Nadu, India
Continuous Internal Assessment - I August 2025
I Semester

Class: I UG

Major: Computer Science

Time: 2 hours

Max.Marks:60

23BCSC01 Programming Methodology

Course Outcomes:

1. Obtain knowledge to design algorithms and draw flowcharts to solve a problem.
2. Develop problem solving skills coupled with top-down design principles.
3. Acquire knowledge to implement different Operations on arrays.
4. Trained skill to solve problems through programming for simple applications.
5. Understand the use of Arrays, functions, pointers, structures and unions.

Part A

6x1 = 6

Choose the Correct Answer

1. The rectangle symbol is used to represent _____ in a flowchart. CO1K1
a. An input b. An output c. A process d. A decision
2. _____ is a procedure or step by step process for solving a problem. CO1K1
a. Algorithm b. Paradigm c. Pseudocode d. Model
3. What is the value of 15%5 in C language? CO2K1
a. zero b. one c. two d. three
4. C programming language was developed by _____. CO2K1
a. Dennis Ritchie b. Ken Thompson c. Bill Gates d. Peter Norton
5. What is the output of the program below? CO2K4

```
main()
{
    int i;
    for(i=0;i<10;i++)
    {
        printf("%d", i);
        i++;
    }
}
```


a. 01234 b. 12345 c. 02468 d. 13579
6. How a one dimensional array is initialized in C Language? CO2K4
a.int a[3]={1,2,3}; b.int a() ={1,2,3}; c. int a[]=[1,2,3]; d. int a(3) =[1,2,3];

Part- B

3x6=18

Answer ALL Questions

Each answer should not exceed 400 words or two pages

7. a. Write an algorithm and draw flowchart to check whether a given number is odd or even. CO1K3
Or
7. b. Discuss the procedure oriented and object oriented programming methodologies. CO1K1
8. a. What are the characteristics of an algorithm? Explain. CO3K1
Or
8. b. Write on various translators of programming languages. CO2K2
9. a. Explain how to define and call a function with syntax in C. CO2K1
Or
9. b. How to create an array and access elements from it? Explain. CO3K1

Part-C
Answer ALL questions
Each answer should not exceed 800 words or four pages

3x12=36

- | | |
|--|-------|
| 10. a. Explain Input and Output statement with an example. | CO1K2 |
| Or | |
| 10. b. Explain the stages in programming development life cycle. | CO1K2 |
| 11. a. Explain the syntax of if statement and switch statement in C example. | CO2K2 |
| Or | |
| 11. b. Explain the looping statements in C with example. | CO2K2 |
| 12. a. Write a C program to perform linear search using one-dimensional array. | CO3K3 |
| Or | |
| 12.b. Explain the function parameter mechanisms in C with example. | CO3K2 |

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Staff in-charge: Dr.R.Vijayabhanu, Dr.M.Thilagu

Campus-I- 60
Campus-II- 30