

Programming Using C Language

Question Bank

BSc CA&IT And AI&ML _Major-I

1ST SEMESTER

2024-25

Unit 1

Multiple Choice Questions

- _____ is a step-by-step approach to solve any problem.
(a) Process (b) Programming Language (c) **Algorithm** (d) Compiler
- _____ is a pictorial representation of an algorithm.
(a) Data Diagram (b) **Flow Chart** (c) Pie Chart (d) Program
- The process of walking through a program's logic on paper before you actually write the program is called _____.
(a) **desk checking** (b) flowcharting (c) pseudo coding (d) testing
- What symbol is used to represent output in a flowchart?
(a) square (b) circle (c) **parallelogram** (d) triangle
- What is the standard decision symbol for a flowchart?
(a) circle (b) lozenge (c) **diamond** (d) square
- Which of the following is called low level languages?
(a) **Machine Language** (b) Assembly Language (c) Both of the above (d) None of above
- Which of the following is problem-oriented language?
(a) **High level language** (b) Machine language (c) Assembly language (d) Lowlevel language
- A compiler is a translating program which
(a) **Translates instruction of a high-level language into machine language.**
(b) Translates entire source program into machine language program.
(c) It is not involved in program's execution.
(d) All of above
- Which of the following is machine independence program?
(a) **High level language** (b) Machine language (c) Assembly language (d) Lowlevel language
- Which is the limitation of high-level language?
(a) **Lower efficiency** (b) Machine dependence (c) Machine level coding (d) None of above
- High level language is also called _____.
(a) **Problem Oriented Language** (b) Business Oriented Language
(c) Mathematically Oriented Language (d) All of above
- C language is _____.
(a) **High level language** (b) Machine language (c) Assembly language (d) Low level language

Short Questions (for 2 Marks)

1. What is an algorithm? List Characteristics of an algorithm.
2. Write advantages and disadvantages of an algorithm.
3. Write an algorithm/flowchart for following.
 - a. To find maximum of given three numbers.
 - b. To find out $N!$ (Factorial of N).
4. What is flowchart? List Symbols used in flowchart.
5. Write advantages and disadvantages of flow chart.
6. List Rules to draw flow chart.
7. What is an Editor? Give 3 examples of Well Know Editors.
8. List Languages for all generation.
9. Write advantages and disadvantages for following.
 - a. Machine Level or Low-Level Language (1GL)
 - b. High Level Language (3GL)
10. What is Translator? List all translators.
11. Explain any one translator in brief.

Long Questions (for 4/10 marks)

1. What is an algorithm? Write advantages and disadvantages of an algorithm. (4 marks)
2. Write an algorithm/flowchart for following. (each of 4 marks)
 - a. To find sum a given number is odd or even.
 - b. To find out minimum from N numbers.
 - c. To find area of circle.
 - d. To calculate simple interest.
3. What is Flowchart? Explain Rules to draw flowchart. Also explain symbols used to draw flowchart. (8 marks)
4. What is flow chart? Write advantages and disadvantages of flowchart. (4 marks)
5. What is Translator? Explain compiler, Interpreter and Assembler. (8 Marks)
6. Write a note on Generation of Computer Languages. (4 Marks)
7. Explain any one language from following in detail. (Each contain 4 Marks)
 - a. Machine Level or Low-Level Language (1GL)
 - b. High Level Language (3GL)
8. Write difference between Interpreter and Compiler.

Unit 2

Multiple Choice Questions

- _____ is a valid variable name.
a) int b) \$amount c) **tot_sum** d) 9Sum
- In which section consists of Headerfiles.
a) **Main()** b) Definition c) Documentation d) Link Section
- _____ is a invalid variable name.
a) amt b) pi c) **int** d) total_marks
- What of the following is decision making statement?
a) **if** b) break c) continue d) for
- The integer data type requires _____ number of bytes.
a) 2 b) **4** c) 8 d) 16
- _____ What is the value of I after the following execution?
I=1; ++I =+ 3;
a) 2 b) **5** c) 1 d) 0
- The value can be changed during program execution is known as _____.
a) **Variable** b) constant c) Operator d) None of these
- The combination of "? "and ":" is known as _____ operator.
Ternary b) Arithmetic c) dot d) Relational
- The value cannot be changed during program execution is known as _____.
a) Variable b) **constant** c) Operator d) None of these
- _____ Format specifier used for floating data type.
a) %d b) **%f** c) %c d) %e
- Which of the following section is compulsory in C program?
a. **Main()** 2) Definition 3) Documentation 4) None of these
- By default, _____ digits in float type variable after decimal point.
a) **2** b) 4 c) 6 d) 8
- Which of the following backslash character constant is used for horizontal tab?
a. \n b) **\t** c) \h d) \y
- _____ Format specifier used for integer data type.
a. **%d** b) %f c) %c d) %e
- The range of double data type is _____ bytes.
a) 2 b) 4 c) **8** d) 16
- Do-while loop is also known as _____ loop.
a) Entry level (b) **Exit level** (c) a & b (d) None of this
- _____ statement terminates the execution of loop.
(a) Continue (b) **break** (c) switch (d) none of these
- _____ statement skips the remaining statement of the loop and control transfer to the condition.
(a) Break (b) **Continue** (c) if (d) switch
- _____ format specifier used for character data type.
a) %d b) %f c) **%c** d) %e
- The float data type requires _____ number of bytes.
a) 2 b) **4** c) 8 d) 16

Short Question (2 marks)

1. Draw the basic structure of C program.
2. Write Rules of variable name.
3. Give 4 example of invalid variable names with reason.
- 4 Explain assignment operator with example.
- 5 Explain ternary operator with example.
- 6 What does break statement denote in switch statement?
- 7 List basic datatypes used in C Programming.
- 8 What is a constant? List ways to define a constant in C Programming with example.

Long Questions. (4/8 Marks)

1. Explain Basic Structure of C program in detail.
2. What is Operator? Explain different operators with example.
3. Explain Arithmetic operator & Relational operator with example.
4. Explain Relational and Pre and post increment operator with example.
5. What is Variable? Explain how to declare and initialize variable with example.
6. Explain simple if statement with example.
7. Explain if..else & nested if statement with syntax and example.
8. Explain switch statement in detail with example.
9. Explain printf() and scanf() statement with example.