Chapter 12
C-Programming

One mark questions (Knowledge)

1. What is C programming language?
2. Name the person who developed C language.
3. What is case sensitivity in C language?
4. What do you mean by syntax?
5. What is a function in C language?
6. What is C pre-processor?
7. What is C compiler?
8. What is debugging a C program?
9. What is a syntax error?
10. What is logical error?
11. What is a runtime error?
12. What is testing a program?
13. What is character set of C language?
14. What are C tokens?
15. What are keywords in C?
16. What is an identifier in C?
17. What is a constant in C?
18. What is a character constant in C?
19. What is a string constant in C?
20. What is a variable in C?
21. Write the syntax for assigning values to variables.
22. What is a statement in C program?
23. What symbol or character is used to terminate every C statement?
24. What is an operator?
25. Write arithmetic operator used to represent remainder obtained in integer division.
26. What is a ternary operator or conditional operator?
27. Write the general syntax of ternary operator in C?
28. What is the meaning of the symbol '~'?
29. Name any one library function in C?
30. What is the use of function conio.h?
31. Which operator in C-language is also called as ternary operator?
32. What is symbolic constant in C?
33. Give a C language symbolic constant statement that will create a constant named MAX with value 100.
34. What is a newline escape sequence in C?
35. What does local variable mean in C?
36. What does global variable mean in C?
37. What is bitwise operator in C?
38. What is scanf ( )?
39. What is printf ( )?
40. Write the general form of 'scanf ( )' formatted input.

41. Write the general format of printf ( ) formatted output.
42. What is the syntax for ternary operator in C?
43. What is arithmetic operator in C?
44. What is assignment operator in C?
45. What is the relational operator in C?
46. What is the logical operator in C?
47. What is the difference between single equal "=" and double equal "==" operators in C?
48. What is the use of sizeof operator?
49. What is a break statement in C?
50. What is the use of clrscr ( ) function in C program?
51. What is a flowchart?

One mark questions (understanding)

1. How many types of constants are there in C language?
2. Where is conditional operator used?
3. How do you represent increment operator in C?
4. How do you represent decrement operator in C?
5. How many keywords are there in C-language?
6. How many decimal places are displayed when a number has a corresponding format specifier %f?
7. Why we use main ( ) function in every C program?
8. In which header file printf ( ) and scanf ( ) functions are declared?
9. In which header file getch ( ) and clrscr ( ) functions are declared?
10. How are comments included in a C program?

One mark questions (skill)

1. What is the value of 17% -2?
2. What is the value of -17%2?
3. Write the symbol of exclusive–OR operation.
4. Write syntax of continue statement?
5. Write syntax of continue break statement?

Two marks questions (knowledge)

1. List the features of C language.
2. Write the commonly used pre-processor directives in C?
3. List the different C tokens.
4. What is floating point constants? Give an example.
5. What is a character constant? Give an example.
6. What is a string constant? Give an example.
7. What is the use of main ( ) function in C?
8. What is the purpose of scanf ( ) and printf ( ) function in C program?
9. What is the use of "#define" in C?
10. What do you understand by data type? Give few examples of data types available in C.

11.Mention the decision control statements in C?

12.List the loop control statements in C?

13.What is the use of break statement? Write its syntax.

14.What is a header file? Write the syntax for including standard libraries into C Program.

15.Mention the four types of constants in C language.

16.What are delimiters? Mention commonly used delimiters in C language.

17.What are the symbols used for logical AND and logical OR operators in C?

18.What is character constant? Give an example.

19.What is string constant? Give an example.

20.What is header file? Name any one commonly used header files in C programs.

21.Write the syntax and flow chart of **if** statement in C?

22.Write the syntax and flow chart of **if-else** statement in C?

23.Write the syntax and flow chart of **while** statement in C?

24.Write the syntax and flow chart of **do-while** statement in C?

25.Name any two unconditional control statements in C.

26. List the arithmetic operators in C.

27. List the logical operators in C.

28.List the assignment operators in C.

29.List the relational operators in C.

30.List the bitwise operators in C.

31.What are unary operators? How many operands are associated with a unary operator?

Two marks questions (understanding)

1. Which characters comprise the C character set?
2. Write any two arithmetic operators and its meaning.
3. What is the meaning of a% b? Find the value of 21% 4.
4. For what purpose if-statement and if-else statement are used?
5. What is the difference between local and global variable in C?
6. What is the difference between constant and variable in C?
7. What is the difference between pre increment operator and post increment operator in C?
8. What is the difference between 'x' and "x" in C?
9. Differentiate between the expression "++a" and "a++" in C-language.
10. Differentiate between the expression "- -a" and "a- -" in C-language.
11. What is the difference between unary and binary operators in C?
12. What is the difference between <stdio.h> and <conio.h> header file?

Two marks questions (skill)

1. Given x=15 and y=4, what values do the expression x/y and (float) x/y yield, respectively?
2. Write the C equivalent expression for (2x +1) (3y +2).
3. 27.Draw any four symbols used while writing the flow chart.
4. 30.Evaluate the C logical expression a&&b||c&& (!b). Given a=2, b=4, and c=3.
5. If a=2, b=4 and c=7 then evaluate the C logical expression a&&b||c ||(!b).
6. What is the value of 2.5*4/2?

7. Find the value of the given C expression 3-5*2.5.
8. Find the value of the given C expression 20%5%2*3.
9. Find the value of the given C expression 10/ (2*3).
10. Find the value of the given C expression 22%3*12/3.

Three marks questions (knowledge)

1. List the features of C language.
2. Write the format of simple C program.
3. What is a syntax error? Give any two common syntax errors of C-language.
4. What is logical error? Given any two common logical errors of C-language.
5. Write the steps involved in executing C program.
6. What is data type? How many types of data types are there in C?
7. Mention the C tokens.
8. What do you mean by identifiers? Mention the rules to be followed while defining identifiers.
9. Mention the rules for constructing the variable name in C-language.
10. What are format specifiers? Write any three commonly used format specifiers in C programs.
11. Write the syntax and flow chart of nested-if statement in C.
12. Write the syntax and flow chart of switch statement in C.
13. Write a C program to find the largest from the two given numbers using if-else statement.

Three marks questions (understanding)

1. Discuss in detail the syntax errors, logical errors and run time errors.
2. Briefly explain the conditional operator (or ternary operator) in C.
3. What is the difference between int, char, and float data types?
4. Give any three differences between while and do-while loop statements in C?
5. Give memory requirement of integer type data, float type data and character type data in C?
6. Write a C program to find the area of a circle.
7. Write a C program to accept four numbers and compute their sum and average.
8. Explain for statement along with general syntax and flow chart.
9. Explain if-else statement along with general syntax and flow chart.
10. Explain while statement along with general syntax and flow chart.

Three marks questions (skill)

1. Write C expressions equivalent to the following algebraic expressions:
   (i)$\sqrt{a^2 + b^2}$ and   (iii) ax^2+bx+c (ii)$\sqrt{b^2 - 4ac}$
2. Convert the following mathematical expressions into C expressions:
   (i) a $+\frac{b}{c}$ +d   (ii) $\frac{ab}{c-d}$ +d (iii) b^2- 4ac
3. Explain the significance of the following control specifiers in C program:
   (i) %c   (ii) %d   (iii)%f

Five marks questions (knowledge)

1. Write the basic structure of C program and explain each section in brief.
2. Write the general syntax of following C statements:
   (i) if-else statement (ii) while statement (iii) do-while statement
   (iv) switch case statement and (v) for statement.
3. What is a variable in C language? Mention the rules for constructing variable names in C.

Five marks questions (understanding)

1. What are flowcharts? Give any four notations (symbols) used in a flow chart along with their names and uses?
2. Compare the three loop statements available in C language.
3. Explain do-while statement along with general syntax and flow chart.

Five marks questions (skill)

1. With the help of flow chart describe the process of creating and executing a C- program.
2. Write a C program to accept two numbers and print their sum, difference and product.
3. Write a C program to find the largest of given three numbers using nested if statement.
4. Write a C program to check a given number is even or odd.
5. Write a C program to print the sum of first n natural numbers using for loop.
6. Write a C program to print the sum of first n natural numbers using while loop.
7. Write a C program to print the sum of first n natural numbers using do-while loop.
8. Write a C program to find the roots of a quadratic equation $(ax^2+bx+c) = 0$ for all possible combinations of a, b and c.