1. Depict basic flow chart symbols. Also mention their specified use.
2. Explain datatypes available in C.
3. Explain basic structure of a C program with example.
4. Write about various types of operators in C programming.
5. Explain bitwise operator supported by C.
6. Write a program to print all the prime numbers between 1 to 100.
7. Write a program to print inverted half pyramid using *.

*	*	*	*	*
*	*	*	*	
*	*	*		
*	*			
*				

8. Write C string functions with examples.
9. Explain format specifier and format string.
10. Explain the various operators of C.
11. Explain the structure of C program and features of C.
12. Explain basic data types and sizes.
13. Explain bitwise operators.
14. Write a program to generate Fibonacci series using for loop.
15. Explain While and do-while statements with example.
16. Explain switch case with example.
17. Whenever we use a variable in C program, it has to be first declared. What are the two things informed to the compiler when a variable is declared.
18. What is the basic structure of a C program? Explain with a neat diagram.
19. Write a C program to find the area of a triangle if its three sides are given. Also draw its flowchart.

    Area = sqrt(s*(s-a)*(s-b)*(s-c))
20. Explain the process of building, compiling and executing a C program with diagram.
21. What is the output of the following program segments?

```
#include<stdio.h>
int main() {
        int i=1;
        i=2+2*i++;
        printf("%d", i);
        return 0;
}

void main() {
        int choice = 2;
        switch(choice);
        {
        case 1:
                printf("\n Allas");
```

```
            break;
        case 2:
            printf("\n Babo");
            break;
        case 3:
            printf("\n Hurray");
            break;
        }
        printf("Finally I am in main");
}
```

22. The monthly telephone bill is to be computed as follows:
    Minimum 200 Rs for up to 100 calls plus 0.60 Rs per call for next 50 calls plus 0.50 Rs per call for next 50 calls plus 0.40 per call for any call beyond 200 calls.
    Write a program to compute monthly bill for any number of calls.
23. Write a program to generate the following pattern:

A	B	C	D	D	C	B	A
A	B	C			C	B	A
A	B					B	A
A							A

24. How type conversion can be carried out in C?
25. What is flowchart? Also draw the flowchart to calculate area and circumference of circle for given radius.
26. Explain operators with examples.
27. Explain the structure of a C program. Also write a program to input the distance of two cities in kilometres and convert it into metres, centimetres, feets, and inches.
28. Differentiate between break and continue.
29. Explain else-if ladder with suitable examples.
30. Write any three string functions with a program.
31. Write a program to generate the following pattern up to N number of rows:

				1				
			2		2			
		3		3		3		
	4		4		4		4	
5		5		5		5		5

32. Define flowchart.
33. Explain the general structure of any C program.
34. Give description of various data types available in C language along with their size and capacity with example.

35. Write short nodes on (any two):
    (a) Compiler
    (b) Variables
    (c) Top down program design
36. What is the use of break and continue statements in C language.
37. Write a C language program for inputting a 5 digit number and to print the sum of its digits.
38. Explain in detail about various types of conditional statement available in C language.
39. Write a C program to read a number from user and to display whether it is odd or even strictly using switch case syntax.
40. What is algorithm? Explain.
41. Explain the relational and logical operators and conditional operator with example.
42. Explain the compilation and linking process in C programming.
43. Explain the following:
    a. Constant
    b. Variable
    c. Keyword
    d. Identifiers
44. Write the differences between do-while and while loop.
45. Explain break and continue with example.
46. Write a program to find the smallest and the greatest element in the array. (Assume any array size).
47. Write a program to generate the following pattern up to N number of rows:

				1				
			2		2			
		3		3		3		
	4		4		4		4	
5		5		5		5		5

48. Define algorithm, pseudocode, flowchart.
49. Explain the data types used in C language.
50. Explain conditional, logical, bitwise operators in brief.
51. Describe the basic structure of a C program.
52. List the bitwise operators in C language.
53. If a four digit number is input through the keyboard, write a program to reverse the given number.
54. Write a program to demonstrate the use of nested if-else.
55. Explain in detail the working of break and continue with example.
56. What will be the value of z in the following c program:

```
{
        int z, x=5, y=-10, a=4, b=2;
        z=x++*y*b/a;
}
```

57. Explain the basic structure of a C program with an example.

58. In a town, the percentage of men is 52. The percentage of total literacy is 48. If the total percentage of literate men is 35 of the total population, write a program to final the total number of illiterate men and women if the population of the town is 80000.
59. List the operator in C and explain conditional, logical, and bitwise precedence operator in brief.
60. Consider the following code:

```
#include<stdio.h>
main() {
        int var1, var2;
        printf("Enter any number");
        scanf("%d", &var1);
        var2 = var1 + 1;
        var1 = var2 + 1;
        printf("var2 = %d In", var2);
        printf("var1 = %d In", var1);
}
```

    What would be the output if the user enters 10 as the number?
61. Write a program to input the numbers till 0 is entered and find the largest even and odd numbers among them.
62. Write a menu driven program which has the following options:
    (i) Factorial of a number
    (ii) Prime or not
    (iii) Odd or even
    (iv) Exit
    Once a menu item is selected, the appropriate action should be taken and once this action is finished, the menu should reappear. Unless the user selects the 'Exit' option, the program should continue to work.
63. Write a program to produce the following output:

				1				
			1		1			
		1		2		1		
	1		3		3		1	
1		4		6		4		1

64. What are keywords? Write five keywords of C.
65. Draw a flow chart to calculate the perimeter of a rectangle for given length and width.
66. Write the basic structure of a C program. Also explain why C is called middle level language.
67. Write a program which asks the user to enter marks of physics, chemistry, and mathematics. Then calculate the percentage and print on the screen.
68. Explain the bitwise – AND and bitwise – OR operator with examples.
69. Explain the usage of 'break' and 'continue' statements with example.

70. Write a program which asks the user to input the numbers till he enters zero. At the end it prints the average of all the numbers.

71. Write a program using loops to print the following pattern on the output screen:

E				
E	D			
E	D	C		
E	D	C	B	
E	D	C	B	A

72. Write short notes on the history of C-programming and also explain the features of C.
73. Explain the basic structure of C programming with examples.
74. Explain various types of operators in C programming.
75. Describe the data types used in C.
76. List out the difference between break and continue statement.
77. Write a program to find the greatest value between three numbers.
78. Compare while loop and do-while loop in terms of their functions.
79. Write a program to print the following output:

5	4	3	2	1
4	3	2	1	
3	2	1		
2	1			
1				

80. Depict basic flowchart symbols. Also mention their specific functions.
81. Write about different types of C built in operators. Explain them in brief.
82. What is a conditional operator in C. Write a C program by using a conditional operator to find the maximum out of 3 given numbers.
83. Write about various steps to develop a program.
84. Enlist the bitwise operators supported by C.
85. Write about a C decision making statement. Explain with examples.
86. Write a program to reverse an entered string without using strrev function.
87. Explain various looping statements in C. Give examples for each.
88. Write short notes on compiler, linker, loader, and assembler.
89. Rewrite the statement without using compound relations

    ```
    if(grade <= 59 && grade >= 50) {
    ```

second = second + 1;

}

90. Write a program to print all the prime numbers between a given range.
91. Explain any 7 string handling functions.
92. Draw the given pattern upto n number of rows:

			1			
		2	3	2		
	3	4	5	4	3	
4	5	6	7	6	5	4

93. Define keywords and write 5 keywords of C with its meaning.
94. What is an Operator? Explain all the operators with examples.
95. Briefly describe the computer language.
96. Differentiate with example

    I/P and O/P statement

    Type conversion and type casting

97. Write the names of selection used in making decisions.
98. Explain various jump statements in C with the help of examples.
99. Describe the else-if ladder with suitable examples.
100. Explain with example:

    Switch case

    Event and counter controlled loop

101. What do you mean by the precedence of operator.
102. Write a program to find the area of a circle.
103. What do you mean by conditional or ternary operator? Explain with examples and flowchart.
104. Write a program to find an average of 5 numbers.
105. Write names of different types of loops available in C.
106. Write a program to find the sum of digits of an integer number.
107. Write a program to print a multiplication table of an integer number.
108. What do you mean by an array? Write a program to input and print elements in an integer array of size 5.
109. Define keywords and write 5 keywords of C with its meaning.
110. What is an Operator? Explain all the operators with examples.
111. Briefly describe the computer language.
112. Differentiate with example:
    a. I/P and O/P statement
    b. Type conversion and type casting
113. Write the names of selection used in making decisions.
114. Explain various jump statements in C with the help of examples.
115. Describe else-if ladder with suitable example.
116. Explain with example:

a. Switch case
b. Event and counter controlled loop

117. Write a short note on formatted I/O functions in C.
118. Write a program to find the least common divisor.
119.