Structured Programming

CSE 103

Note: This document is collected from Internet and modified whereever found necessary.

Multiple Choice Questions

1. The C language consists of how many number of keywords?
   A) 32 B) 40 C) 24 D) 56

2. The prototype of the printf function is included in which header file -
   A) stdio.h B) stdlib.h C) conio.h D) io.h

3. Preprocessor Directives are used for -
   A) Macro Expansion B) File Inclusion C) Conditional Compilation D) All of these

4. Which operator has the lowest priority?
   A) ++ B) % C) + D) ||

5. The typecast operator is -
   A) (type) B) cast() C) // D) " "

6. File manipulation functions in C are available in which header file?
   A) streams.h B) stdio.h C) stdlib.h D) files.h

7. Which pair of functions below are used for single character I/O?
   A) getchar() and putchar() B) scanf() and printf() C) input() and output() D) Non of these

8. Which function is used to read characters as you type?
   A) getchar() B) getch() C) getche() D) Both (B) and (C)

9. What is the output of the following program?
   void main() {
   int a=b=c=10; a=b=c=50;
   printf("%d %d %d",a,b,c);
   }
   A) 50 50 50 B) Compile Time Error C) 10 10 10 D) Three Gaebage Value

10. Which format specifier is used to print the values of a double type variable:
    A) %If B) %Id C) %Iu D) %f

11. What will be the output of the following program?
    void main ( ) {
    double x=28;
    int r;
    r = x%5;
    printf ("r=%d", r);
    }
    A) r= 3 B) Run time Error C) Compile time Error D) None of the Above

12. What does the following function call mean? strcpy(s1 , s2)
    A) copies s1 string into s2 B) copies s2 string into s1 C) copies both s1 and s2 D) None of these

13. What will be the output of the following program?
    void main( ) {
    int x [ ]= 10,20,30,40,50;
    printf("%d %d %d %d", x[4], 3[x], x[2], 1[x], x[0]);
    }
    A) Error! B) 10 20 30 40 50 C) 50 40 30 20 10 D) None of these

14. Which of the following is not a keyword of 'C'?
    A) auto B) register C) int D) function

15. What will be the output of the following program?

void main ( ) {
char a[] = “INFO” ; a++;
printf (“%s”, a);
}
A) Error B) INFO C) NFO D) None of these

16. Which of the following operators has right-to-left associativity?
A) && B) // C) % D) sizeof

17. What will be the output of the following program?
void main ( ) {
int I;
I = 0x10 + 010 + 10;
printf (“I=%x”, i);
}
A) x= 34 B) i= 34 C) I = 22 D)Error

18. Explicit type conversion is known as
A) conversion B) disjunction C) separation D) casting

19. What will be the output?
#define SQUARE(X) X * X
void main ( ) {
printf (“Square = %d” , SQUARE(10+2));
}
A) Square = 144 B) Square =32 C) Square =122 D) Square =12

20. By default a function returns a value of type
A) int B) char C) void D) None of these

21. What will be the value of x after executing the program?
void main ( ) {
int x;
x = printf(“I See, Sea in C”); printf(“x= % d” , x);
}
A) x= 15 B) x=2 C) Garbage value D) Error

22. What is sizeof in ‘C’?
A) Operator B) Reserve Worf C) Both (A) and (B) D) Function

23. Study the following C program
void main ( ) {
int a= 0; For (; a ;); A++;
}
What will be the value of the variable, a, on the execution of the above program
A) I B) 0 C) –1 D) None of these

24. Which is not a keyword in ‘C’?
A) typedef B) const C) near D) complex

25. What will be the output of the following ’C’ code?
void main ( ) {
char a[ ]= “Hello World” ; char *p ;
p=a;
printf(“%d %d %d %d”,sizeof(a), sizeof(p), stren (a), strlen(p));
}
A) 11 11 10 10 B) 10 10 10 10 C) 12 12 11 11 D) 12 2 11 11

26. The meaning of arrow operator in a-⟩b
A) (*a).b B) a.(*b) C) a.b D) None of these

27. What will be the output of the following ’C’ code?
void main ( ) {
printf (“ABC\b\b\bInfo World”);
}
A) Info world B) ABC Info world C) strxfrm D) strcut

28. Which is a valid string function?
A) strpbrk B) strlen C) strxfrm D) strcut

29. What will be the size of the following structure?
struct sample {
static int x; int y,z;
};
A) 6 bytes B) 2 bytes C) + bytes D) None of these

30. Which of the following function will not convert a floating point number to string?
A) fcvt B) gevt C) eevt D) hcvt

31. What will be the output?
void main ( ) {
printf(“%d”,’B’ ⟨ ‘A’); }
A) Error B) 1 C) 0 D) None of these

32. Which one of the following is a conditional directive?
A) #nifdefn B) #ifdefn C) #ifdefn D) #nifdef

33. What will be the output?
```
void main ( ) {
int x; unsigned y;
printf("%d %d", sizeof(x), sizeof(y) );
}
```
A) 22 B) 24 C) 44 D) None of these

34. int **x;
A) x is a pointer to pointer B) x is not pointer C) x is long D) None of these

35. What will be the output?
```
void main ( ) {
printf("%d %d", 10&20, 10/ 20);
}
```
A) 00 B) 10 10 C) 0 30 D) 20 20

36. Which of the following is used as a string termination character?
A) 0 B) \0 C) /0 D) None of these

37. What will be the output?
```
void main ( ) {
int I= 48;
printf("%c %d",I,I);
}
```
A) Error B) 48 48 C) 1 48 D) 0 48

38. A static variable by default gets initialized to
A) 0 B) blank space C) 1 D) garbage value

39. Find out on which line no. you will get an error?
```
Line 1: void main ( )
Line 2: {
Line 3: print("Hello World")
Line 4: }
```
A) Line 1 B) Line 2 C) Line 3 D) Line 4

40. What will be the output of the following program?
```
void main ( ) {
int x=10,y=20;
printf ("%d",x,y); }
```
A) 10 B) 20 C) 10 20 D) None of these

41. Which function reallocates memory?
A) realloc B) alloc C) malloc D) None of these

42. A declaration float a,b; occupies of memory?
A) 1 bytes B) 4bytes C) 8byte D) 16 bytes

43. What is the output of the following program?
```
void main() {
int x=40,y=30,z=80; if(x<y<z)
printf("Hello world"); else
printf("Good by"); }
```
A) Hello world B) Good by C) Compile time error D) None of these

44. Which of the following is not a relational operator?
A) ! B) ! = C) >= D) <

45. What will be the output?
```
void main() {
char *p="Hello world"; int *q;
p++;
q = (int *)p; q++;
printf("%s\n%s",p,q); }
```
A) ello world B)Error Ello world C) ello world D)ello world Lo world llo world

46. which of the following is an operator in 'C'?
A) , B) $ C) @ D) None of these

47. What is the output of the following code?
```
void main() {
int c=0, d=5, e=10, a;
a=c>1?d>1||e>1?100:200:300;
printf("a=%d",a); }
```
A) a=300 B)a=100 C) a=200 D) None of these

48. Which among the following is a unconditional control structure?
A) do-while B) if –else C) goto D) for

49. Which of the following language is predecessor to C Programming Language?
A) A B) B C) BCPL D) C++

50. C programming language was developed by
A) Dennis Ritchie B) Ken Thompson C) Bill Gates D) Peter Norton

51. C was developed in the year
A) 1970 B) 1972 C) 1976 D) 1980

52. C is a language
A) High Level B) Low Level C) Middle Level D) Machine Level

53. C language is available for which of the following Operating Systems?
A) DOS B) Windows C)Unix D) All of these

54. Which of the following symbol is used to denote a pre-processor statement?
A) ! B) # C) ∼ D);

55. Which of the following is a Scalar Data type
A) Float B) Union C) Array D) Pointer

56. Which of the following are tokens in C?
A) Keywords B) Variables C) Constants D) All of the above

57. What is the valid range of numbers for int type of data?
A) 0 to 256 B) -32768 to +32767 C) -65536 to +65536 D) No specific range

58. Which symbol is used as a statement terminator in C?
A) ! B) # C) ∼ D) ;

59. Which escape character can be used to begin a new line in C?
A) \a B) \b C) \m D) \n

60. Which escape character can be used to beep from speaker in C?
A) \a B) \b C) \m D) \n

61. Character constants should be enclosed between
A) Single quotes B) Double quotes C) Both a and b D) None of these

62. String constants should be enclosed between
A) Single quotes B) Double quotes C) Both a and b D) None of these

63. Which of the following is invalid?
A) '' B) " " C) 'a' D) 'abc'

64. The maximum length of a variable in C is
A) 8 B) 16 C) 32 D) 64

65. What will be the maximum size of a float variable?
A) 1 byte B) 2 bytes C) 4 bytes D) 8 bytes

66. What will be the maximum size of a double variable?
A) 1 byte B) 4 bytes C) 8 bytes D) 16 bytes

67. A declaration float a,b; occupies of memory
A) 1 byte B) 4 bytes C) 8 bytes D) 16 bytes

68. The size of a String variable is
A) 1 byte B) 8 bytes C) 16 bytes D) None

69. Which of the following is an example of compounded assignment statement?
A) a = 5 B) a += 5 C) a = b = c D) a = b

70. The operator && is an example for operator
A) Assignment B) Increment C) Logical D) Rational

71. The operator & is used for
A) Bitwise AND B) Bitwise OR C) Logical AND D) Logical OR

72. The operator / can be applied to
A) integer values B) float values C) double values D) All of these

73. The equality operator is represented by
A) := B) .EQ. C) = D) ==

74. Operators have hierarchy. It is used to know which operator
A) is most important B) is used first C) is faster D) operates on large numbers

75. The bitwise AND operator is used for
A) Masking B) Comparison C) Division D) Shifting bits

76. The bitwise OR operator is used to
A) set the desired bits to 1 B) set the desired bits to 0 C) divide numbers D) multiply numbers

77. Which of the following operator has the highest precedence?
A) * B) == C) =⟩ D) +

78. The associativity of ! operator is
A) Right to Left B) Left to Right C) (a) for Arithmetic and (b) for Relational D) (a) for Relational and (b) for Arithmetic

79. Which operator has the lowest priority?
A) ++ B) % C) + D) ||

80. Which operator has the highest priority?
A) ++ B) % C) + D) ||

81. Operators have precedence. A Precedence determines which operator is
A) faster B) takes less memory C) evaluated first D) takes no arguments

82. Integer Division results in
A) Rounding the fractional part B) truncating the fractional part C) Floating value D) An Error is generated

83. Which of the following is a ternary operator?
A) ? B) * C) sizeof D) ∧

84. What will be the output of the expression 11 ∧ 5?
A) 5 B) 6 C) 11 D) None of these

85. The type cast operator is
A) (type) B) cast() C) // D) " "

86. Explicit type conversion is known as
A) Casting B) Conversion C) Disjunction D) Separation

87. The operator + in a += 4 means
A) a = a + 4 B) a + 4 = a C) a = 4 D) a = 4 + 4

88. p++ executes faster than p+1 because
A) p uses registers B) p++ is a single instruction C) ++ is faster than + D) None of these

89. Which of the following statements is true?
A) C Library functions provide I/O facilities B) C inherent I/O facilities C) C doesn't have I/O facilities D) Both (a) and (c)

90. Header files in C contains
A) Compiler commands B) Library functions C) Header information of C programs D) Operators for files

91. Which pair of functions below are used for single character I/O.
A) getchar() and putchar() B) scanf() and printf() C) input() and output() D) None of these

92. The printf() function returns which value when an error occurs?
A) Positive value B) Zero C) Negative value D) None of these

93. Identify the wrong statement
A) putchar(65) B) putchar('x') C) putchar("x") D) putchar('\n')

94. Which of the following is charecter oriented console I/O function?
A) getchar() and putchar() B) gets() and puts() C)scanf() and printf() D) fgets() and fputs()

95. The output of printf("%u", -1) is
A) -1 B) minimum int value C) maxium int value D) Error message

96. An Ampersand before the name of a variable denotes
A) Actual Value B) Variable Name C) Address D) Data Type

97. Symbolic constants can be defined using
A) #define B) const C) symbols D) None of these

98. Null character is represented by
A) \n B) \0 C) \o D) \e

99. Which header file is essential for using strcmp() function?
A) string.h B) strings.h C) text.h D) strcmp.h

100. malloc() function that is used in dynamic allocation is available in which header file?
A) stdio.h B) stdlib.h C) conio.h D) mem.h

101. File manipulation functions in C are available in which header file?
A) streams.h B) stdio.h C) stdlib.h D) files.h

102. C supports how many basic looping constructs
A) 2 B) 3 C) 4 D) 6

103. A statement differs from expression by terminating with a
A) ; B) : C) NULL D) .

104. What should be the expression return value for a do-while to terminate
A) 1 B) 0 C) -1 D) NULL

105. Which among the following is a unconditional control structure
A) do-while B) if-else C) goto D) for

106. continue statement is used
A) to go to the next iteration in a loop B) come out of a loop C) exit and return to the main function D) restarts iterations from beginning of loop

107. Which operator in C is called a ternary operator
A) if..then B) ++ C) ? D) ()

108. Which of the following header file is required for strcpy() function?
A) string.h B) strings.h C) files.h D) strcpy()

109. The meaning of conversion character for data input is
A) Data item is a long integer B) Data item is an unsigned decimal integer C) Data item is a short integer D) None of the above

110. The conversion characters for data input means that the data item is
A) An unsigned decimal integer B) A short integer C)A hexadecimal integer D) A string followed by white space

111. An expression contains relational, assign. ment and arithmetic operators. If Parenthesis are not present, the order will be
A) Assignment, arithmetic, relational B) Relational, arithmetic, assignment C) Assignment, relational, arithmetic D) Arithmetic, relational, assignment

112. Which of the following is a keyword is used for a storage class
A) printf B) external C) auto D) scanf

113. In the C language 'a' represents
A) a digit B) an integer C) a character D) a word

114. The number of the relational operators in the C language is
A) Four B) Six C) Three D) One

115. A compound statement is a group of statements included between a pair of
A) double quote B) curly braces C) parenthesis D) a pair of /'s

116. A Link is
A) a compiler B) an active debugger C) a C interpreter D) a analyzing tool in C

117. The continue command cannot be used with
A) for B) switch C) do D) while

118. In C, a Union is
A) memory location B) memory store C) memory screen D) None of these

119. When the main function is called, it is called with the arguments
A) argc B) argv C) None of these D) both a & b

120. A multidimensional array can be expressed in terms of
A) array of pointers rather than as pointers to a group of contiguous array B) array without the group of contiguous array C) data type arrays D) None of these

121. C allows arrays of greater than two dimensions, who will determined this
A) programmer B) compiler C) parameter D) None of these

122. A pointer to a pointer in a form of
A) multiple indirection B) a chain of pointers C) both a and b D) None of these

123. Pointers are of
A) integer data type B) character data type C) unsigned integer data types D) None of these

124. Maximum number of elements in the array declaration int a[5][8] is
A) 28 B) 32 C) 35 D) 40

125. If the size of the array is less than the number of initializers then,
A) Extra values are being ignored B) Generates an error message C) Size of Array is increased D) Size is neglected when values are given

126. Array subscripts in C always start at
A) -1 B) 1 C) 0 D) Value provided by user

127. A Structure
A) can be read as a single entity B) cannot be read as a single entity C) can be displayed as a single entity D) has member variables that cannot be read individually

128. Identify the invalid pointer arithmetic
A) Addition of float value to a pointer B) Comparison of pointers that do not point to the element of the same array C) Subtracting an integer from a pointer D) Assigning the value 0 to a pointer variable

Very short questions

1. What is a variable?
2. What is a constant?
3. How many bytes are required to store integer type value?
4. How many bytes are required to store float type value?
5. How many bytes are required to store char type value?
6. How many bytes are required to store double type value?
7. What is a main difference between a variable and a constant?
8. What is a logical variable?
9. What is a global variable?
10. How long is a word?
11. How long is a byte?
12. How does a programmer finds coding errors?
13. Describe the appearance of a machine code?
14. Whether the program in c can be executed by a computer directly?
15. What is a language processor?
16. What is the purpose of a language processor?
17. What are the major disadvantages of a machine code?
18. Give the general syntax of a conditional operator?
19. Which are relational operator?
20. Which are logical Operators?
21. Which are Bitwise Operators?
22. Which are unformatted input output functions?
23. Which are formatted input output functions?
24. What is the use of getchar() function?
25. What is the use of getch() function?
26. What is the use of getche() function?
27. What is a Disk IO Function?
28. What do you mean by consol IO functions?
29. Give syntax of a simple if statement.
30. Give syntax of a simple if – else statement.
31. Give syntax of a simple nested if – else statement.
32. Define a Program.
33. What is a nested loop?
34. What is a process loop?
35. What is a Syntax Error?
36. What is a Logical Error?
37. What is a Run Time Error?
38. Define an Array.
39. Give the general Syntax to declare an One dimensional array.
40. Give the general Syntax to declare a two dimensional array.
41. What is a function?
42. What is a built in function?
43. What is the use of a return statement?
44. What is the use of strcat() function?
45. What is the use of strcmp() function?
46. What is the use of strrev() function?
47. What is the use of strlen() function?
48. What is the use of strcpy() function?
49. What is a recursive function?
50. What do you mean by call by value?

51. What do you mean by call by reference?
52. What is a pointer?
53. What is a structure?
54. What is the main difference between a structure and a union?
55. What is the use of typedef?
56. State whether Structured programming helps in reducing errors?
57. What is a preprocessor?
58. Give any two features of preprocessor
59. Give the syntax for defining a File
60. Give the syntax for opening a File
61. Give the syntax for Closing a File
62. What is fopen()?
63. What is fclose()?
64. What are the three constants used in C?
65. Explain bitwise left shift operator?
66. What is a unary operator?
67. Explain putchar()?
68. What is an expression?
69. How is an expression differ from a variable?
70. Explain primary data types used in C?
71. Comment on "C is mid level language"?
72. Explain the escape sequence character in C?
73. What is the use of if statement?
74. write a syntax of while loop?
75. what is the output of the following program?
    void main () {
    int m=1,n=2;
    for(j=1;j<=2;j=j+1)
    { m=m+1;
    n=n*j;
    printf("%d %d",m,n);
    }}
76. What are the different types of loop statements used in C?
77. Explain for loop?
78. Enlist different format specifier in C.
79. What is the output of the following program?
    void main()
    { int a[7]={11,12,13,14,15,16,17};
    int i;
    printf("content of array"); for(i=0;i<=6;++i);
    { printf("%d ",a[i]); }
    }
80. What are the rules to declare an one dimensional array?
81. What is a multidimensional array?
82. Explain - a) strlen() b) strcat()
83. Explain - a) getc() b) putc().
84. Explain any two file handling functions?
85. Explain macros?
86. Explain #include?
87. Explain dynamic memory allocation?
88. State three advantages of functions?
89. What is the purpose of keyword "void"?
90. Determine the value of each of following expression-
    int i=8, j=j; a) (3 * i – 2 * j) %(2 * d –c) b) (i > 0) && (j < 5)
91. What is meant by associativity?
92. If x = 8.8,y = 3.5,z = -5.2, then determine value of following expression
    a) 2 * y + 3 * (x - z) b) 2 * x / (3 * y)
93. Describe an arithmetic operator?
94. Explain scanf()
95. Difference between formatted & unformatted statements?
96. State features of pre-processor?
97. What is a command line argument?
98. Define variable & constant?
99. How static variable are define and initialized?
100. What is meant by storage class of variable?
101. List any three file modes in C?
102. Write a program to find the largest between two numbers?

Short questions

1. Enlist the features of C.
2. Explain different data types used in C language?
3. Explain type identifiers in C?
4. Explain in brief structure of C programming?
5. what is operator enlist all operators used in C?
6. what is data type explain the any four data types used in C language?
7. Explain the difference between '=' and '==' operator explain with example?
8. Write a short note precedence & order of evaluation?
9. Differentiate between relational and logical op-

erators used in C?
10. Write short note on Input & Output functions used in C (i.e. print & scanf functions?
11. What is variable? What are the rules for defining variables?
12. Differentiate between local variable and global variable?
13. Explain symbolic constants used in C?
14. Explain any two bitwise operator with suitable example.
15. Explain with example ++i and i++.
16. Explain logical operators and expressions used in C?
17. Explain the following g functions i)getch() and ii) clrscr()
18. Explain printf() function with an example
19. Explain scanf() function with an example
20. Explain syntax and use of Do While statement
21. Which looping statements does C provides?Explain any one.
22. Explain explain continue And break statements
23. Explain switch statement with its syntax and example.
24. What is Nested if else explain with an example?
25. Explain nested for loop with an example
26. What is array? How to declare array?Explain with suitable example.
27. Explain one dimensional array with an example
28. Explain Two dimensional array with an example
29. Explain applications of array
30. Explain any 4 string functions with suitable example?
31. What is the difference between call by value and call by reference
32. What is recursion explain with suitable example.
33. For what purpose `'\0'` is used in string operations? Explain with a suitable example.
34. What is function ?how function is defined.
35. Explain the difference between calling function and called function?
36. Explain void function?
37. Explain what is pointer?expalin with suitable example
38. Explain pointer to structure in detail.
39. Explain pointer to function in detail.
40. Explain explain any one dynamic memory allocation
41. Explain how to access a value using pointer?give a suitable example.
42. Write a short note on pointer to pointer
43. Distinguish bet malloc and calloc()
44. What is structure?explain with suitable example
45. Explain array of structure with example
46. Explain Nested structure with example.
47. Distinguish between Structure and Union
48. Differentiate structure and array
49. Describe programming approach
50. Explain the use of Typedef
51. Explain directives
52. Explain features of preprocessors
53. What is a pre-processor explain #include ,#define
54. Write a short note on C preprocessors
55. Write a short note on file handling in C
56. Distinguish between getch and getc
57. Distinguish between putch and putc
58. Explain putc and getc in brief
59. What is command line argument
60. Explain command line argument with example
61. What is macro? Explain with example
62. Differentiate between if-else-if and switch statement.
63. Explain function with argument and return type.
64. Explain array of pointers.
65. Define array and how two – dimensional array is initialize?
66. Explain dynamic memory allocation in brief.
67. Write a note on pointer to pointer.
68. What are the similarities and difference between structure and union.
69. Explain nested structure.
70. Explain array of structure.
71. Explain pointer to structure.
72. Explain sizeof operator with example.
73. Explain conditional operator with example.
74. What is user defined functions and built-in functions. Enlist them.
75. What is null string? What is it's length?
76. What is union? Explain with example.
77. Write short note on expression used in C.
78. What are static variable? Compare with standard local variable.

79. Write a rule for declaring character constant.
80. Write a rule for declaring string constant.
81. Write a rule for declaring numeric constant.
82. What is structure? Explain with example.
83. Explain * operator and & operator with example.
84. What are the rule of to use period(.) operator.
85. Explain is EOF and BOF.
86. What is EOF and what value does usually have?
87. What are identifier and keywords? Explain it with suitable example.
88. What is type casting? Explain it with suitable example.
89. What is swapping? Explain it with suitable example.
90. Write a short note on ternary operator and cast operator.
91. What is string constant? How is string constant is differ from character constant?
92. What is character constant? How is character constant is differ from integer constant?
93. List out the five arithmetic operators in C.
94. What is the associativity rules involve in this operator.
95. What is mean by the comparison and logical operator?
96. How are they different from the arithmetic and assignment operator?
97. List out the different operators involve for comparison and logical decision making in C.
98. What is mean by the equality operator? How do these differ from an assignment operator.
99. Explain the following bitwise operators: i)Bitwise AND ii) Bitwise OR iii) BitwiseXOR iv) Bitwise Left Shift v) Bitwise Right Shift
100. What is unary operator? List out the different operator involve in the unary operator.
101. Distinguish between binary minus and unary minus.
102. What is modulus operator and how does it operate in C.
103. What is an expression? How is an expression different from the variables?
104. What are the different type of statement used in C.
105. What are the salient features of standard input and output file
106. Explain the following statements: i)getchar() ii)putchar() iii)EOF
107. What is the scanf() and how does it differ from the getchar().
108. What are the format codes used along with the scanf().Display the various data types in C.
109. What is the printf() and compare with putchar().
110. What is mean by conditional expression?
111. What is looping in C? What are the advantages of looping?
112. What is the nested for loop?
113. Compare while loop and for loop with example.
114. What is crucial importance of main() in C.
115. What is use of continue in C.
116. List out applications of C language.
117. List out the advantages of function.
118. What is mean by call by reference & call by value.
119. What is the difference between call by reference & call by value.
120. What is the purpose of return statement
121. List out the rules used in return statement
122. What is static variable and what is its scope?
123. What is the use of external data type in c?
124. What is the recursive function. List out their merits and demerits.
125. How does the fopen() works? Explain it with example.
126. What is an array and how array variable differs from ordinary variable.
127. What is an array indexing explain with an example
128. When sorting the elements of an array is it necessary to use another array to store the sorted elements explain?
129. What is the function and list out advantages and disadvantages of functions
130. What is mean by function argument, function call and return value
131. What is the automatic variable and what is the use of it.
132. How can data be initialized in the automatic variable
133. How are the data elements initialized in the case

of static type variable
134. What is the use of external data type in C
135. How is the include directive is used?
136. How can #define directive be continued to a new line
137. What are the rules used to declare a one dimensional array
138. What are the rules used to declare a two dimensional array
139. What are the rules used to declare a multi dimensional array
140. What is character array how it differs from other data types.
141. Distinguish between character array and string
142. Explain applications of array
143. What is a pointer?What is the use of pointer in C
144. What is the role played by the break statement within the switch statement.Explain with example.
145. What is the difference between the array of pointer and pointer to the array
146. Summerise the purpose of string.h function.
147. What is the structure and what are the uses of it.
148. Distinguish structure data type with other data type variables.,
149. How structure different from array
150. What is mean by member or field of structure
151. What is the difference between structure declaration and structure initialization
152. What is the advantage of UNION in C?
153. Explain the salient features of typedef ?
154. Explain the various modes used in file operation?
155. Comment on "May comments are nested"?
156. Distinguish between binary and unary minus with example
157. What is the modulus operator and how does it works explain it with example
158. Why is go to not necessary for the structured programming language like C?
159. What is the purpose of comma operator within which statement does the comma operator usually appear.

Programming Segment

1. Write a C program to find the maximum of three numbers using conditional operators
2. Write a C Program to sort an array in ascending order
3. Write a C Program to sort an array in descending order
4. Write a C Program to find sum of digits in a given number
5. Write a C Program to print square of all numbers 1 to 20 and print sum squares
6. Write a C Program to check if given number is present in an array or not
7. Write a C Program to find the position of given number in array
8. Write a C Program to print transpose of matrix
9. Write a C Program to print equivalent binary number of given decimal number
10. Write a C Program to print equivalent octal number of given decimal number
11. Write a C Program to print equivalent hex number of given decimal number
12. Write a C Program to calculate factorial of a given number using recursion
13. Write a C Program to draw following object
14. Write a C Program to print all numbers between 1 to n divisible by 7
15. Write a C Program to find sum of 1 + 2 + 3 + ... + n
16. Write a C Program to find sum of 2 + 4 + 6 + ... + n
17. Write a C Program to find sum of 7 + 14 + 21 + ... + n
18. Write a C Program to find sum of 1/1 + 1/2 + 1/3 + ... + 1/n
19. Write a C Program to print 15 terms of 1 , 2 , 4, 7, 11, 16, ...
20. Write a C Program to print even and odd number from an array
21. Write a C Program to read character from keyboard and display message whether character is alphabet , digit or special symbol.
22. Write a C Program to read a string and count number of vowels in it.
23. Write a C language program to display the

largest element in the matrix.

24. Write a C language program to swap two numbers using pointers and function.
25. Write a C language program to calculate the series- 1/1! + 2/2! + 3/3! + ... Up to n terms.
26. Write down C language program to find out number of occurrences of a character in a file.
27. Write a C language program to display the student result sheet using the data stored in a file.
    Student structure
    Name character(25)
    Rollno integer
    Marks1 integer
    Marks2 integer
    Marks3 integer
28. Write a C language program to find out sum of the following series 1! +2! + 3!+.....+n!
29. Write a C language program to enter n elements in array and find second smallest number from an array.
30. Write a C language program to check whether given number is prime or not.
31. Write a C language program using recursive function to enter 4 digit number and find the sum of all digits of the number .
32. Write a C language program to print all Armstrong numbers between 1 to 500. (e.g. 153=13+53+33=153)
33. Write a C language program to find whether given number is palindrome or not.
34. Write a C language program to find GCD of given two numbers.
35. Write a C language program which will read string and count the number of characters and words in it.
36. Write a C language program to read two matrices and add them.
37. Write a C language program to read two matrices and multiply them.
38. Write a C language program to read one matrix and find the sum of it's diagonal elements.
39. Write a C language program to input number and find a largest digit in a given number and print it in word with appropriate message. (e.g. n=5273 - "SEVEN is largest")
40. Write a C language program to compute following series G= 1+ x3/3! + x5 /5! + x7/7! + ... up to n terms.
41. Write a C language program to read n numbers in an array and split the array into two arrays even and odd such that the array even contains all the even numbers and other is odd. So the output will be—(e.g. Original array is 7,9,4,6,5,3,2,10,18 Odd array is 7,9,5,3 Even array is 4,6,2,10,18)
42. Write a C language program to check whether the string is palindrome or not.
43. Write a C language program to add, list, delete record and modify the current record.
44. Write a C language program using structure to define employee record containing employee number, name and salary. Read 10 records.
45. Write a C language program to demonstrate the use of union.
46. Write a C language program to define structure for class containing class, name, no. of students and block no. Read 5 records and display it.
47. Write a C language program using recursion n terms of Fibonacci series.
48. Write a C language program using recursion to calculate factorial of given number.
49. Distinguish between character constant and string constant.
50. Describe all operators used in C language with example.
51. Explain in detail three parts of C program.
52. Write a short note on precedence and order of evolution.
53. Explain in detail bitwise operators with example.
54. State and explain formatted input-output statements and standard input-output statements with example.
55. Explain in detail call by value and call by reference with example.
56. Explain the following using general syntax and example . i)if ii) if-else iii) nested if-else
57. Explain break and continue statements using syntax and example .
58. Explain following
    i)while ii) do-while iii) for
59. Define array. Explain different types of array in

detail.

60. State and explain various types of standard function with example.
61. State and explain different phases used in user defined function.
62. Explain function with return and function with arguments with example.
63. State and explain different types of string functions with example.
64. Explain dynamic memory allocation and releasing dynamically allocated memory.
65. Define structure and union. Explain the way of declaring and accessing them.
66. Explain nested structure and self referential structure with example.
67. Explain in detail array of structure and pointer to structure.
68. State and explain various modes of file opening and file closing.
69. What do you mean by pre-processor? Explain in detail macros.
70. What do you mean by pre-processor directives? List and explain its different categories.
71. Write a C language program to enter n elements in array and find second largest number from array.