Multiple Choice Questions (1 mark)

Unit-1

1. _____is a step by step approach to solve any problem..
   a) Process
   b) Programming Language
   c) Algorithm
   d) Compiler

2. 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) pseudocoding
   d) testing

3. Which symbol is used to represent output in a flowchart?
   a) square
   b) circle
   c) parallelogram
   d) triangle

4. _____is a pictorial representation of an algorithm.
   a) Data Diagram
   b) Flow Chat
   c) Pie Chart
   d) Program

5. What is the standard decision symbol for a flowchart?
   a) circle
   b) lozenge
   c) diamond
   d) square

6. Mnemonic a memory trick is used in which of the following language?
   a) Machine Language
   b) Assembly Language
   c) High Level Language
   d) None of above

7. The translator program used in assembly language is called _____.
   a) Compiler
   b) Interpreter
   c) Assembler
   d) None of above
   d) Translator

8. _____ is easily relocatable language.
   a) Machine Language
   b) Assembly Language
   c) High Level Language
   d) Medium Level Language

9. Which of the following is called low level languages?
   a) Machine Language
   b) Assembly Language
   c) Both of the above
   d) None of above

10. Which of the following is problem oriented language?
    a) High level language
    b) Machine language
    c) Assembly language
    d) Low level language

11. 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

12. Which of the following is machine independence program?
    a) High level language
    b) Machine language
    c) Assembly language
    d) Low level language

13. Which is the limitation of high level language?
    a) Lower efficiency
    b) Machine dependence
    c) Machine level coding
    d) None of above

14. High level language is also called _____
    a) Problem Oriented Language
    b) Business Oriented Language
    c) Mathematically Oriented Language
    d) All of above

15. C language is _____
    a) High level language
    b) Machine language
    c) Assembly language
    d) Low level language

Unit-2

1. _____ is a valid variable name.
    a) int b) float 3) **tot_sum** 4) 9Sum
2. In which section consists of Header files.
    a) Main() 2) Definition 3) Documentation 4) **Link Section**
3. _____ is a invalid variable name.
    a) INT b) pi c) **int marks** d) total_marks
4. What is the output of 9/2- (5%3)
    a) **2**   b) -2
    c) 0   d) 3
5. The range of int data type is _____ bytes.
    a) **2**   b) 4
    c) 8   d) 16
6. What is the value of I after the following execution?
    I=1; ++I =+ 3;
    a) 2   b) **5**
    c) 1   d) 0
7. The value can be changed during program execution is known as _____.
    a) **Variable**   b) constant
    c) Operator   d) None of these
8. The combination of ? and : is known as _____ operator.
    a) **Ternary**   b) Arithmetic
    c) dot   d) Relational
9. The value can not be changed during program execution is known as _____.
    a) Variable   b) **constant**
    c) Operator   d) None of these
10. _____ format specifier used for floating data type.
    a) %d   b) **%f**
    c) %c   d) %e
11. Which of the following section is compulsory in C program?
    a) **Main()**   b) Definition
    c) Documentation   d) None of these
12. By default _____ digits in float type variable after decimal point.
    a) 2   b) 4
    c) 6   d) **8**
13. Which of the following backslash character constant is used for horizontal tab?
    a) \n   b) **\t**
    c) \h   d) \y
14. _____ format specifier used for integer data type.
    a) **%d**   b) %f
    c) %c   d) %e
15. The range of double data type is _____ bytes.
    a) 2   b) 4
    c) **8**   d) 16

16. I=10;
    j=++i;
    i++;
    then i=_____ and j=_____
    a) 21, 22   b) 25, 21
    c) 22, 32   d) **12, 11**

Unit-3

1. Do-while loop is also known as _____ loop.
   a) Entry level
   b) **Exit level**
   c) a & b
   d) None of these

2. _____ statement terminates the execution of loop.
   a) Continue
   b) **break**
   c) switch
   d) none of these

3. _____ statement skips the remaining statement of the loop and control transfer to the condition.
   a) Break
   b) **Continue**
   c) if
   d) switch

4. The Switch expression can be an _____ type.
   a) **Integer**
   b) float
   c) double
   d) none of these

5. The following is not true for switch statement.
   a) break is optional in switch
   b) default is optional in switch
   c) **we can define same case label more than once**
   d) we can define switch within another switch

6. _____loop execute at least once.
   a) while loop
   b) **do...while**
   c) if
   d) for

7. While (1)
   {
   printf(" Hello");
   }
   How many times execute above loop?
   a) 1
   b) 10
   c) **infinite time**
   d) finite time

8. Identified from the following after which statement; is required.
   a) for
   b) nested if
   c) **continue**
   d) none of these

9. _____ types of control structure available in C language.
   a) 1
   b) 2
   c) **3**
   d) 4

10. For declaring one- dimensional array _____subscript is use.
    a) **One**
    b) Two
    b) Three
    d) All of above

11. Individual value in array is called _____.
    a) **Element**
    b) Number
    c) Index
    d) Element and number

12. For declaring two- dimensional array _____subscript is use
    a) One
    b) **Two**
    c) Three
    d) All above

13. In Array subscript can begin with number_____
    a) **Zero**
    b) One
    c) Three
    d) None of these

14. When we declare array _____data type is use.
    a) int
    b) char
    c) float
    d) **All of above**

15. For Initialization of array list of value separated by _____
    a) Question marks (?)
    b) **Commas (,)**
    c) Exclamatory marks (!)
    d) None of these

16.   An array can be initialize either at compile time or at _____
        a) **Run Time**   b) Allocation Time
        c) Released Time   d) Not of above
17.   In two dimensional array the first subscript is define _____size.
        a) **Row**   b) column
        c) Vector   d) All of above
18.   In two dimensional array the second subscript is define _____size
        a) Row   b) **column**
        c) Vector   d) All of above
19.   isdigit( ) function is available in _____
        a) <stirng.h>   b) **<ctype.h>**
        c) <conio.h>   d) <math.h>
20.   abs ( ) function is available in _____
        a) <stirng.h>   b) <stdlib.h>
        c) <conio.h>   d) **<math.h>**
21.   _____is return the absolute value.
        a) **abs( )**   b) isdigit( )
        c) isupper( )   d) islower( )
22.   isalpha(argument) function is return _____ where the argument is
        not alphabetic
        a) **zero**   b) one
        c) three   d) none of these
23.   isupper( ) function is available in _____
        a) <stirng.h>   b) **<ctype.h>**
        c) <conio.h>   d) <math.h>

Unit-4
1.   '\0' is _____
        a) **Null Character**   b) Character value
        c) Escape sequence   d) Symbolic Constant
2.   A group of character is known as _____
        a) **String**   b) Array
        c) Function   d) All of above
3.   When we declare string _____data type is use.
        a) int   b **char**
        c) float   d) All of above
4.   A group of character in string defines in_____quotation marks.
        a) Single   b) **Double**
        c) Three   d) Multi
5.   _____is use to print the double quote in the string
        a) **Back slash**   b) Forward slash
        c) Tab   d) None of these.
6.   _____operation is performed on string
        a) Reading   b) Copying
        c) Writing   d) **All of above.**
7.   _____function is use to reading the string
        a) **scanf()**   b) printf()
        c) strrev()   d) strlen()
8.   _____function is use to writing the string.
        a) scanf()   b) **printf()**
        c) strrev()   d) strlen()

9.   Ampersand (&) is not required when read the _____value.
      a) int   b) float
      c) **string**   d) All of above.

10.   Reading a specified number of character from the input string _____is use
      in scanf Function.
      a) %d   b) %S
      c) **%ws(w=number)**   d) %ld

11.   Reading single character form the keyboard _____function is use.
      a) putchar( )   b) **getchar()**
      c) getc()   d) putc()

12.   _____function is use for reading the string with the whitespace.
      a) **gets()**   b puts()
      c) getc()   d) putc()

13.   gets () function is available in _____header file.
      a) **<stdio.h>**   b) <conio.h>
      c) <math.h>   d) All of above

14.   The function putchar ( ) requires _____parameter.
      a) **One**   b) Two
      c) Three   d) Four

15.   puts () function is available in _____header file.
      a) **<stdio.h>**   b) <conio.h>
      c) <math.h>   d) All of above

16.   What is the O/P of the following code in arithmetic code on character?
      x = 'z'-1;
      a) x = **121**   b) x = 125
      c) x = 112   d) None of these

17.   The _____string function is use to joins two string.
      a) **strcat()**   b) strlen()
      c) strupr()   d) strrev()

18.   If both the string are same then the comparison value is _____.
      a) **Zero**   b) One
      c) Minus One   d) None of these

19.   strcmp () function is use for _____ two string.
      a) Concate   b) Join
      c) **Compare**   d) All of above

20.   strcmp("ABCD","abcd") = _____
      a) 0   b) 32
      c**)-32**   d) -1

21.   strcpy () function works like _____operator.
      a) **assignment**   b) logical
      c) bit-wise   d) relational

22.   Assign the value of one string into another string _____function is use.
      a) **strcpy()**   b) strlen()
      c) strupr()   d) strrev()

23.   _____ function count and return the number of character in a string.
      a) strcpy()   b) **strlen()**
      c) strupr()   d) strrev()

24.   _____function is use for reverse the string.
      a) strcpy()   b) strlen()
      c) strupr()   d) **strrev()**

25.   Command line argument : main(int argc ,char *argv[])Consider the above example the _____variable is count the number of argument in command line.
     a) **argc**   b) argv
     c) int   d) main( )

26.   Every c program begins its execution with _____
     a) {   b) clrscr ( )
     c) **main ( )**   d) #include<stdio.h>

27.   The following are the user defined function _____.
     a) **main ( )**   b) printf ( )
     c) scanf ( )   d) sqrt ( )

28.   printf ( ) and scanf ( ) is _____type of function.
     a) **Library**   b) User-define
     c) main   d) None of above

29.   C function can be classified in _____catagory.
     a) one   b) **two**
     c) three   d) nine

30.   All function by default return _____
     a) **integer**   b) float
     c) void   d) string

31.   Function header consists of _____parts.
     a) one   b) two
     c) **three**   d) none of above

32.   A function definition is also known as _____.
     a) **function implementation**   b) function call
     c) function type   d) none of above.

33.   The parameter is also known as _____
     a) **argument**   b) variable
     c) data type   d) array

34.   A parameter list in function can be separated by_____
     a) Question marks (?)   b) **Commas (,)**
     c) Exclamatory marks (!)   d) None of these

35.   A function can be surrounded by _____
     a) **parentheses**   b) square brackets
     c) queerly brackets   d) none of these

36.   The following are wrong declaration in function definition._____
     a) int sum(int a , float b)   b) float sum(int a ,float b)
     c) **int sum(int a,b)**   d) float sum(float a, float aa)

37.   A _____statement that returns the value evaluated by the function.
     a) goto   b) break
     c) **return**   d) none of these

38.   When the function return any value at that time it return _____value per function call.
     a) **one**   b) two
     c) three   d) multiple

39.   When the function is called _____argument is passed.
     a) **actual**   b) formal
     c) actual & formal   d) none of these

40.   A function declaration is also known as _____
     a) function implementation   b) function call
     c) function type   d) **function prototype**.

41.   If the function has no formal parameter ,the list is written as _____
    a) **(void)**   b) (int)
    c) (float)   d) none of these
42.   The return type must be _____if no value return from the function.
    a) **void**   b) int
    c) float   d) none of these.
43.   If the function are declare in the global declaration section the prototype is referred as _____prototyped.
    a) **global**   b) local
    c) formal   d) none of these
44.   If the function are declare in the local declaration section the prototype is referred as _____prototyped.
    a) global   b) **local**
    c) formal   d) none of these
45.   User Defined Function can be classified in to _____category
    a) one   b) two
    c) three   d) **four**

Short Question (2 marks)

Unit-1
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.
    1)   To find simple interest.   Hint: SI = (P * R * N)/100
    2)   To find maximum of given three numbers.
    3)   To find out N! (Factorial of N).
    4)   To find weather given number is odd or even.
4.   What is flowchart? List Symbols used in flowchart.
5.   Write advantages and disadvantages of flow chart.
6.   List symbols used to draw flow chart. Explain any one.
7.   List Rules to draw flow chart.
8.   What is an Editor? Give 3 examples of Well Known Editors.
9.   List Languages for all generation.
10.   Write advantages and disadvantages for following.
    1)   Machine Level or Low Level Language (1GL)
    2)   Assembly Language (2GL)
    3)   High Level Language (3GL)
11.   What is Translator? List all translators.
12.   Explain any one translator in detail.
Unit-2
1.   Draw the basic structure of C program.
2.   Write Rules of variable name.
3.   Explain printf() statement with example.
4.   Explain scanf() statement with example.
5.   Explain ternary operator with example.
6.   Explain short hand operator in brief.
7.   Write difference between pre-increment and post- increment operator.
8.   Explain if statement with example.

Unit-3
1. Explain break and continue statement in C.
2. Explain do-while statement with example.
3. Explain break statement with example.
4. Write difference between break and continue.
5. Write difference between exit and entry controlled loop.
6. Explain structure programming in brief.
7. What is array? List out the type of array use in c programming.
8. What is an array? Write syntax to declare 1D array in c. Also give one example.
9. Write the syntax of compile time initialization of 1D array in c. Also give example.
10. Write the syntax of run time initialization of 1D array in c. Also give example.
11. What is an array? Write syntax to declare 2D array in c. Also give one example.
12. Write the syntax of compile time initialization of 2D array in c. Also give example.
13. Write the syntax of run time initialization of 2D array in c. Also give example.
14. List out any four mathematical functions.
15. Explain the isalpha ( ) function.
16. Explain the isdigit ( ) function.
17. Explain the islower ( ) function.
18. Explain the isupper ( ) function.
19. Explain the pow ( ) function.
20. Explain the sqrt ( ) function.
21. Explain the abs ( ) function.
22. Explain the clrscr ( ) function.
23. Explain the getch ( ) function.

]Unit-4
1. What is string? List out the operation perform on the string.
2. What is string? Write the syntax of declaring string in c. Also give example.
3. What is string? How we can initialize the string variable. Give one example.
4. Explain gets ( ) function with syntax and example.
5. Explain puts ( ) function with syntax and example.
6. Explain strlen ( ) function with syntax and example.
7. Explain strrev ( ) function with syntax and example.
8. Explain strcmp ( ) function with syntax and example.
9. Explain strcpy ( ) function with syntax and example.
10. Explain strcat ( ) function with syntax and example.
11. Define function? List out type of function use in c.
12. What is user – define function? Give one example of user define function.
13. What is library function? Give one example of library function.
14. Write deference between user define function and library function.
15. Write the advantage of function.
16. Define function? List out typed of element of user define function.
17. Write the syntax of the following.
    1) Function definition.
    2) Function call
    3) Function declaration.
18. Define function? List out the category of function.

Long Question (>= 3 marks)

Unit-1
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)
      1) To find sum of odd value and even value digits of a given number.
      2) To find out minimum from N numbers.
      3) To check whether inputted number is prime number or not.
      4) To check whether inputted number is palindrome number or not.
      5) To check whether inputted number is Armstrong number or not.
      6) To print N terms of Fibonacci series.
      7) Sum=$1^2 + 2^2 + 3^2 + 4^2 + 5^2 + 6^2 + 7^2 + $ … and so on.
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 flow chart? Explain symbols used to draw a flow chart.
6.   What is Translator? Explain compiler, Interpreter and Assembler. (8 Marks)
7.   Explain High Level Language and Assembly Language in Detail. (8 Marks)
8.   Write a note on Language Generation. (4 Marks)
9.   Explain any one language from following in detail. (Each contain 4 Marks)
      1) Machine Level or Low Level Language (1GL)
      2) Assembly Language (2GL)
      3) High Level Language (3GL)
10.   Write difference between Interpreter and Compiler.

Unit-2
1.   Explain Basic Structure of C program.
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? How to declare and initialization of variable with example.
6.   Explain basic data types used in C language.
7.   What is the output for following?
      a) 4/3 % 9-3   b) (-7/3)+4%3/7 c) 8/4.0+(3.0/2)-1 d) 10/5-2*(3%6)
      e) ((3/2)*6/2-1) f) 7/2+(4.0*3)%2
8.   Explain if..else & nested if statement with syntax and example.
9.   Explain switch statement with syntax and example.

Unit-3
1.   Explain looping statement with syntax and example.
2.   Explain while and for loop with syntax and example.
3.   Write difference between do-while, while and for loop.
4.   Define array? Also explain declaration of 1D and 2D array with syntax and example.
5.   Explain initialization of 1D array with syntax and example.
6.   Explain initialization of 2D array with syntax and example
7.   Define 1D array? Explain the declaration and initialization of 1D array with syntax and example.

8.   Define 2D array? Explain the declaration and initialization of 2D array with syntax and example.

9.   Explain the following library function with syntax and example.
     1) sqrt ( )   2) isdigit ( )
     3) pow ( )   4) islower ( )
10.   Explain the following library function with syntax and example.
     1) abs ( )   2) isalpha ( )
     3) clrscr ( )   4) isupper ( )

Unit-4

1.   Explain arithmetic operation in character with example.
2.   Explain gets and puts function with syntax and example.
3.   Explain command line argument in c with example.
4.   Explain following function with syntax and example.
     1) strlen ( )   2) strcat ( )
     3) strcpy ( )   4) strrev ( )
5.   Explain following function with syntax and example.
     1) strcmp ( )   2) gets ( )
     3) puts ( )   4) strrev ( )
6.   Define function? Explain type of function use in c with example.
7.   Explain function definition with syntax and example.
8.   Explain function call with syntax and example
9.   Explain function declaration with syntax and example
10.   Explain formal parameter and actual parameter with example.
11.   Explain return statement with syntax and example. And also explain the return type in C language.
12.   Explain the function category with no argument and no return value with example.
13.   Explain the function category with argument and no return value with example.
14.   Explain the function category with no argument and return value with example.
15.   Explain the function category with argument and return value with example.
16.   What is user defined function? Explain element of user define function.
17.   Explain the following category of function with example.
     1) no argument & no return value   2) with argument & no return value