

1. C language has been developed at

- 1. Microsoft Corp., USA
- 2. AT & T BELL Labs, USA
- 3. Borland International, USA
- 4. IBM, USA

2. C programs are converted into machine language with the help of?

- 1. An interpreter
- 2. A Compiler
- 3. An Operating system
- 4. An assembler

3. C Language has been developed by

- 1. Ken Thompson
- 2. Dennis Ritchie
- 3. Peter Norton
- 4. Martin Richards

4. C is a

- 1. Middle level language
- 2. High level language
- 3. Low level language
- 4. Three-tier language

5. C can be used on

- 1. Only MS-DOS operating system
- 2. Only Unix operating system
- 3. Only Xenix operating system
- 4. Any platform

6. C language came into existence in the year

- 1. 1971
- 2. 1957
- 3. 1972
- 4. 1983

7. A C program is converted into machine language with the help of

- 1. An interpreter
- 2. A compiler
- 3. An operating system
- 4. An assembler

8. The maximum value that an integer constant can have is

- 1. -32767
- 2. 32767
- 3. $1.704e+38$
- 4. $-1.7014e+38$

9. The real constant in C can be expressed in which of the following forms?

- 1. Fractional form only
- 2. Exponential form only
- 3. ASCII Form only
- 4. Both Fractional and Exponential form

10. A character variable at a time can store

- 1. 1 Character
- 2. 8 Characters
- 3. 254 Characters
- 4. 1024 Characters

11. Which of the following is not a Character Constant?

- 1. 'Thank You'
- 2. 'Enter values of P, N, R'
- 3. '23.56E-03'
- 4. All the above

12. The maximum width of a C variable name can be

- 1. 6 Characters
- 2. 8 Characters
- 3. 10 Characters
- 4. 12 Characters

13. Which of the following statement is wrong?

- 1. `mes = 123.56;`
- 2. `con = 'T' * 'A';`
- 3. `this = 'T'* 20;`
- 4. `3+a = b;`

14. A C variable cannot start with

- 1. An alphabet
- 2. A number
- 3. A special symbol
- 4. both a number & a special symbol

15. Please refer the below image.

- 1. $6.6/a$
- 2. $2*a$
- 3. $3*c$
- 4. $2/n$

16. Which of the following shows the correct hierarchy of arithmetic operations in C?

- 1. (), **,*/or, + or -
- 2. (), **,*, /, +,-
- 3. (), **, /, *,+,-
- 4. (), /or*, -or+

17. Please refer the below question.

- 1. 32768
- 2. -32768
- 3. 113040
- 4. 0

18. Which of the following statement is false?

- 1. Each new C instruction has to be written on a separate line
- 2. Usually all C statements are entered in small case letters
- 3. Blank spaces may be inserted between two words in a C statement
- 4. Blank spaces may be inserted within a integer variable.

19. If a is an integer variable, $a = 5/2$; will return a value

- 1. 2.5
- 2. 3
- 3. 2
- 4. 0

20. Question: If a is integer then

- 1. 8.28
- 2. 6.28
- 3. 3.14
- 4. 0

1. What is the output of this C code?

- 1. inside if
- 2. inside elseif
- 3. insideif inside elseif
- 4. Compile time error

2. What is the output of this C code?

- 1. inside if
- 2. inside else if
- 3. inside else
- 4. Compile time error

3. What is the output of this C code?

- 1. true
- 2. false
- 3. Compile time error
- 4. Undefined behavior

4. What is the output of this C code?

- 1. false, 0
- 2. true, 0
- 3. true, 10

4. Compile time error

6. Which of the following is an invalid if-else statement?

- 1. if (if (a == 1)){}
- 2. if (func1 (a)){}
- 3. if(a) {}
- 4. if (a==1){}

7. What is the output of this C code?

- 1. True
- 2. False
- 3. True False
- 4. No Output

8. What is the output of this C code?

- 1. true
- 2. false
- 3. Depends on the compiler
- 4. No print statement

9. Comment on the output of this C code?

- 1. Output will be All is Well I am Well
- 2. Output will be I am Well I am not a River
- 3. Output will be I am Well I am not a River
- 4. Compile time error

10. What is the output of this C code?

- 1. 0 We are Happy
- 2. 1 We are Happy
- 3. 1 We are Sad
- 4. Compile time error

1. The keyword 'break' cannot be simply used within:

- 1. do-while
- 2. if-else
- 3. for
- 4. while

2. Which keyword can be used for coming out of recursion?

- 1. break
- 2. return
- 3. exit
- 4. continue

3. Which keyword is used to come out of a loop only for that iteration?

- 1. break
- 2. continue
- 3. return
- 4. break return

4. Which of the following cannot be used as LHS of the expression in for (exp1;exp2;exp3) ?

- 1. Variable
- 2. Function
- 3. typedef
- 4. macros

5. Example(s) of iteration in C:

- 1. for loop
- 2. while loop
- 3. do-while loop
- 4. All of the above mentioned

6. The following code 'for(;;)' represents an infinite loop. It can be terminated by:

- 1. break
- 2. exit(0)
- 3. abort()
- 4. stop

7. Which is not a loop structure?

- 1. For
- 2. Do while
- 3. While
- 4. Repeat Until

8. How many times does a do while loop guarantee to loop?

- 1. 0
- 2. Infinitely
- 3. 1
- 4. Variable

9. What is the final value of x when the code `int x; for(x=0; x<10; x++) {}` is run?

- 1. 10
- 2. 9
- 3. 0
- 4. 1

10. When does the code block following `while(x<100)` execute?

- 1. When x is less than one hundred
- 2. When x is greater than one hundred
- 3. When x is equal to one hundred
- 4. While it wishes

11. Which loop is the most suitable one to first perform the operation and then test the condition?

- 1. for loop
- 2. while loop
- 3. do-while loop
- 4. switch case

12. Which of the following statement is used to take the control to the beginning of the loop?

- 1. exit
- 2. break
- 3. continue
- 4. begin

13. If the condition is missing, for a "For loop" in a C Program, then:

- 1. it is assumed to be present and taken to be false
- 2. it is assumed to be present and taken to the true
- 3. it result in a syntax error
- 4. execution will be terminated abruptly

14. If c is a variable initialised to 1, how many times will the following loop be executed?

- 1. 60
- 2. 59
- 3. 61
- 4. 62

15. Choose the correct statement.

- 1. Use of goto enhances the logical clarity of the code
- 2. Use of goto makes the debugging task easier
- 3. Use goto when you want to jump out of a nested loop
- 4. Never use goto

16. Which of the following statement about the "for loop" is true ?

- 1. Index value is retained outside the loop
- 2. Index value can be changed from within the loop
- 3. Goto can be used to jump, out of the loop
- 4. All of these

17. A do-while loop is useful when we want that the statement within the loop must be executed _____.

- 1. only once
- 2. at least once
- 3. more than once
- 4. at least twice

18. A "switch" statement is used to:

- 1. Switch between functions in a program
- 2. Switch from one variable to another variable
- 3. Choose from multiple possibilities which may arise due to different values of a single variable
- 4. All of above

19. What will be the output of the following loop?

- 1. a syntax error
- 2. cartrt
- 3. catrat
- 4. catratratratrat

20. What will be the output of the following loop?

- 1. 1 10 2 9 3 8 4 7 5 6
- 2. 1 2 3 4 5 10 9 8 7 6
- 3. 1 1 1 1 1 1 9 9 9 9 9
- 4. 9 9 9 9 9 1 1 1 1 1 1

1. What will be the output of the program?

- 1. It matters
- 2. It doesn't matters
- 3. matters
- 4. No output

2. What will be the output of the program, if a short int is 2 bytes wide?

- 1. 1 ... 65535
- 2. Expression syntax error
- 3. No output
- 4. 0, 1, 2, 3, 4, 5

3. What will be the output of the program?

- 1. Infinite loop
- 2. 0 1 2 ... 65535
- 3. 0 1 2 ... 32767 - 32766 -32765 -1 0
- 4. No output

4. What will be output of the program?

- 1. 0, 1, 3
- 2. 1, 2, 3
- 3. 3, 1, 3
- 4. 1, 3, 1

5. What will be the output of the program?

- 1. 200
- 2. 30
- 3. 100
- 4. 500

6. What will be the output of the program?

- 1. Hi
- 2. Hello
- 3. Hi Hello
- 4. Hello Hi

8. What will be the output of the program?

- 1. 300, 300, 200
- 2. Garbage, 300, 200
- 3. 300, Garbage, 200
- 4. 300, 300, Garbage

1. What is the output of this C code?

- 1. hello, world!!
- 2. Compile time error
- 3. Undefined behaviour
- 4. Segmentation fault

2. What is the output of this C code?

- 1. hello, world
- 2. Crash/segmentation fault
- 3. Undefined behaviour
- 4. Run time error

3. QuestionWhat is the output of this C code?

- 1. hello. world
- 2. hello, world
- 3. Compile error
- 4. Segmentation fault

4. What is the output of this C code?

- 1. hello. world
- 2. hello, world
- 3. Compile error
- 4. Segmentation fault

5. What is the output of this C code?

- 1. 11 11
- 2. 12 12
- 3. 4 12
- 4. 4 11

6. What is the output of this C code?

- 1. hello world
- 2. hello worldg india
- 3. Compile time error
- 4. Undefined behaviour

7. Comment on the output of this C code?

- 1. Memory holding "this" is cleared at line 3
- 2. Memory holding "this" loses its reference at line 3
- 3. You cannot assign pointer like in Line 3
- 4. Output will be This, Program

8. What is the output of this C code?

- 1. l
- 2. e
- 3. h
- 4. o

9. Hierarchy decides which operator _____.

- 1. is most important
- 2. is used first
- 3. is fastest
- 4. operates on largest numbers

10. What is the output of this C code?

- 1. 11 11
- 2. 12 11
- 3. 11 12
- 4. x 11 where x can be any positive integer.

13. Comment on the output of this C code?

- 1. Compile time error, declaration of a function inside main.
- 2. Compile time error, no definition of function fn_ptr.
- 3. Compile time error, illegal application of statement fn_ptr = add.
- 4. No Run time error, output is 5.

14. What is the output of this C code?

- 1. h
- 2. e
- 3. m
- 4. o

15. The correct way to declare and assign a function pointer is done by:
*(Assuming the function to be assigned is "int multi(int, int);")

- 1. int (*fn_ptr)(int, int) = multi;
- 2. int *fn_ptr(int, int) = multi;
- 3. int *fn_ptr(int, int) = &multi;
- 4. int *fn_ptr(&int, &int) = multi;

18. What is the output of this C code?

- 1. Compile time error
- 2. h
- 3. e
- 4. o

19. What is the output of this code having void return-type function?

- 1. 1
- 2. 0
- 3. Runtime error
- 4. Compile time error

20. What will be the data type returned for the following function?

- 1. char
- 2. int
- 3. double
- 4. multiple type-casting in return is illegal

1. What will be the output of the program?

- 1. KCL 1 7 11 0
- 2. 1
- 3. 4
- 4. 7

5. Point out the error in the following program.

- 1. Error: ptr has to be set at beginning
- 2. Error: ptr must be type of va_list
- 3. Error: invalid access to list member
- 4. No error

6. What will be the output of the program?

- 1. Dogs 12
- 2. Cats 14
- 3. Boys 13
- 4. Apple 12

7. Point out the error in the following program.

- 1. Error: invalid va_list declaration
- 2. Error: var c data type mismatch
- 3. No error
- 4. No error and Nothing will print

8. Point out the error in the following program.

- 1. Error: invalid arguments in function display()
- 2. Error: too many parameters
- 3. Error: in va_start(ptr, s);
- 4. No error

9. Point out the error in the following program.

- 1. Error: too many parameters
- 2. Error: invalid access to list member
- 3. Error: ptr must be type of va_list
- 4. No error

10. Point out the error in the following program.

- 1. Error: invalid function display() call
- 2. Error: invalid function show() call
- 3. No error
- 4. Error: Rvalue required for t

11. In a function that receives variable number of arguments the fixed arguments passed to the function can be at the end of argument list.

- 1. True
- 2. False

12. The macro `va_arg` is used to extract an argument from the variable argument list and advance the pointer to the next argument.

- 1. True
- 2. False

13. `va_list` is an array that holds information needed by `va_arg` and `va_end`.

- 1. True
- 2. False

14. For a function that receives variable number of arguments it is necessary that the function should receive at least one fixed argument.

- 1. True
- 2. False

15. A function that receives variable number of arguments should use `va_arg()` to extract the last argument from the variable argument list.

- 1. True
- 2. False

16. The macro `va_start` is used to initialise a pointer to the beginning of the list of fixed arguments.

- 1. True
- 2. False

17. A function that receives variable number of arguments should use `va_arg()` to extract arguments from the variable argument list.

- 1. True
- 2. False

18. Can we pass a variable argument list to a function at run-time?

- 1. Yes
- 2. No

19. It is necessary that in a function which accepts variable argument list, there should be at least be one fixed argument.

- 1. True
- 2. False

20. While defining a variable argument list function, we drop the ellipsis(...).

- 1. True
- 2. False

1. Please refer the below image and answer whether it is True or False.

- 1. True
- 2. False

2. If the file to be included doesn't exist, the preprocessor flashes an error message.

- 1. True
- 2. False

3. A macro must always be defined in capital letters.

- 1. True
- 2. False

4. A preprocessor directive is a message from programmer to the preprocessor.

- 1. True
- 2. False

5. Macro calls and function calls work exactly similarly.

- 1. True
- 2. False

6. Please refer the below image and answer whether it is True or False.

- 1. True
- 2. False

7. Macros have a local scope.

- 1. True
- 2. False

8. Please refer the below image and answer whether it is True or False.

- 1. True
- 2. False

9. Macros with arguments are allowed.

- 1. True
- 2. False

10. A header file contains macros, structure declaration and function prototypes.

- 1. True
- 2. False

11. In a macro call, the control is passed to the macro.

- 1. True
- 2. False

12. Every C program will contain at least one preprocessor directive.

- 1. True
- 2. False

13. The preprocessor can trap simple errors like missing declarations, nested comments or mismatch of braces.

- 1. True
- 2. False

14. Once preprocessing is over and the program is sent for the compilation the macros are removed from the expanded source code.

- 1. True
- 2. False

15. A preprocessor directive is a message from compiler to a linker.

- 1. True
- 2. False

16. Would the following typedef work?

- 1. Yes
- 2. No

17. Will the program compile successfully?

- 1. Yes
- 2. No

18. Will the program compile successfully?

- 1. Yes
- 2. No

19. It is necessary that a header file should have a ".h" extension.

- 1. True
- 2. False

20. Will the program compile successfully?

- 1. Yes
- 2. No

1. The array `int num [26]` has twenty-six elements.

- 1. True
- 2. False

2. The expression `num [1]` designates the first element in the array.

- 1. True
- 2. False

3. What is the difference between the 5's in these two expressions? (Select the correct Answer)

- 1. First is particular element, second is type
- 2. First is array size, second is particular element
- 3. First is particular element, second is array size
- 4. Both specify array size

4. The expression num[27] designates the twenty-eighth element in the array.

- 1. True
- 2. False

5. What is the output of this C code?

- 1. Same address is printed.
- 2. Different address is printed.
- 3. Compile time error.
- 4. Segmentation error.

6. What is the output of this C code?

- 1. 4
- 2. 1
- 3. 2
- 4. Compile time error

7. Comment on the following statement:

- 1. An array "a" of pointers.
- 2. A pointer "a" to an array.
- 3. A ragged array.
- 4. A two dimensional array.

8. Comment on the 2 arrays regarding P and Q.

- 1. a1 is P, a2 is Q
- 2. a1 is P, a2 is P
- 3. a1 is Q, a2 is P
- 4. a1 is Q, a2 is Q

9. Which of the following is not possible statically in C?

- 1. Jagged Array
- 2. Rectangular Array
- 3. Cuboidal Array
- 4. Multidimensional Array

10. An array is a collection of:

- 1. Different data types scattered throughout memory
- 2. The same data type scattered throughout the memory
- 3. The same data type placed next to each other in memory
- 4. Different data types placed next to each other in memory

11. What is the output of this C code?

- 1. Different address is printed
- 2. Same address is printed
- 3. Run time error
- 4. Compile time error

12. What is the output of this C code?

- 1. Run time error
- 2. h h
- 3. h e
- 4. h l

13. What is the output of the code given below?

- 1. 2 3
- 2. Compile time error
- 3. 2 4
- 4. 2 somegarbagevalue

14. What is the output of this C code?

- 1. 1
- 2. Compile time error
- 3. Some garbage value
- 4. Undefined variable

15. What is the output of this C code?

- 1. h h
- 2. Run time error
- 3. ll
- 4. e e

17. What is the output of this C code?

- 1. h e
- 2. ll
- 3. lo
- 4. le

18. What is the output of this C code?

- 1. 4
- 2. 5
- 3. Compile time error
- 4. 3

19. The elements in the array of the following code given below are: `*int array[5] = {5};`

- 1. 5, 5, 5, 5, 5
- 2. 5, 0, 0, 0, 0
- 3. 5, (garbage), (garbage), (garbage), (garbage)
- 4. (garbage), (garbage), (garbage), (garbage), 5

1. Which of the following function sets first n characters of a string to a given character?

- 1. strinit()
- 2. strnset()
- 3. strset()
- 4. strcset()

2. If the two strings are identical, then `strcmp()` function returns ____.

- 1. -1
- 2. 1
- 3. 0
- 4. Yes

3. The library function used to find the last occurrence of a character in a string is:

- 1. strnstr()
- 2. laststr()
- 3. strrchr()
- 4. strstr()

5. What will be the output of the program?

- 1. A
- 2. b
- 3. c
- 4. 65

6. Which of the following function is used to find the first occurrence of a given string in another string?

- 1. strchr()
- 2. strrchr()
- 3. strstr()
- 4. strnset()

7. What will be the output of the program?

- 1. Good Morning
- 2. Good
- 3. M
- 4. Morning

8. What will be the output of the program?

- 1. Error
- 2. MKCL
- 3. MK
- 4. CL

9. What will be the output of the program?

- 1. 6
- 2. 12
- 3. 7
- 4. 2

10. Comment on the following statement: “strcat() function adds null character.”

- 1. Only if there is space.
- 2. Always.
- 3. Depends on the standard.
- 4. Depends on the compiler.

11. What will be the output of the program?

- 1. KCL
- 2. Odisha
- 3. Odisha KCL
- 4. Odisha\0KCL

12. The return-type used in String operations are:

- 1. void only
- 2. void and (char *) only
- 3. void and int only
- 4. void, int and (char *) only

13. Which pre-defined function returns a pointer to the last occurrence of a character in a string?

- 1. strchr(s, c);
- 2. strrchr(s, c);
- 3. strlchr(s, c);
- 4. strfchr(s, c);

14. String operation such as strcat(s, t), strcmp(s, t), strcpy(s, t) and strlen(s) heavily rely upon:

- 1. Presence of NULL character
- 2. Presence of new-line character
- 3. Presence of any escape sequence
- 4. Absence of any escape sequence

15. Which of the following function compares 2 strings with case-insensitively?

- 1. strcmp(s, t)
- 2. strcmpcase(s, t)
- 3. strcasecmp(s, t)
- 4. strchr(s, t)

16. What will be the value of var for the following? *var = strcmp("Hello", "World");

- 1. -1
- 2. 0
- 3. 1
- 4. strcmp has void return-type

17. What will be the output of the program?

- 1. 10
- 2. 6
- 3. 5
- 4. 11

18. Is there any difference between the two statements? *1. `char ch = "MKCL";` *2. `char ch[] = "MKCL";`

- 1. Yes
- 2. No

19. What will be the output of the program?

- 1. 8
- 2. 0
- 3. 16
- 4. Error

20. What will be the output of the program?

- 1. Rahul, Sonali, Sangeeta, Mitali, Rohan
- 2. Rahul, Sonali, Sangeeta, Rohan, Mitali
- 3. Rahul, Sonali, Mitali, Sangeeta, Rohan
- 4. Rahul, Sonali, Rohan, Sangeeta, Mitali

1. How will you free the allocated memory?

- 1. `remove(var-name);`
- 2. `free(var-name);`
- 3. `delete(var-name);`
- 4. `dalloc(var-name);`

2. Point out the error in the program.

- 1. Error: in structure declaration
- 2. Linker Error
- 3. No Error
- 4. Runtime error

3. Which of the following statement is True?

- 1. User has to explicitly define the numeric value of enumerations.
- 2. User has a control over the size of enumeration variables.
- 3. Enumeration can have an effect local to the block, if desired.
- 4. Enumerations have a global effect throughout the file.

4. Which of the following operation is illegal in structures?

- 1. Typecasting of structure
- 2. Pointer to a variable of same structure
- 3. Dynamic allocation of memory for structure
- 4. All of the above mentioned

5. Which of the following are themselves a collection of different data types?

- 1. String
- 2. Structure
- 3. Char
- 4. All of the mentioned

6. What is the similarity between a structure, union and enumeration?

- 1. All of them let you define new values
- 2. All of them let you define new data types
- 3. All of them let you define new pointers
- 4. All of them let you define new structures

7. Bit fields can only be declared as part of a structure.

- 1. True
- 2. False

8. Number of bytes in memory taken by the below structure is:

- 1. Multiple of integer size
- 2. integer size + character size
- 3. Depends on the platform
- 4. Multiple of word size

9. Which of the following cannot be a structure member?

- 1. Another structure
- 2. Function
- 3. Array
- 4. Character

10. Which of the following comments about the usage of structure is true?

- 1. Storage class can be assigned to an individual member
- 2. Individual members can be initialized within a structure type declaration
- 3. The scope of a member name is confined to the particular structure, within which it is defined
- 4. Individual members can't be initialized within a structure type declaration

11. For what minimum value of x in a 32-bit Linux OS would make the size of s equal to 8 bytes?

- 1. 4
- 2. 8
- 3. 12
- 4. 32

12. In the declaration of bit-fields mentioned below, the constant-expression specifies_____.

- 1. The width of the field in bits.
- 2. The width of the field in bytes.
- 3. Nothing.
- 4. Error

13. What will be the output of the program?

- 1. -1, 0, 1, 2, 3, 4
- 2. -1, 2, 6, 3, 4, 5
- 3. -1, 0, 6, 2, 3, 4
- 4. -1, 0, 6, 7, 8, 9

14. What will be the output of the program given below in 16-bit platform?

- 1. 1
- 2. 2
- 3. 4
- 4. 10

15. What will be the output of the program?

- 1. 12, 12, 12
- 2. 112, 1, 12
- 3. 32, 1, 12
- 4. -64, 1, 12

16. Which of the following statements is correct about the below code?

***maruti.engine.bolts=25;**

- 1. Structure bolts is nested within structure engine.
- 2. Structure engine is nested within structure maruti.
- 3. Structure maruti is nested within structure engine.
- 4. Structure maruti is nested within structure bolts.

17. If initialization is a part of a structure, then storage class can be:

- 1. Automatic
- 2. Register
- 3. Static
- 4. Anything

18. One of elements of a structure can be a pointer to the same structure.

- 1. True
- 2. False

19. By default, structure variable will be of auto storage class.

- 1. True
- 2. False

20. A structure can be nested inside another structure.

- 1. True
- 2. False

1. Which among the following is odd one out?

- 1. printf
- 2. fprintf
- 3. putchar
- 4. scanf

2. For a typical program, the input is taken using:

- 1. scanf
- 2. Files
- 3. Command-line
- 4. All of the above mentioned

3. What is the default return-type of getchar() ?

- 1. char
- 2. int
- 3. char *
- 4. Reading character doesn't require a return-type

4. What does the following command line signify? *prog1|prog2

- 1. It runs prog1 first, prog2 second
- 2. It runs prog2 first, prog1 second
- 3. It runs both the programs, pipes output of prog1 to input of prog2
- 4. It runs both the programs, pipes output of prog2 to input of prog1

5. The puts() function works exactly opposite to gets() function.

- 1. True
- 2. False

6. The value of EOF is ____.

- 1. -1
- 2. 0
- 3. 1
- 4. 10

8. The limitation of functions like `putch()`, `putchar()` and `fputchar()` is that it print output only one character at a time.

- 1. True
- 2. False

9. To receive the string "We have got the guts, you get the glory!!" in an array `char str[100]` , which of the following functions would you use?

- 1. `scanf(%s, str) ;`
- 2. `gets (str) ;`
- 3. `getche (str) ;`
- 4. `fgetchar (str) ;`

10. `putchar(c)` function/macro always outputs character `c` to standard output.

- 1. True
- 2. False

11. Which function would you use if a single key were to be received through the keyboard?

- 1. `scanf()`
- 2. `gets()`
- 3. `getche()`
- 4. `getchar()`

12. If an integer is to be entered through the keyboard, which function would you use?

- 1. scanf()
- 2. gets()
- 3. getche()
- 4. getchar()

13. If a character string is to be received through the keyboard which function would work faster?

- 1. scanf()
- 2. gets()
- 3. getche()
- 4. getchar()

14. What is true about getchar()?

- 1. getchar() is a function.
- 2. getchar() is a macro which receives a character from a keyboard, but it is necessary to hit the enter key after the character.
- 3. getchar() receives a character from keyboard without echoing it on the screen.
- 4. getchar() receives a character from keyboard with echoing it on the screen.

15. Functions that accepts the input from the keyboard & gives the output on the screen are called _____.

- 1. disk I/O functions
- 2. console I/O functions
- 3. system I/O functions
- 4. program I/O functions

16. The format string of a printf() function can contain:

- 1. Characters, format specifications and escape sequences
- 2. Character, integers and floats
- 3. Strings, integers and escape sequences
- 4. Inverted commas, percentage sign and backslash character

17. The control character used to handle strings is _____.

- 1. \t
- 2. \a
- 3. \st
- 4. \d

18. Which of the following is not an unformatted console I/O function?

- 1. gets()
- 2. puts()
- 3. printf()
- 4. getch()

19. The getch() function does not _____.

- 1. Echo the character on the screen
- 2. Terminate by itself
- 3. Read a character
- 4. Terminate by itself as well as read a character

20. The putchar() function is used to:

- 1. Count the number of character in a string.
- 2. Print a single character on the screen.
- 3. Print the entire string on the screen.
- 4. Print first two characters on the screen.

1. If there is any error while opening a file, what will fopen return?

- 1. EOF
- 2. NULL
- 3. Depends on compiler
- 4. Nothing

2. For binary files, _____ must be appended to the mode string.

- 1. "b"
- 2. "binary"
- 3. "01?"
- 4. Nothing

3. The first and second arguments of fopen are _____.

- 1. A character string containing the name of the file & the second argument is the mode.
- 2. A character string containing the name of the user & the second argument is the mode.
- 3. A character string containing file pointer & the second argument is the mode.
- 4. A character string containing the name of the user & the second argument is none.

4. The macro FILE is defined in which of the following files?

- 1. stdlib.h
- 2. stdio.c
- 3. io.h
- 4. stdio.h

5. Point out the errors, if any, in the following program.

- 1. Incorrect declaration
- 2. Null should be used instead of NULL
- 3. No Error
- 4. No error, only warning message

6. If a file contains the line “ I am a boy\r\n”, then on reading this line into the array str[] using fgets(), what would str[] contain?

- 1. I am a boy\r\n\0
- 2. I am a boy\r\0
- 3. I am a boy\n\0
- 4. I am a boy

7. All the following fopen() statements are illegal.

- 1. True
- 2. False

8. Which type of files can't be opened using fopen()?

- 1. .txt
- 2. .bin
- 3. .c
- 4. .wmv

9. Is it necessary that a file created in text mode must always be opened in text mode for subsequent operations?

- 1. Yes
- 2. No

10. FILE reserved word is?

- 1. A structure tag declared in stdio.h
- 2. One of the basic datatypes in c
- 3. Pointer to the structure defined in stdio.h
- 4. It is a type name defined in stdio.h

11. stdout, stdin and stderr are _____.

- 1. File pointers
- 2. File descriptors
- 3. Streams
- 4. Structure

12. Which of the following mode argument is used to truncate?

- 1. a
- 2. f
- 3. w
- 4. t

13. stdout and stderr are connected to screen by default.

- 1. True
- 2. False

14. The purpose of library function fflush() is to clear (or flush) the output buffer and move the buffered data to console (in case of stdout) or disk (in case of file output stream).

- 1. True
- 2. False

15. What is the output of this C code?

- 1. 45 65
- 2. 65 45
- 3. 45
- 4. Compilation error

16. For opening a file in append mode, it is necessary that the file should exist.

- 1. True
- 2. False

17. On opening a file for reading, which of the following activity/activities are performed?

- 1. The disk is searched for existence of the file.
- 2. The file is brought into memory.
- 3. A pointer is set up which points to the first character in the file.
- 4. All the above listed.

18. A file opened in binary mode and read using fgetc() would report the same number of characters in the file as reported by DOS's DIR command.

- 1. True
- 2. False

19. The disadvantage of High Level Disk I/O functions is that the programmer has to manage the buffers.

- 1. True
- 2. False

20. If a file is opened for reading, it is necessary that the file must exist.

- 1. True
- 2. False

1. What type of array is generally generated in Command-line argument?

- 1. Single dimension array
- 2. Dimensional Square Array
- 3. Jagged Array
- 4. 2-Dimensional Rectangular Array

2. The first argument in command line arguments is:

- 1. The number of command-line arguments the program was invoked with
- 2. A pointer to an array of character strings that contain the arguments
- 3. An array of character strings that contain the arguments
- 4. Nothing

3. What does argv and argc indicate in command-line arguments? (Assuming the below image)

- 1. argument count, argument variable
- 2. argument count, argument vector
- 3. argument control, argument variable
- 4. argument control, argument vector

4. The second (argument vector) in command line arguments is:

- 1. The number of command-line arguments the program was invoked with.
- 2. A pointer to an array of character strings that contain the arguments, one per string.
- 3. An array of character strings that contain the arguments.
- 4. Nothing.

5. argv[0] in command line arguments, is:

- 1. The name by which the program was invoked.
- 2. The name of the files which are passed to the program.
- 3. Count of the arguments in argv vector.
- 4. Count of the arguments in argc vector.

6. The maximum combined length of the command-line arguments including the spaces between adjacent arguments is:

- 1. 128 characters
- 2. 256 characters
- 3. 67 characters
- 4. It may vary from one operating system to another

8. What do the 'c' and 'v' in argv and argc stands for?

- 1. 'c' means argument control 'v' means argument vector
- 2. 'c' means argument count 'v' means argument vertex
- 3. 'c' means argument count 'v' means argument vector
- 4. 'c' means argument configuration 'v' means argument visibility

9. Every time we supply new set of values to the program at command prompt, we need to recompile the program.

- 1. True
- 2. False

10. Even if integer/float arguments are supplied at command prompt they are treated as strings.

- 1. True
- 2. False

11. A program that has no command line arguments will have_____ argc.

- 1. Zero
- 2. Negative
- 3. One
- 4. Two

12. If the different command line arguments are supplied at different times would the output of the following program change?

- 1. Yes
- 2. No

13. Which of the following causes an error?

- 1. Trying to read a file that doesn't exist
- 2. Inability to write data in a file
- 3. Failure to allocate memory with the help of malloc
- 4. All of the mentioned

14. What is the purpose of the following function? *Please refer the below image.

- 1. They check for input errors.
- 2. They check for output errors.
- 3. They check for all types of errors.
- 4. They check for error in accessing the file.

15. Which of the following function can be used to terminate the main function from another function safely?

- 1. return(expr);
- 2. exit(expr);
- 3. abort();
- 4. Both exit(expr); and abort();

16. What is the output of this C code if there is no error in stream fp?

- 1. Compilation error
- 2. 0
- 3. 1
- 4. Any nonzero value

17. What happens when we use: `*fprintf(stderr, "error: could not open file");`

- 1. The diagnostic output is directly displayed in the output.
- 2. The diagnostic output is pipelined to the output file.
- 3. The line which caused error is compiled again.
- 4. The program is immediately aborted.

18. Which standard file pointers are used to interact with printer and auxiliary devices respectively?

- 1. `stdprn` and `stdaux`
- 2. `stdin` and `stdout`
- 3. `stdaux` and `stdprn`
- 4. `stdout` and `stdaux`

19. Redirection allows a program to read from or write to files at _____.

- 1. IDE
- 2. Text File
- 3. Command prompt
- 4. Word File

20. Which Operators are called redirection operators?

- 1. `&` and `&&`
- 2. `^` and `|`
- 3. `%` and `*`
- 4. `<` and `>`

1. Which bitwise operator is suitable for checking whether a particular bit is on or off?

- 1. && operator
- 2. & operator
- 3. || operator
- 4. ! operator

2. Bitwise & can be used in conjunction with ~ operator to turn off 1 or more bits in a number.

- 1. Yes
- 2. No

3. Which bitwise operator is suitable for turning off a particular bit in a number?

- 1. && operator
- 2. & operator
- 3. || operator
- 4. ! operator

4. Which bitwise operator is suitable for turning on a particular bit in a number?

- 1. && operator
- 2. & operator
- 3. || operator
- 4. | operator

5. Bitwise can be used to generate a random number.

- 1. Yes
- 2. No

6. Bitwise can be used to reverse a sign of a number.

- 1. Yes
- 2. No

7. Bitwise | can be used to multiply a number by powers of 2.

- 1. Yes
- 2. No

8. Bitwise | can be used to set multiple bits in number.

- 1. Yes
- 2. No

9. Bitwise can be used to perform addition and subtraction.

- 1. Yes
- 2. No

10. Bitwise | can be used to set a bit in number.

- 1. Yes
- 2. No

11. In the statement `expression1 >> expression2`, if `expression1` is a signed integer with its leftmost bit set to 1 then on right shifting it the result of the statement will vary from computer to computer.

- 1. True
- 2. False

12. Bitwise & can be used to check if more than one bit in a number is on.

- 1. True
- 2. False

13. Bitwise & can be used to check if a bit in number is set or not.

- 1. True
- 2. False

14. Left shifting an unsigned int or char by 1 is always equivalent to multiplying it by 2.

- 1. True
- 2. False

15. Bitwise & can be used to divide a number by powers of 2.

- 1. True
- 2. False

16. Which is not a bitwise operator?

- 1. &
- 2. |
- 3. <<
- 4. &&

17. Bitwise & and | are unary operators.

- 1. True
- 2. False

18. On left shifting, the bits from the left are rotated and brought to the right and accommodated where there is empty space on the right.

- 1. True
- 2. False

19. Which Bitwise Operator can be used to check whether a number is EVEN or ODD quickly?

- 1. Bitwise AND (&)
- 2. Bitwise OR (|)
- 3. Bitwise XOR (^)
- 4. Bitwise NOT (~)

20. Consider the given statement: `*int x = 10 ^ 2` *What will be the value of x?

- 1. 5
- 2. 6
- 3. 7
- 4. 8

1. What is the similarity between a structure, union and enumeration?

- 1. All of them let you define new values
- 2. All of them let you define new data types
- 3. All of them let you define new pointers
- 4. All of them let you define new structures

2. Which of the following are themselves a collection of different data types?

- 1. String
- 2. Structure
- 3. Char
- 4. All of the mentioned

3. How will you free the allocated memory?

- 1. `remove(var-name);`
- 2. `free(var-name);`
- 3. `delete(var-name);`
- 4. `dalloc(var-name);`

4. User-defined data type can be derived by _____.

- 1. struct
- 2. enum
- 3. typedef
- 4. All three i.e. struct, enum as well as typedef

5. Which of the following cannot be a structure member?

- 1. Another structure
- 2. Function
- 3. Array
- 4. Character

6. Which operator connects the structure name to its member name?

- 1. -
- 2. <-
- 3. .
- 4. Both <- and .

7. Size of a union is determined by size of the _____.

- 1. First member in the union
- 2. Last member in the union
- 3. Biggest member in the union
- 4. Sum of the sizes of all members

8. Comment on the following union declaration.

- 1. a
- 2. b
- 3. c
- 4. Such declarations are illegal

9. Members of a union are accessed as _____.

- 1. union-name.member
- 2. union-pointer->member
- 3. both union-name.member & union-pointer->member
- 4. Nothing

10. Which of the following data types are accepted while declaring bit-fields?

- 1. char
- 2. float
- 3. double
- 4. String

11. Which of the following is not allowed?

- 1. Arrays of bit fields
- 2. Pointers to bit fields
- 3. Functions returning bit fields
- 4. All of the mentioned are allowed

12. In the declaration of bit-fields (in the below image), The constant-expression specifies:

- 1. The width of the field in bits.
- 2. Nothing.
- 3. The width of the field in bytes.
- 4. Error.

13. Can a structure point to itself?

- 1. Yes
- 2. No

14. A pointer union cannot be created.

- 1. True
- 2. False

15. In the following code, the P2 is Integer Pointer or Integer?

- 1. Integer
- 2. Integer pointer
- 3. Both Integer and Integer Pointer
- 4. Error in declaration

16. Bit fields can only be declared as part of a structure.

- 1. True
- 2. False

17. Please refer the below image and answer.

- 1. True
- 2. False

18. Is there an easy way to print enumeration values symbolically?

- 1. Yes
- 2. No

19. Macros needed to handle variable argument of Functions are available in:

- 1. stdio.h
- 2. stdarg.h
- 3. stddef.h
- 4. stdlib.h

20. There are three macros which allow a function to take variable no. of arguments. Those are:

- 1. `va_start`, `va_arg`, `va_list`
- 2. `va_stop`, `va_start`, `va_arg`
- 3. `va_start`, `va_end`, `va_list`
- 4. Only `va_start`

1. For the following expression to work, which option should be selected? `*string p = "HELLO";`

- 1. `typedef char string;`
- 2. `typedef char * string;`
- 3. `typedef char string;` and `typedef char * string;`
- 4. Such expression cannot be generated in C

3. Which of the given option is the correct method for initialization for the below image?

- 1. `*string *p = "Hello";`
- 2. `string p = "Hello";`
- 3. `*string p = 'A';`
- 4. Not more than one space should be given when using `typedef`

4. The below statement creates:

- 1. type PFI, for pointer to function (of two `char *` arguments) returning `int`
- 2. Error
- 3. type PFI, function (of two `char *` arguments) returning `int`
- 4. type PFI, for pointer

5. What is the output of this C code?

- 1. Compile time error
- 2. 1
- 3. 0
- 4. Depends on the standard

6. Which of the following is FALSE about typedef?

- 1. typedef follow scope rules.
- 2. typedef defined substitutes can be redefined again. (Eg: typedef char a; typedef int a;)
- 3. You cannot typedef a typedef with other term.
- 4. typedef is a keyword in C.

7. In the following code, the P2 is Integer Pointer or Integer?

- 1. Integer
- 2. Integer pointer
- 3. Error in declaration
- 4. Depends on the compiler

8. In the following code what is 'P'?

- 1. P is a constant
- 2. P is a character constant
- 3. P is character type
- 4. P is a pointer

9. What will be the output of the program?

- 1. 1, 2, 3, 4
- 2. 1, 2, 3, 4, 5
- 3. No output
- 4. Error: Cannot use typedef with an array

10. What is x in the following program?

- 1. x is a pointer
- 2. x is an array of three pointer
- 3. x is an array of three function pointers
- 4. Error in x declaration

11. What will be the output of the program?

- 1. 72, 68.000000
- 2. 72.000000, 68
- 3. 68.000000, 72.000000
- 4. 68, 72.000000

12. What will be the output of the program?

- 1. 1
- 2. 0
- 3. 2
- 4. Red

13. What will be the output of the program?

- 1. 9
- 2. 0
- 3. 90.000000
- 4. 90

14. What will be the output of the program?

- 1. 0
- 2. 1
- 3. 2
- 4. Error

15. In the following code, we can declare a new typedef named ptr even though struct employee has not been completely declared while using typedef. State whether True or False.

- 1. True
- 2. False

16. Is the following declaration acceptable?

- 1. Yes
- 2. NO

17. Point out the error in the following code?

- 1. Error: in *NODEPTR
- 2. Error: typedef cannot be used until it is defined
- 3. Runtime error
- 4. No error

18. Refer the below image to answer.

- 1. Yes
- 2. No

19. Are the properties of i, j and x, y in the following program same?

- 1. Yes
- 2. No

20. Please refer the below image & state whether True or False.

- 1. True
- 2. False

1. The style `WS_OVERLAPPED | WS_CAPTION | WS_MINIMIZEBOX` will create a window with caption bar and minimize box only.

- 1. True
- 2. False

2. Every window has to be created using pre-registered window class.

- 1. True
- 2. False

3. Window classes are similar to classes in C++.

- 1. True
- 2. False

4. To be able to interact with a window it is necessary to implement the message loop.

- 1. True
- 2. False

5. The `ShowWindow()` function can display only the maximized window.

- 1. True
- 2. False

6. We can use the pre-defined window classes but cannot create our own.

- 1. True
- 2. False

7. In a 8088 microprocessor, each CPU register is _____.

- 1. 12 bits long
- 2. 16 bits long
- 3. 8 bits long
- 4. 8 bytes long

8. Each address present in the Interrupt Vector Table is:

- 1. 4 bytes long
- 2. 2 bytes long
- 3. 1 byte long
- 4. 8 bytes long

9. To interact with the hardware which of the following is a reasonably reliable as well as a fast procedure?

- 1. Using high level language functions
- 2. Using ROM-BIOS functions
- 3. Directly programming the hardware
- 4. All of the above

10. The process of storing the contents of CPU register into the memory when an interrupt occurs, is called:

- 1. Pushing values on the stack
- 2. Popping values off the stack
- 3. Setting up a stack pointer
- 4. Setting up an instruction pointer

11. Whether a particular operation is successfully carried out by DOS or not, is indicated by the value stored in _____.

- 1. Flags register
- 2. Ordinary variables
- 3. Segment register
- 4. Offset register

12. Pick the odd one out.

- 1. Scratch-pad register
- 2. Segment register
- 3. Flags register
- 4. Interrupt register

13. While calling a ROM-BIOS/DOS routine, the service number should always be placed in _____.

- 1. AH register
- 2. AL register
- 3. AX register
- 4. AL register and AX register

14. The routine which gets executed when an interrupt occurs is called an Interrupt Service Routine.

- 1. True
- 2. False

15. An interrupt can occur through hardware as well as software.

- 1. True
- 2. False

16. A ROM-BIOS routine makes use of the segment register ES and DS. To call this routine which function would you use?

- 1. int86()
- 2. int86x()
- 3. intdos()
- 4. intdosx()

17. ROM-BIOS and DOS functions do not have names.

- 1. True
- 2. False

18. If ROM-BIOS functions are used in a program, they would increase the size of the executable file, the way standard library functions do.

- 1. True
- 2. False

19. All ROM-BIOS services return a value indicating success or failure in AX register.

- 1. True
- 2. False

20. A union variable occupies as much data as what a corresponding structure variable would occupy, elements of both remaining same.

- 1. True
- 2. False

1. Which is the ball that can be rotated with the fingers or palm of the hand?

- 1. Space ball
- 2. Trackball
- 3. Joystick
- 4. Roller Ball

2. Potentiometers mounted at the base of the joystick measures:

- 1. The amount of movement
- 2. The direction
- 3. Position
- 4. Resolution

3. _____ is used for 3D positioning and modeling, animation and other application.

- 1. Space ball
- 2. Trackball
- 3. Joystick
- 4. Roller Ball

4. Which is the device that is constructed with the series of sensors that detects hand and finger motion?

- 1. Digitizers
- 2. Data glove
- 3. Joystick
- 4. Track ball

5. Which device is used to input two-dimensional coordinates by activating a hand cursor on a flat surface?

- 1. Graphic tablet
- 2. Data tablet
- 3. Low-end Tablet
- 4. Graphic tablet and Data tablet

6. A common device for drawing, painting, or interactively selecting coordinate positions on an object is/are:

- 1. Image scanner
- 2. Digitizers
- 3. Data glove
- 4. Touch panels

7. When a voice command is given, the system searches the _____ for a frequency-pattern match.

- 1. Memory
- 2. Input data
- 3. Dictionary
- 4. Hard disk

8. What is the disadvantage of the light pen?

- 1. Its shape
- 2. They cannot detect positions
- 3. Reading accuracy
- 4. They cannot detect positions within black areas

9. Which of the following device is not a input device?

- 1. Trackball and space ball
- 2. Data glove
- 3. Impact printers
- 4. Keyboard

10. The quality of a picture obtained from a device depends on _____.

- 1. Dot size
- 2. Number of dots per inch
- 3. Number of lines per inch
- 4. All of the mentioned

11. The device which is designed to minimize the background sound is _____

- 1. Microphone
- 2. Digitizers
- 3. Data glove
- 4. Joy stick

12. There are no keywords in C to carry out any drawing activity.

- 1. True
- 2. False

13. The functions provided in graphics library would vary from one compiler to another.

- 1. True
- 2. False

14. If we were to carry out drawing under UNIX we would have to adapt a different strategy than the one mentioned in this chapter.

- 1. True
- 2. False

15. Any shape drawn on the screen can be animated using the `getimage()` & `putimage()` functions.

- 1. True
- 2. False

16. Unless we call `initgraph()` we cannot draw anything on the screen.

- 1. True
- 2. False

17. Purpose of `initgraph()` is to load suitable graphics driver.

- 1. True
- 2. False

18. It is mandatory to call `closegraph()` at the end of any graphics program.

- 1. True
- 2. False

19. Using `printf()` we can write text in a suitable font in graphics mode.

- 1. True
- 2. False

20. `restorecrtmode()` restores the pre-`initgraph()` display mode.

- 1. True
- 2. False

1. The data-in register of I/O port is:

- 1. read by host to get input
- 2. read by controller to get input
- 3. written by host to send output
- 4. written by host to start a command

2. I/O hardware contains _____.

- 1. bus
- 2. controller
- 3. I/O port and its registers
- 4. all of the mentioned

3. The host sets _____ bit when a command is available for the controller to execute.

- 1. write
- 2. status
- 3. command-ready
- 4. control

4. When hardware is accessed by reading and writing to the specific memory locations, then it is called _____.

- 1. port-mapped I/O
- 2. controller-mapped I/O
- 3. bus-mapped I/O
- 4. memory-mapped I/O

5. Device drivers are implemented to interface _____.

- 1. character devices
- 2. block devices
- 3. network devices
- 4. all of the mentioned

6. Which hardware triggers some operation after certain programmed count?

- 1. programmable interval timer
- 2. interrupt timer
- 3. programmable timer
- 4. Network device timer

7. The device-status table contains _____.

- 1. each I/O device type
- 2. each I/O device address
- 3. each I/O device state
- 4. all of the mentioned

8. Which buffer holds the output for a device?

- 1. spool
- 2. output
- 3. status
- 4. magic

9. Which one of the following connects high-speed high-bandwidth device to memory subsystem and CPU?

- 1. expansion bus
- 2. PCI bus
- 3. SCSI bus
- 4. CSI bus

10. A process is moved to wait queue when I/O request is made with ____.

- 1. non-blocking I/O
- 2. blocking I/O
- 3. asynchronous I/O
- 4. synchronous I/O

11. Buffering is done to:

- 1. cope with device speed mismatch
- 2. cope with device transfer size mismatch
- 3. maintain copy semantics
- 4. All of these

12. Caching is same as spooling.

- 1. True
- 2. False

13. Caching: (choose all that apply)

- 1. holds a copy of the data.
- 2. is fast memory.
- 3. holds the only copy of the data.
- 4. holds output for a device.

14. Spooling holds a copy of data and output for a device.

- 1. True
- 2. False

15. The _____ keeps state information about the use of I/O components.

- 1. CPU
- 2. OS
- 3. kernel
- 4. shell

16. The kernel data structures include:

- 1. process table
- 2. open file table
- 3. close file table
- 4. All of these

17. Windows NT uses a _____ implementation for I/O.

- 1. message – passing
- 2. draft – passing
- 3. secondary memory
- 4. cache

18. I/O is a major factor in system performance.

- 1. True
- 2. False

19. A _____ is a full duplex connection between a device driver and a user level process.

- 1. bus
- 2. I/O operation
- 3. stream
- 4. flow

20. If the number of cycles spent busy – waiting is not excessive, then:

- 1. interrupt driven I/O is more efficient than programmed I/O
- 2. programmed I/O is more efficient than interrupt driven I/O
- 3. Both programmed and interrupt driven I/O are equally efficient
- 4. All of these

1. The assembly code is converted into the machine code by _____.

- 1. compiler
- 2. assembler
- 3. linker
- 4. Loader

2. The compiler converts _____

- 1. assembly code into machine code
- 2. preprocessed source code into assembly code
- 3. machine code into assembly code
- 4. assembly code into preprocessed source code

3. What is the role of linker in the compilation process?

- 1. linker links the object code with the library code
- 2. linker converts machine code into executable machine code
- 3. linker generates an executable file
- 4. all of the mentioned

4. If okcl.c is compiled with GCC, then the okcl.s file will contain the _____ .

- 1. assembly code
- 2. machine code
- 3. preprocessed code
- 4. expanded source code

5. The correct sequence of GCC compilation process is:

- 1. preprocessing -> compilation -> assemble -> linking
- 2. assemble -> preprocessing -> compilation -> linking
- 3. preprocessing -> assemble -> compilation -> linking
- 4. linking -> preprocessing -> compilation -> assemble

6. The preprocessor removes the _____ from the source code.

- 1. comments
- 2. header files
- 3. source file
- 4. garbage

7. The macros specified in source code are expanded by _____ .

- 1. preprocessor
- 2. assembler
- 3. compiler
- 4. linker

8. If we do not specify the executable file name at the compilation time in GCC, then in Linux the compiler creates executable file named as _____.

- 1. a.out
- 2. a.exe
- 3. x.out
- 4. x.exe

9. The preprocessor creates the file with extension ____

- 1. .a
- 2. .i
- 3. .s
- 4. .o

10. The object file contains the _____.

- 1. assembly code
- 2. machine code
- 3. modified source code
- 4. expanded source code

11. The 'logout' built in command is used to _____.

- 1. shutdown the computer
- 2. logoff of the computer
- 3. logout the current user
- 4. exit the current shell

12. The command 'umask -S':

- 1. prints the current mask using symbolic notation
- 2. prints the current mask using octal numbers
- 3. sets the mask to 000
- 4. sets the mask to 777

13. Which command removes a directory from directory stack?

- 1. dirs
- 2. popd
- 3. pushd
- 4. rm

14. Which command puts a script to sleep until a signal is received?

- 1. sleep
- 2. suspend
- 3. disown
- 4. break

15. The 'mapfile' command:

- 1. reads lines of standard input and assigns each to the element of an indexed array
- 2. reads lines of standard output file
- 3. reads lines of standard error file
- 4. reads lines of standard input file

16. Which command identifies the resource of a command?

- 1. type
- 2. typeset
- 3. select
- 4. source

17. Which option of the kill command sends the given signal name to the specified process?

- 1. -l
- 2. -n
- 3. -s
- 4. -a

18. The command 'ulimit':

- 1. set a limit on specified resource for system users
- 2. set/show process resource limit
- 3. set a limit on specified resource for system users and set/show process resource limit
- 4. set a limit on process completion time

19. Which command prints the accumulated user and system times for processes run from the shell?

- 1. time
- 2. times
- 3. system time
- 4. sys -t

20. Which command waits for the specified process to complete and return the exit status?

- 1. sleep
- 2. wait
- 3. delay
- 4. stop

1. Effective user id can be set using which of the following permission?

- 1. 0777
- 2. 2666
- 3. 4744
- 4. 1711

2. The permission -rwxr-sr- represented in octal expression will be _____.

- 1. 0777
- 2. 2766
- 3. 2744
- 4. 2754

3. A user does a chmod operation on a file. Which of the following is true?

- 1. The last accessed time of the file is updated
- 2. The last modification time of the file is updated
- 3. The last change time of the file is updated
- 4. All of the above

4. The permission -rwSr-r- represented in octal expression will be _____

- 1. 0777
- 2. 2666
- 3. 4744
- 4. 4644

5. Sticky bit can be set using which of the following permission?

- 1. 0777
- 2. 2666
- 3. 4744
- 4. 1711

6. If user tries to remove (rm) a readonly file (444 permission), what will happen?

- 1. The file is removed successfully (and silently)
- 2. The rm command prompts for a confirmation, the command is successful upon confirmation
- 3. The rm command prompts for a confirmation, however the operation fails because of insufficient permissions
- 4. The rm command fails because of insufficient permissions

7. The dmesg command shows:

- 1. user login logoff attempts
- 2. the syslog file for info messages
- 3. kernel log messages
- 4. the daemon log messages

8. If the umask value is 0002, What will be the permissions of new directory?

- 1. 777
- 2. 775
- 3. 774
- 4. 664

9. What is the command to set the execute permissions to all the files and subdirectories within the directory /home/user1/direct ?

- 1. `chmod -r +x /home/user1/direct`
- 2. `chmod -R +x /home/user1/direct`
- 3. `chmod -f -r +x /home/user1/direct`
- 4. `chmod -F +x /home/user1/direct`

10. The command “mknod myfifo b 4 16” will create:

- 1. a block device if user is root
- 2. a block device for all users
- 3. a FIFO if user is not root
- 4. a LIFO if user is not root

11. Which command is used to set terminal IO characteristic?

- 1. `tty`
- 2. `ctty`
- 3. `ptty`
- 4. `stty`

12. Which command is used to record a user login session in a file ?

- 1. macro
- 2. read
- 3. script
- 4. All of the above

13. Which command is used to display the unix version?

- 1. uname -r
- 2. uname -n
- 3. uname -t
- 4. kernel

14. Which command is used to print a file?

- 1. print
- 2. ptr
- 3. lpr
- 4. printf

15. Which command is used to display the operating system name?

- 1. os
- 2. Unix
- 3. kernel
- 4. uname

16. Check the image file and answer ?

- 1. List all files and directories recursively starting from /
- 2. List a file named * in /
- 3. List all files in / directory
- 4. List all files and directories in / directory

17. Which option of "ls" command is used to view file inode number?

- 1. -l
- 2. -o
- 3. -a
- 4. -i

1. Which of the following is not a type of constructor?

- 1. Copy constructor
- 2. Friend constructor
- 3. Default constructor
- 4. Parameterized constructor

2. Which of the following statements is correct?

- 1. Base class pointer cannot point to derived class.
- 2. Derived class pointer cannot point to base class.
- 3. Pointer to derived class cannot be created.
- 4. Pointer to base class cannot be created.

3. Which of the following type of class allows only one object of it to be created?

- 1. Virtual class
- 2. Abstract class
- 3. Singleton class
- 4. Friend class

4. Which of the following concepts means determining at runtime what method to invoke?

- 1. Data hiding
- 2. Dynamic Typing
- 3. Dynamic binding
- 4. Dynamic loading

5. Which of the following is not the member of class?

- 1. Static function
- 2. Friend function
- 3. Const function
- 4. Virtual function

6. Which of the following term is used for a function defined inside a class?

- 1. Member Variable
- 2. Member function
- 3. Class function
- 4. Classic function

7. How many instances of an abstract class can be created?

- 1. 1
- 2. 5
- 3. 13
- 4. 0

8. Which of the following concept of oops allows compiler to insert arguments in a function call if it is not specified?

- 1. Call by value
- 2. Call by reference
- 3. Default arguments
- 4. Call by pointer

9. Which of the following concepts of OOPS means exposing only necessary information to client?

- 1. Encapsulation
- 2. Abstraction
- 3. Data hiding
- 4. Data binding

10. Which of the following cannot be friend?

- 1. Function
- 2. Class
- 3. Object
- 4. Operator function

1. Cout is a/an _____ ?

- 1. operator
- 2. function
- 3. object
- 4. macro

2. Which of the following concepts provides facility of using object of one class inside another class?

- 1. Encapsulation
- 2. Abstraction
- 3. Composition
- 4. Inheritance

3. Why reference is not same as a pointer?

- 1. A reference can never be null.
- 2. A reference once established cannot be changed.
- 3. Reference doesn't need an explicit dereferencing mechanism.
- 4. All of the above.

4. Which of the following is an abstract data type?

- 1. int
- 2. double
- 3. string
- 4. Class

5. How many types of polymorphisms are supported by C++?

- 1. 1
- 2. 2
- 3. 3
- 4. 4

1. In Turbo C++ which of the following command is used to open a new file?

- 1. Press Alt + F, N
- 2. Press Alt + F5, N
- 3. Press Alt + F9, N
- 4. Press Alt + F3, N

2. In Turbo C++ which of the following command is used to view the output of the program?

- 1. Press Alt + F5
- 2. Press Alt + F4
- 3. Press Alt + F2
- 4. Press Alt + F9

3. In Turbo C++ which of the following command is used to save the current file?

- 1. Press F9
- 2. Press F5
- 3. Press F3
- 4. Press F2

4. In Turbo C++ which of the following command is used to compile and run the program?

- 1. Press Ctrl + F2
- 2. Press Ctrl + F9
- 3. Press Ctrl + F5
- 4. Press Ctrl + F4

5. In Turbo C++ which of the following command is used to close the currently opened file?

- 1. Press Alt + F5
- 2. Press Alt + F3
- 3. Press Alt + F9
- 4. Press Alt + F2

1. In Visual Studio C++, which of the following command is used to Compile and execute the program?

- 1. Press Ctrl + F5
- 2. Press Ctrl + F4
- 3. Press Ctrl + F9
- 4. Press Ctrl + F3

2. In Turbo C++ which of the following command is used to exit Turbo C++?

- 1. Press Alt + Z
- 2. Press Alt + A
- 3. Press Alt + X
- 4. Press Alt + C

3. C++ programs are converted into machine language with the help of?

- 1. An Editor
- 2. A Compiler
- 3. An operating system
- 4. A Programmer

4. Which of the command prompt is used to change the directory?

- 1. AB
- 2. BC
- 3. CD
- 4. DC

1. Which of the following concepts means waiting until runtime to determine which function to call?

- 1. Data hiding
- 2. Dynamic casting
- 3. Dynamic binding
- 4. Dynamic loading

2. Which of the following concepts means wrapping up of data and functions together?

- 1. Abstraction
- 2. Encapsulation
- 3. Inheritance
- 4. Polymorphism

3. Which of the following is the correct class of the object cout?

- 1. iostream
- 2. istream
- 3. ostream
- 4. ifstream

4. Which of the following operator is overloaded for object cout?

- 1. >>
- 2. <<
- 3. +
- 4. =

5. Which of the following is correct about class and structure?

- 1. class can have member functions while structure cannot.
- 2. class data members are public by default while that of structure are private.
- 3. Pointer to structure or classes cannot be declared.
- 4. class data members are private by default while that of structure are public by default.

6. How "Late binding" is implemented in C++?

- 1. Using C++ tables
- 2. Using Virtual tables
- 3. Using Indexed virtual tables
- 4. Using polymorphic tables

7. Which of the following functions are performed by a constructor?

- 1. Construct a new class
- 2. Construct a new object
- 3. Construct a new function
- 4. Initialize objects

8. Which one of the following options is correct about the statement given below?

*** The compiler checks the type of reference in the object and not the type of object.**

- 1. Inheritance
- 2. Polymorphism
- 3. Abstraction
- 4. Encapsulation

9. Which of the following cannot be used with the keyword virtual?

- 1. class
- 2. member functions
- 3. constructor
- 4. destructor

10. Which of the following problem causes an exception?

- 1. Missing semicolon in statement in main().
- 2. A problem in calling function.
- 3. A syntax error.
- 4. A run-time error.

1. Which of the following is the correct way of declaring a function as constant?

- 1. `const int ShowData(void) { /* statements */ }`
- 2. `int const ShowData(void) { /* statements */ }`
- 3. `int ShowData(void) const { /* statements */ }`
- 4. `int (void) const { /* statements */ }`

2. Which of the following ways are legal to access a class data member using this pointer?

- 1. `this->x`
- 2. `this.x`
- 3. `*this.x`
- 4. `*this-x`

3. Which of the following statement is correct?

- 1. C++ allows static type checking.
- 2. C++ allows dynamic type checking.
- 3. C++ allows static member function be of type const.
- 4. C++ allows both static type checking as well as dynamic type checking.

4. Which of the following concepts is used to implement late binding?

- 1. Virtual function
- 2. Operator function
- 3. Const function
- 4. Static function

5. Which of the following factors supports the statement that reusability is a desirable feature of a language?

- 1. It decreases the testing time.
- 2. It lowers the maintenance cost.
- 3. It reduces the compilation time.
- 4. It decreases the testing time and also lowers the maintenance cost.

1. Which operator is having right to left associativity in the following?

- 1. Array subscripting
- 2. Function call
- 3. Addition and subtraction
- 4. Type cast

2. Which operator is having the highest precedence?

- 1. postfix
- 2. unary
- 3. shift
- 4. equality

3. Where does the execution of the program starts?

- 1. user-defined function
- 2. main function
- 3. void function
- 4. friend function

4. Which of the following is used to terminate the function declaration?

- 1. Colon (:)
- 2. Closing bracket ())
- 3. Semicolon (;)
- 4. Comma (,)

5. What is the use of dynamic_cast operator?

- 1. It converts virtual base class to derived class.
- 2. it converts virtual base object to derived objects.
- 3. It will convert the operator based on precedence.
- 4. It will convert the object based on its declaration.

6. What are mandatory parts in function declaration?

- 1. return type, function name
- 2. return type, function name, parameters
- 3. parameters, function name
- 4. parameters, return type

7. What is the scope of the variable declared in the user defined function?

- 1. whole program
- 2. only inside the {} block
- 3. main function
- 4. outside of the function

8. Where does the return statement returns the execution of the program?

- 1. main function
- 2. caller function
- 3. same function
- 4. friend function

9. What will you use if you are not intended to get a return value?

- 1. static
- 2. const
- 3. volatile
- 4. void

10. How many types of returning values are present in c++?

- 1. 1
- 2. 2
- 3. 3
- 4. 4

1. Which of the following permits function overloading on c++?

- 1. type
- 2. number of arguments
- 3. type & number of arguments
- 4. neither type nor arguments

2. How many ways of passing a parameter are there in c++?

- 1. 1
- 2. 2
- 3. 3
- 4. 4

3. Which is used to keep the call by reference value as intact?

- 1. static
- 2. const
- 3. absolute
- 4. int

4. By default how the value are passed in c++?

- 1. call by value
- 2. call by reference
- 3. call by pointer
- 4. call by variable

5. Function overloading is also similar to which of the following?

- 1. operator overloading
- 2. constructor overloading
- 3. destructor overloading
- 4. pointer overloading

6. In which of the following we cannot overload the function?

- 1. return function
- 2. caller
- 3. called function
- 4. friend function

7. Which header file is used to pass unknown number of arguments to function?

- 1. stdlib.h
- 2. string.h
- 3. stdarg.h
- 4. stdio.h

8. How can you access the arguments that are manipulated in the function?

- 1. va_list
- 2. arg_list
- 3. both va_list & arg_list
- 4. reference variable

9. What we will not do with function pointers?

- 1. allocation of memory
- 2. de-allocation of memory
- 3. both allocation & de-allocation of memory
- 4. function encapsulation

10. To which does the function pointer point to?

- 1. variable
- 2. constants
- 3. function
- 4. absolute variables

1. Which is used to define the member of a class externally?

- 1. :
- 2. ::
- 3. #
- 4. All of the above

2. How many specifiers are present in access specifiers in class?

- 1. 1
- 2. 2
- 3. 3
- 4. 4

3. Which of the following is a valid class declaration?

- 1. class A { int x; };
- 2. class B { }
- 3. public class A { }
- 4. object A { int x; };

4. Constructors are used to?

- 1. initialize the objects
- 2. construct the data members
- 3. both initialize the objects & construct the data members
- 4. All of the above

5. The fields in the class in C++ program are by default:

- 1. protected
- 2. private
- 3. public
- 4. Can be public or protected

6. Which other keywords are also used to declare the class other than class?

- 1. struct
- 2. union
- 3. object
- 4. both struct & union

7. How to access the object in the class?

- 1. Scope resolution operator
- 2. ternary operator
- 3. direct member access operator
- 4. All of the above

8. When struct is used instead of the keyword class, what will happen in the program?

- 1. access is public by default
- 2. access is private by default
- 3. access is protected by default
- 4. access is secured by default

9. Where does the object gets created?

- 1. class
- 2. constructor
- 3. destructor
- 4. attributes

1. What is the use of function call operator?

- 1. overloading the methods
- 2. overloading the objects
- 3. overloading the parameters
- 4. All of the above

2. Pick out the correct statement.

- 1. virtual functions does not give the ability to write a templated function
- 2. virtual functions does not give the ability to rewrite a templated function
- 3. virtual functions does give the ability to write a templated function
- 4. virtual functions does give the ability to rewrite a templated function

3. Operator overloading is?

- 1. making c++ operator works with objects
- 2. giving new meaning to existing operator
- 3. making new operator
- 4. adding operation to the existing operators

4. What will happen when the function call operator is overloaded?

- 1. It will not modify the functions
- 2. It will modify the functions
- 3. It will modify the object
- 4. It will modify the operator to be interpreted

5. Which of these following members are not accessed by using direct member access operator?

- 1. Public
- 2. private
- 3. protected
- 4. both private & protected

1. Which is used to allocate and deallocate storage for objects during the execution?

- 1. Stack
- 2. Heap
- 3. Free store
- 4. Data

2. What type of class member is operator new?

- 1. static
- 2. dynamic
- 3. const
- 4. smart

3. What must be an operand of operator delete?

- 1. Pointer
- 2. Array
- 3. Stack
- 4. Queue

4. Which operators are used in the free store?

- 1. new
- 2. delete
- 3. both new & delete
- 4. Bitwise OR

5. Which of the following is used to allocate an object outside the object lifetime?

- 1. int
- 2. float
- 3. void*
- 4. char*

6. How many items are there in sequence container?

- 1. 2
- 2. 3
- 3. 4
- 4. 5

7. Which of the following does not support any insertion or deletion?

- 1. Array
- 2. Vector
- 3. Dequeue
- 4. List

8. How the list containers are implemented?

- 1. Using Double linked list
- 2. Using Single linked list
- 3. Using Single & Double linked list
- 4. Using Stack and Queue

9. Which of the following will return the new element at the end of container?

- 1. front
- 2. back
- 3. push_back
- 4. pop_back

10. Which of the following class templates are based on arrays?

- 1. vector
- 2. list
- 3. dequeue
- 4. Both vector & dequeue

1. In C++, the declaration of functions and variables are collectively called _____

- 1. class members
- 2. function members
- 3. object members
- 4. member variables

2. The keywords private and public used in C++ are known as _____

- 1. keyword labels
- 2. visibility labels
- 3. declaration labels
- 4. display labels

3. The variables declared inside the class are known as data members and functions are known as _____

- 1. data functions
- 2. inline functions
- 3. member functions
- 4. member variables

4. Only the _____ can have access to the private members and private functions.

- 1. data functions
- 2. inline functions
- 3. member functions
- 4. member variables

5. Data members and member functions of a class in C++ program are by default

- 1. protected
- 2. public
- 3. private
- 4. Friend

6. What is the return type of the conversion operator?

- 1. void
- 2. int
- 3. float
- 4. no return type

7. The class in C++ which act only as a base class and object of it cannot be created is _____

- 1. parent class
- 2. super class
- 3. abstract class
- 4. derived class

8. Which operator is used to allocate an object dynamically of a class in C++?

- 1. Scope resolution operator
- 2. Conditional operator
- 3. New operator
- 4. Membership access

9. When you create an object of a derived class in C++ ?

- 1. Derived class constructor is called first then the base class constructor
- 2. Base class constructor is called first then derived class constructor
- 3. Base class constructor will not be called
- 4. Only base class constructor will not be called

10. Why we use the “dynamic_cast” type conversion?

- 1. result of the type conversion is valid
- 2. to be used in low memory
- 3. result of the type conversion is invalid
- 4. to be used in memory exhaustion

1. Process of inserting an element in stack is called _____.

- 1. Create
- 2. Push
- 3. Evaluation
- 4. Pop

2. Process of removing an element from stack is called _____.

- 1. Create
- 2. Push
- 3. Evaluation
- 4. Pop

3. Stack in Data Structure is _____.

- 1. FIFO
- 2. LILO
- 3. FILO
- 4. LIFO

4. Entries in a stack are “ordered”. What is the meaning of this statement?

- 1. A collection of stacks is sortable.
- 2. Stack entries may be compared with the ‘<’ operation.
- 3. The entries are stored in a linked list.
- 4. There is a Sequential entry that is one by one.

5. Pushing an element into stack already having five elements and stack size of 5 , then stack becomes _____

- 1. Overflow
- 2. Crash
- 3. Underflow
- 4. User flow

6. A linear list of elements in which deletion can be done from one end (front) and insertion can take place only at the other end (rear) is known as a _____

- 1. Queue
- 2. Stack
- 3. Tree
- 4. Linked list

7. A queue is a _____

- 1. FIFO (First In First Out) list
- 2. LIFO (Last In First Out) list
- 3. Ordered array
- 4. Linear tree

8. If the elements “A”, “B”, “C” and “D” are placed in a queue and are deleted one at a time, in what order will they be removed?

- 1. ABCD
- 2. DCBA
- 3. DCAB
- 4. ABDC

9. In Breadth First Search of Graph, which of the following data structure is used?

- 1. Stack
- 2. Queue
- 3. Linked list
- 4. Tree

10. The data structure required for Breadth First Traversal on a graph is _____

- 1. Stack
- 2. Array
- 3. Queue
- 4. Tree

1. A derived class with only one base class is called _____ inheritance.

- 1. single
- 2. multiple
- 3. multilevel
- 4. hierarchical

2. When a base class is privately inherited by a derived class, public members of the base class become _____ of the derived class.

- 1. private members
- 2. protected members
- 3. public members
- 4. Not inherited

3. When the properties of one class are inherited by more than one class, this is called _____ inheritance.

- 1. single
- 2. multiple
- 3. multilevel
- 4. hierarchical

4. The _____ inherits some or all of the properties of the _____ class.

- 1. base, derived
- 2. derived, base
- 3. derived, initial
- 4. base, final

5. A class can be derived from another derived class. This is known as _____ inheritance.

- 1. single
- 2. multiple
- 3. multilevel
- 4. hierarchical

6. A class can inherit properties from more than one class. This is known as _____ inheritance.

- 1. single
- 2. multiple
- 3. multilevel
- 4. hierarchical

7. When a protected member is inherited in public mode, it becomes _____ in the derived class too and therefore is accessible by member functions of the derived class.

- 1. protected
- 2. private
- 3. public
- 4. friend

8. A member declared as _____ is accessible by the member functions within its class and any class immediately derived from it.

- 1. protected
- 2. private
- 3. public
- 4. friend

9. State whether the following statements about inheritance are True or False? * i) A public member of a class can be accessed by its own objects using the dot operator. * ii) While inheriting, the private members of the base class will never become the members of its derived class.

- 1. True, False
- 2. False, True
- 3. True, True
- 4. False, False

10. When the base class is publicly inherited, public members of the base class become_____ of the derived class.

- 1. private members
- 2. protected members
- 3. public members
- 4. Not inherited

1. Which symbol is used to create multiple inheritance?

- 1. Dot
- 2. Comma
- 3. Dollar
- 4. Semicolon

2. Which of the following advantages we lose by using multiple inheritance?

- 1. Dynamic binding
- 2. Polymorphism
- 3. Both Dynamic binding & Polymorphism
- 4. Data Abstraction

3. Which design patterns benefit from the multiple inheritance?

- 1. Adapter and observer pattern
- 2. Code pattern
- 3. Glue pattern
- 4. No pattern exists

4. What things are inherited from the base class?

- 1. Constructor and its destructor
- 2. Operator=() members
- 3. Friends
- 4. All of the mentioned

5. What is meant by multiple inheritance?

- 1. Deriving a base class from derived class
- 2. Deriving a derived class from base class
- 3. Deriving a derived class from more than one base class
- 4. Deriving a derived class from derived class

1. A class that have no pure virtual member functions, are called:

- 1. Polymorphic class
- 2. Concrete class
- 3. Base class
- 4. Abstract class

2. In object oriented programming there are two distinct views, one is consumer and second is manufacturer view, that manufacturer's action are called:

- 1. Functions
- 2. Operations
- 3. Methods
- 4. Operators

3. A virtual member function is a member function that can:

- 1. Be overridden by a subclass
- 2. Be derived from another class
- 3. Move to any class
- 4. Inherited by a friend class

4. Overloaded functions in C++ oops are:

- 1. Functions preceding with virtual keywords.
- 2. Functions inherited from base class to derived class.
- 3. Two or more functions having same name but different number of parameters or type.
- 4. Functions succeeding with virtual keywords.

5. Object-oriented programming refers to use of:

- 1. Derived classes
- 2. Virtual functions
- 3. PHP scripts
- 4. Both Derived classes and Virtual functions

6. Correct way to declare pure virtual function in a C++ class is:

- 1. `virtual void foo() =0 ;`
- 2. `void virtual foo()= { 0 }`
- 3. `virtual void foo() {} = 0;`
- 4. `void* virtual {}foo() =0 ;`

7. Which function cannot be overloaded in C++ program?

- 1. Virtual function
- 2. member function
- 3. Static function
- 4. Friend Function

8. A constructor that accepts _____ parameter(s) is called the default constructor.

- 1. one
- 2. two
- 3. no
- 4. three

9. What happens when a class with parameterized constructors and having no default constructor is used in a program and we create an object that needs a zero-argument constructor?

- 1. Compile-time error.
- 2. Preprocessing error.
- 3. Runtime error.
- 4. Runtime exception.

10. Can a class have virtual destructor?

- 1. Yes
- 2. No

1. Which of the following statement is incorrect?

- 1. Constructor is a member function of the class.
- 2. The compiler always provides a zero argument constructor.
- 3. It is necessary that a constructor in a class should always be public.
- 4. Both the compiler always provides a zero argument constructor and It is necessary that a constructor in a class should always be public.

2. Which constructor function is designed to copy objects of the same class type?

- 1. Create constructor
- 2. Object constructor
- 3. Dynamic constructor
- 4. Copy constructor

3. Destructor has the same name as the constructor and it is preceded by _____

- 1. !
- 2. ?
- 3. ~
- 4. \$

4. For automatic objects, constructors and destructors are called each time the objects:

- 1. enter and leave scope
- 2. inherit parent class
- 3. are constructed
- 4. are destroyed

5. Which of the following statement is correct?

- 1. Constructor has the same name as that of the class.
- 2. Destructor has the same name as that of the class with a tilde symbol at the beginning.
- 3. Constructor has the same name as that of the class and also Destructor has the same name as that of the class with a tilde symbol at the beginning.
- 4. Destructor has the same name as the first member function of the class.

1. Which header file is used with input and output operations of C in C++?

- 1. stdio.h
- 2. **cstdio**
- 3. iostream
- 4. stdlib.h

2. Which will be used with physical devices to interact from C++ program?

- 1. Programs
- 2. Library
- 3. **Streams**
- 4. Files

3. How many indicators are available in C++?

- 1. 4
- 2. **3**
- 3. 2
- 4. 1

4. How many streams are automatically created when executing a program?

- 1. 1
- 2. 2
- 3. **3**
- 4. 4

5. What is the benefit of C++ input and output over C input and output?

- 1. Type safety
- 2. Exception
- 3. **Both Type safety & Exception**
- 4. Memory management

6. How many groups of output of operation are there in C++?

- 1. 1
- 2. 2
- 3. 3
- 4. 4

7. What must be specified when we construct an object of class ostream?

- 1. stream
- 2. streambuf
- 3. memory
- 4. ofstream

8. What is meant by ofstream in C++?

- 1. Writes to a file
- 2. Reads from a file
- 3. Writes to a file & Reads from a file
- 4. Includes library to a file

9. How many types of output stream classes are there in C++?

- 1. 1
- 2. 2
- 3. 3
- 4. 4

10. Pick out the correct objects about the instantiation of output stream.

- 1. cout
- 2. cerr
- 3. clog
- 4. cin

1. Which operator is used for input stream?

- 1. >
- 2. >>
- 3. <
- 4. <<

2. Which is used to get the input during runtime?

- 1. cout
- 2. cin
- 3. coi
- 4. printf

3. Where does a cin stops it extraction of data?

- 1. By seeing a blankspace
- 2. By seeing (
- 3. By seeing a blankspace & (
- 4. By seeing)

4. What can be used to input a string with blankspace?

- 1. inline
- 2. getline
- 3. putline
- 4. getch

5. How many parameters are there in getline function?

- 1. 1
- 2. 2
- 3. 2 or 3
- 4. 3

1. Which other keywords are also used to declare the class other than class?

- 1. struct
- 2. union
- 3. object
- 4. both struct & union

2. How many specifiers are present in access specifiers in class?

- 1. 1
- 2. 2
- 3. 3
- 4. 4

3. What does your class can hold?

- 1. data
- 2. functions
- 3. both data & functions
- 4. Neither data nor functions

4. Which is used to define the member of a class externally?

- 1. colon (:)
- 2. double colon (::)
- 3. semi colon (;)
- 4. ampersand (&)

5. Which of the following is a valid class declaration?

- 1. class A { int x; };
- 2. class B { }
- 3. public class A { }
- 4. object A { int x; };

6. The fields in the class in C++ program are by default:

- 1. protected
- 2. private
- 3. public
- 4. void

7. Which rule will not affect the friend function?

- 1. private and protected members of a class cannot be accessed from outside
- 2. private and protected member can be accessed anywhere
- 3. Only protected member can be accessed anywhere
- 4. Only private member can be accessed anywhere

8. Which keyword is used to declare the friend function?

- 1. friend*
- 2. friend
- 3. classfriend
- 4. myfriend

9. Constructors are used to:

- 1. initialize the objects
- 2. construct the data members
- 3. both initialize the objects & construct the data members
- 4. deallocate memory from objects

10. When struct is used instead of the keyword class means, what will happen in the program?

- 1. access is public by default
- 2. access is private by default
- 3. access is protected by default
- 4. access is not allowed

1. What is the syntax of friend function?

- 1. friend class1 class2;
- 2. friend class;
- 3. friend class
- 4. friend class*()

2. Pick out the correct statement.

- 1. A friend function may be a member of another class
- 2. A friend function may not be a member of another class
- 3. A friend function may or may not be a member of another class
- 4. A friend function may be a member of only friend class

3. Where does keyword 'friend' should be placed?

- 1. function declaration
- 2. function definition
- 3. main function
- 4. Inside the function

4. What should be used to point to a static class member?

- 1. Smart pointer
- 2. Dynamic pointer
- 3. Normal pointer
- 4. Null pointer

5. Which is referred by pointers to member?

- 1. static members of class objects
- 2. Non-static members of class objects
- 3. Referring to whole class
- 4. Referring to derived class

1. Which keyword can be used in template?

- 1. class
- 2. typename
- 3. both class & typename
- 4. function

2. What is meant by template parameter?

- 1. It can be used to pass a type as argument
- 2. It can be used to evaluate a type
- 3. It can be of no return type
- 4. It can be used to pass a type as pointer to function

3. What is the validity of template parameters?

- 1. inside that block only
- 2. inside the class
- 3. whole program
- 4. inside the class and its derived class

4. Which of these does not require instantiation?

- 1. functions
- 2. non virtual member function
- 3. member class
- 4. All of the above

5. Which parameter is legal for non-type template?

- 1. pointer to member
- 2. object
- 3. class
- 4. function to pointer

6. Why we use :: template-template parameter?

- 1. for binding
- 2. for rebinding
- 3. both for binding & rebinding
- 4. for Inheritance

7. How many types of specialization are there in C++?

- 1. 1
- 2. 2
- 3. 3
- 4. 4

8. What is meant by template specialization?

- 1. It will have certain data types to be fixed
- 2. It will make certain data types to be dynamic
- 3. Certain data types are invalid
- 4. It will have certain data types to be void

9. Which is called on allocating the memory for array of objects?

- 1. destructor
- 2. constructor
- 3. method
- 4. Memory fragmentation

10. Which is similar to template specialization?

- 1. template
- 2. function overloading
- 3. function template overloading
- 4. function overriding

1. What is the other name of full specialization?

- 1. explicit specialization
- 2. implicit specialization
- 3. function overloading template
- 4. function overriding

2. Which is dependant on template parameter?

- 1. base class
- 2. abstract class
- 3. method
- 4. derived class

3. How many bits of memory is needed for internal representation of class?

- 1. 1
- 2. 2
- 3. 4
- 4. no memory needed

4. How many kinds of entities are directly parameterized in C++?

- 1. 1
- 2. 2
- 3. 3
- 4. 4

5. Which value is placed in the base class?

- 1. derived values
- 2. default type values
- 3. both default type & derived values
- 4. Null value

1. What kind of exceptions are available in C++?

- 1. handled
- 2. unhandled
- 3. static
- 4. dynamic

2. How to handle error in the destructor?

- 1. throwing
- 2. terminate
- 3. both throwing & terminate
- 4. Catch

3. Which type of program is recommended to include in try block?

- 1. static memory allocation
- 2. dynamic memory allocation
- 3. const reference
- 4. pointer

4. Which is used to handle the exceptions in C++?

- 1. catch handler
- 2. handler
- 3. exception handler
- 4. Throw handler

5. Which statement is used to catch all types of exceptions?

- 1. catch()
- 2. catch(Test t)
- 3. catch(...)
- 4. Throw(...)

6. What is meant by exception specification?

- 1. A function is limited to throwing only a specified list of exceptions
- 2. A catch can catch all types of exceptions
- 3. A function can throw any type of exceptions
- 4. A function can't throw any type of exceptions

7. How many types of specialization are there in C++?

- 1. 1
- 2. 2
- 3. 3
- 4. 4

8. What do you mean by “No exception specification”?

- 1. It throws nothing
- 2. It can throw anything
- 3. It can catch anything
- 4. It can catch nothing

9. What will happen when a program throws any other type of exception other than specified?

- 1. terminate
- 2. arise an error
- 3. run
- 4. Execute the program

10. Identify the correct statement about throw(type).

- 1. A function can throw any type of exceptions
- 2. A function can throw an exception of certain type only
- 3. A function can't throw any type of exception
- 4. A class can throw any type of exceptions

1. Which handler is used to handle all types of exception?

- 1. catch handler
- 2. catch-all handler
- 3. catch-none handler
- 4. throw handler

2. What will happen when an exception is uncaught?

- 1. arise an error
- 2. program will run
- 3. execute continuously
- 4. Terminate the program

3. Which operator is used in catch-all handler?

- 1. ellipses operator
- 2. ternary operator
- 3. string operator
- 4. unary operator

4. What function will be called when we have a uncaught exception?

- 1. catch
- 2. throw
- 3. terminate
- 4. try

5. Which operations don't throw anything?

- 1. Operations which are reversible
- 2. Operations which are irreversible
- 3. Operations which are static
- 4. Operations which are dynamic