

Multiple Choice Questions

For

C++ Programming



by:



1. If the class name is X, what is the type of its "this" pointer (in a nonstatic, non-const member function)?
 - a. const X* const
 - b. X* const
 - c. X*
 - d. X&
2. Which classes allow primitive types to be accessed as objects?
 - a. Storage
 - b. Virtual
 - c. Friend
 - d. Wrapper
3. When is `std::bad_alloc` exception thrown?
 - a. When new operator cannot allocate memory
 - b. When alloc function fails
 - c. When type requested for new operation is considered bad, `thisexception` is thrown
 - d. When delete operator cannot delete the allocated (corrupted) object
4. Which one of the following is not a fundamental data type in C++?
 - a. float
 - b. string
 - c. int
 - d. `wchar_t`
5. Which of the following is a valid destructor of the class name "Country"?
 - a. `int ~Country()`
 - b. `void Country()`
 - c. `int ~Country(Country obj)`
 - d. `void ~Country()`
6. Which of the following correctly describes C++ language?
 - a. Statically typed language
 - b. Dynamically typed language
 - c. Both Statically and dynamically typed language
 - d. Type-less language
7. Which of the following keyword supports dynamic method resolution?
 - a. abstract
 - b. Virtual
 - c. Dynamic
 - d. `Typeid`
8. Which of the following is the most preferred way of throwing and handling exceptions?
 - a. Throw by value and catch by reference.
 - b. Throw by reference and catch by reference.
 - c. Throw by value and catch by value
 - d. Throw the pointer value and provide catch for the pointer type.
9. Which of the following is not true about preprocessor directives?
 - a. They begin with a hash symbol
 - b. They are processed by a preprocessor
 - c. They form an integral part of the code
 - d. They have to end with a semi colon
10. What's wrong? `while((i < 10) && (i > 24))`
 - a. the logical operator `&&` cannot be used in a test condition
 - b. the while loop is an exit-condition loop
 - c. the test condition is always false
 - d. the test condition is always true
11. A `continue` statement causes execution to skip to
 - a. the `return 0;` statement
 - b. the first statement after the loop
 - c. the statement following the `continue` statement
 - d. the next iteration of the loop
12. What's wrong? `(x = 4 && y = 5) ? (a = 5) ; (b = 6);`
 - a. the question mark should be an equal sign
 - b. the first semicolon should be a colon
 - c. there are too many variables in the statement
 - d. the conditional operator is only used with `apstrings`
13. What's wrong? `for (int k = 2, k <= 12, k++)`
 - a. the increment should always be `++k`
 - b. the variable must always be the letter `i` when using a for loop
 - c. there should be a semicolon at the end of the statement
 - d. the commas should be semicolons
14. Which of the following is not recommended in a header file?
 - a. Type definitions (`typedefs`)
 - b. Class definitions
 - c. Function definitions
 - d. Template definitions
15. Which of the STL containers store the elements contiguously (in adjacent memory locations)?
 - a. `std::vector`
 - b. `std::list`
 - c. `std::map`
 - d. `std::set`
16. Which of the following is not a standard exception built in C++.
 - a. `std::bad_creat`
 - b. `std::bad_alloc`
 - c. `std::bad_cast`
 - d. `std::bad_typeid`
17. What does STL stand for?
 - a. Simple Template Library
 - b. Standard Template Library
 - c. Static Type Library
 - d. Single Type-based Library
18. What is the difference between overloaded functions and overridden functions?
 - a. Overloading is a dynamic or run-time binding and Overriding is static or compile-time binding
 - b. Redefining a function in a friend class is called function overriding while Redefining a function in a derived class is called a overloaded function.
 - c. Overloading is a static or compile-time binding and Overriding is dynamic or run-time binding
 - d. Redefining a function in a friend class is called function overloading while Redefining a function in a derived class is called as overridden function.
19. Which one of the following is not a valid reserved keyword in C++
 - a. `Explicit`
 - b. `Public`
 - c. `Implicit`
 - d. `Private`
20. Each pass through a loop is called a/an
 - a. enumeration
 - b. iteration
 - c. culmination
 - d. pass through
21. Which of the following is true about `const` member functions?
 - a. `const` members can be invoked on both `const` as well as `nonconst` objects
 - b. `const` members can be invoked only on `const` objects and not on `nonconst` objects
 - c. `nonconst` members can be invoked on `const` objects as well as `nonconst` objects
 - d. none of the above
22. Which of the following relationship is known as inheritance relationship?
 - a. 'has-a' relationship
 - b. 'is-a' relationship
 - c. association relationship
 - d. none of the above

- 23. If class A is friend of class B and if class B is friend of class C, which of the following is true?**
- Class C is friend of class A
 - Class A is friend of class C
 - Class A and Class C do not have any friend relationship
 - None of the above
- 24. A direct access file is:**
- A file in which records are arranged in a way they are inserted in a file
 - A file in which records are arranged in a particular order
 - Files which are stored on a direct access storage medium
 - None of the above
- 25. Which of the following is not a component of file system**
- Access method
 - Auxiliary storage management
 - Free integrity mechanism
 - None of the above
- 26. Seek time is**
- time taken to retrieve a data
 - Time taken by read/write head mechanism to position itself over appropriate cylinder
 - Time taken by appropriate sector to come under read/write
 - None of the above
- 27. 'Prime area' in context of file system is defined as**
- It is memory area created by operating system
 - It is an area into which data records are written
 - It is the main area of a web page
 - None of the above
- 28. In multi-list organization**
- Records that have equivalent value for a given secondary index item are linked together to form a list.
 - Records are loaded in ordered sequence defined by collating sequence by content of the key
 - Records are directly accessed by record key field
 - None of the above
- 29. Which of the following is/are advantages of cellular partitioned structure:**
- Simultaneous read operations can be overlapped
 - Search time is reduced
 - Both a & b
 - None of the above
- 30. *ptr++ is equivalent to:**
- ptr++
 - *ptr
 - ++*ptr
 - None of the above
- 31. The conditional compilation**
- It is taken care of by the compiler
 - It is setting the compiler option conditionally
 - It is compiling a program based on a condition
 - none of above
- 32. Originally 'C' was developed as:**
- System programming language
 - General purpose language
 - Data processing language
 - None of above
- 33. An inverted file**
- Locates information about data in small files that are maintained apart from actual data record
 - A file which stores opposite records
 - A file which stores information about records of a system
 - None of above
- 34. Which of the following is not a file operation:**
- Repositioning
 - Truncating
 - Appending
 - None of above
- 35. Latency time is:**
- Time taken by read/write head mechanism to position itself over appropriate cylinder
 - Time taken to transfer a data from memory
 - Time taken by appropriate sector to come under read/write head
 - None of above
- 36. The two types of file structure existing in VSAM file are**
- Key sequenced structure, entry sequenced structure
 - Key sequence structure, exit sequenced structure
 - Entry sequence structure, exit sequenced structure
 - None of above
- 37. How many copies of a class static member are shared between objects of the class?**
- A copy of the static member is shared by all objects of a class
 - A copy is created only when at least one object is created from that class
 - A copy of the static member is created for each instantiation of the class
 - No memory is allocated for static members of a class
- 38. Which looping process checks the test condition at the end of the loop?**
- for
 - while
 - do-while
 - no looping process checks the test condition at the end
- 39. The default access level assigned to members of a class is**
- Private
 - Public
 - Protected
 - Needs to be assigned
- 40. Which of the following correctly describes the meaning of 'namespace' feature in C++?**
- Namespaces refer to the memory space allocated for names used in a program
 - Namespaces refer to space between the names in a program
 - Namespaces refer to packing structure of classes in a program.
 - Namespaces provide facilities for organizing the names in a program to avoid name clashes.
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- 42. Which of the following language is not supported by C++?**
- Exception Handling
 - Reflection
 - Operator Overloading
 - Namespaces
- 43. class derived: public base1, public base2 {} is an example of**
- Polymorphic inheritance
 - Multilevel inheritance
 - Hierarchical inheritance
 - Multiple inheritance
- 44. Which of the following languages is a subset of C++ language?**
- C language
 - Java Language
 - C# language
 - language

45. How do we declare an 'interface' class?

- a. By making all the methods pure virtual in a class
- b. By making all the methods abstract using the keyword 'abstract' in a class
- c. By declaring the class as interface with the keyword 'interface'
- d. It is not possible to create interface class in C++

46. How do we declare an abstract class?

- a. By providing at least one pure virtual method (function signature followed by ==0;) in a class
- b. By declaring at least one method abstract using the keyword 'abstract' in a class
- c. By declaring the class abstract with the keyword 'abstract'
- d. It is not possible to create abstract classes in C++

47. Which of the following is not an advantage of secondary memory

- a. It is cost-effective
- b. It has large storage capacity
- c. It has highest speed
- d. It is easily portable

48. What happens when a pointer is deleted twice?

- a. It can abort the program
- b. It can cause a failure
- c. It can cause an error
- d. It can cause a trap

49. Which of the following language feature is not an access specifier in C++?

- a. public
- b. private
- c. C protected
- d. internal

50. Expression C=i++ causes

- a. Value of i assigned to C and then i incremented by 1
- b. i to be incremented by 1 and then value of i assigned to C
- c. Value of i assigned to C
- d. i to be incremented by 1

51. The statement i++; is equivalent to

- a. i = i + i;
- b. i = i + 1;
- c. i = i - 1;
- d. i --;

52. In C language, a hexadecimal number is represented by writing

- a. x
- b. xo
- c. ox
- d. h

53. Which of the following library function below by default aborts the program?

- a. Terminate()
- b. end()
- c. Abort()
- d. exit()

54. If a member needs to have unique value for all the objects of that same class, declare the member as

- a. Global variable outside class
- b. Local variable inside constructor
- c. Static variable inside class
- d. Dynamic variable inside class

55. Value of ix+j, if i,j are integer type and ix long type would be

- a. integer
- b. float
- c. long integer
- d. double percision

56. Which of the following below can perform conversions between pointers to related classes?

- a. A. cast_static
- b. B. dynamic_cast
- c. c. static_cast
- d. D. cast_dynamic

57. How do we define a constructor?

- a. a. x~() {}
- b. B. X() {}~
- c. C. X() ~{}
- d. D. ~X() {}

58. Vtables

- a. creates a static table per class
- b. creates a static table per object
- c. creates a dynamic table per class
- d. creates a dynamic table per object

59. When class B is inherited from class A, what is the order in which the constructors of those classes are called

- a. Class A first Class B next
- b. Class B first Class A next
- c. Class B's only as it is the child class
- d. Class A's only as it is the parent class

60. Which of the following is the most general exception handler that catches exception of any type?

- a. catch(std::exception)
- b. catch(std::any_exception)
- c. catch(...)
- d. catch()

61. Which of the following is the most general exception handler that catches exception of 'any type'?

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62. In a group of nested loops, which loop is executed the most number of times?

- a. the outermost loop
- b. the innermost loop
- c. all loops are executed the same number of times
- d. cannot be determined without knowing the size of the loops

63. What is the Difference between struct and class in terms of Access Modifier?

- a. By default all the struct members are private while by default class members are public.
- b. By default all the struct members are protected while by default class members are private.
- c. By default all the struct members are public while by default class members are private.
- d. By default all the struct members are public while by default class members are protected.

64. Inline functions are invoked at the time of

- a. Run time
- b. Compile time
- c. Depends on how it is invoked
- d. Both b and c above

65. What is shallow copy?

- a. A shallow copy creates a copy of the dynamically allocated objects too.
- b. A shallow copy just copies the values of the data as they are.
- c. A shallow copy creates a copy of the statically allocated objects too
- d. Both b and c above

66. What is deep copy?

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- d. Both b and c above

- 67. Which of the following below is /are a valid iterator type?**
- Input Iterator
 - Backward Iterator
 - Forward Iterator
 - Both a and c above
- 68. What defines a general set of operations that will be applied to various types of data?**
- Template class
 - Function template
 - Class template
 - Both a and c above
- 69. Under which of the following circumstances, synchronization takes place?**
- When the file is closed
 - When the buffer is empty
 - Explicitly, with manipulators
 - both a and c
- 70. Which of the following functions below can be used Allocate space for array in memory?**
- calloc()
 - malloc()
 - Realloc()
 - both a and b
- 71. Statement scanf("%d",80);**
- Assign an integer to variable i
 - Give an error message
 - Print the value of i
 - Assign an float to variable i
- 72. STL is based on which of the following programming paradigms?**
- Structured Programming
 - Object Oriented Programming (OOP)
 - Functional Programming
 - Aspect Oriented Programming (AOP)
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- 74. If there is more than one statement in the block of a for loop, which of the following must be placed at the beginning and the ending of the loop block?**
- parentheses ()
 - braces { }
 - brackets [].
 - arrows < >
- 75. Which of the following members do get inherited but become private members in child class**
- Public
 - Private
 - Protected
 - All the above
- 76. Which looping process is best used when the number of iterations is known?**
- for
 - while
 - do-while
 - all looping processes require that the iterations be known
- 77. In a C language '3' represents**
- A digit
 - An integer
 - A character
 - A word
- 78. Which of the following is the most common way of implementing C++?**
- C++ programs are directly compiled into native code by a compiler
 - C++ programs are first compiled to intermediate code by a compiler and then executed by a virtual machine
 - C++ programs are interpreted by an interpreter
 - A C++ editor directly compiles and executes the program
- 79. Which header file should we include for using std::auto_ptr?**
- <memory>
 - <alloc>
 - <autoptr>
 - <smartptr>
- 80. Which of the following operators can be implemented as a nonmember operator?**
- #NAME?
 - () (function call operator)
 - [] (array access operator)
 - + (addition operator)
- 81. What is the implicit pointer that is passed as the first argument for nonstatic member functions?**
- 'self' pointer
 - std::auto_ptr pointer
 - 'Myself' pointer
 - 'this' pointer
- 82. Which of the following operators can be overloaded?**
- . (dot or member access operator)
 - & (address-of operator)
 - sizeof operator
 - ?: (conditional operator)
- 83. Which of the following operator cannot be overloaded?**
- #NAME?
 - == (equality operator)
 - > (row operator)
 - :: (cope resolution operator)
- 84. Which of the following operators below allow to define the member functions of a class outside the class?**
- ::
 - ?
 - ?:
 - %
- 85. Which of the following is not a valid conditional inclusions in preprocessor directives**
- #ifdef
 - #ifndef
 - #endif
 - #elif
- 86. Which of the following is not a standard exception built in C++.**
- std::bad_creat
 - std::bad_alloc
 - std::bad_cast
 - std::bad_typeid
- 87. If a member needs to have unique value for all the objects of that same class, declare the member as**
- Global variable outside class
 - Local variable inside constructor
 - Static variable inside class
 - Dynamic variable inside class
- 88. Under which of the following circumstances, synchronization takes place?**
- When the file is closed
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 - Explicitly, with manipulators
 - both a and c

89. Which of the following functions below can be used Allocate space for array in memory?

- a. calloc()
- b. malloc()
- c. Realloc()
- d. both a and b

90. Which of the following is not a valid conditional inclusions in preprocessor directives

- a. #ifdef
- b. #ifndef
- c. #endif
- d. #elif

91. Value of a in $a = (b = 5, b + 5)$; is

- a. Junk value
- b. Syntax error
- c. 5
- d. 10

92. Minimum number of temporary variable needed to swap the contents of 2 variables is:

- a. 1
- b. 2
- c. 3
- d. 0

94. There is nothing like a virtual constructor of a class.

- a. False
- b. True

95. C++ provides facility to specify that the compiler should match function calls with the correct definition at the run time. This process is called as

- a. Static binding
- b. Dynamic Binding

96. The output of this program is

```
int
main () { cout << "Hello World!" return 0; }
```

- a. Hello World
- b. Syntax error
- c. 0
- d. Hello World!

97. The return value of the following code is

```
Class1& test(Class1 obj)
{
    Class1 *ptr = new Class1();
    .....
    return ptr;
}
```

- a. object of Class1
- b. reference to ptr
- c. reference of Class1
- d. object pointed by ptr

98. The output of

```
{
    int a = 5;
    int b = 10;
    cout << (a>b?a:b);
}
```

- a. 5
- b. 10
- c. Syntax error
- d. None of above

99. The output of this program is

```
int a = 10;
void main()
{
    int a = 20;
    cout << a << ::a;
}
```

- a. Syntax error
- b. 10 20
- c. 20 10
- d. 20 20

100. Observe following program and answer

```
class Example{
public: int a,b,c;
    Example() {a=b=c=1;}
    //Constructor 1
    Example(int a) {a = a; b = c = 1;}
    //Constructor 2
    Example(int a,int b) {a = a; b = b; c = 1;}
    //Constructor 3
    Example(int a,int b,int c) { a = a; b = b; c = c;}
    //Constructor 4
}
```

In the above example of constructor overloading, the following statement will call which constructor

Example obj = new Example (1,2,3);

- a. Constructor 2
- b. Constructor 4
- c. Constrcutor 1
- d. Type mismatch error



1 - d	2 - b	3 - d	4 - a	5 - b	6 - d	7 - a	8 - b	9 - a	10 - d
11 - c	12 - d	13 - b	14 - d	15 - c	16 - a	17 - a	18 - b	19 - c	20 - c
21 - b	22 - a	23 - b	24 - c	25 - c	26 - d	27 - b	28 - b	29 - a	30 - c
31 - d	32 - c	33 - b	34 - a	35 - d	36 - c	37 - c	38 - a	39 - c	40 - a
41 - d	42 - d	43 - b	44 - d	45 - a	46 - a	47 - a	48 - c	49 - d	50 - d
51 - a	52 - b	53 - d	54 - a	55 - b	56 - c	57 - C	58 - D	59 - a	60 - a
61 - c	62 - c	63 - b	64 - c	65 - b	66 - b	67 - a	68 - d	69 - b	70 - d
71 - a	72 - a	73 - c	74 - c	75 - b	76 - c	77 - a	78 - c	79 - a	80 - c
81 - d	82 - d	83 - b	84 - d	85 - a	86 - b	87 - a	88 - b	89 - d	90 - a
91 - b	92 - d	93 - d	94 - a	95 - b	96 - b	97 - b	98 - b	99 - c	100 - b

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