

Q.1. Which of the following user-defined header file extension used in c++?
(a) hg (b) cpp (c) h (d) hf

Ans. (c) h

Q.2. Which of the following is a correct identifier in C++?

- (a) VAR_1234 (b) \$var_name
(c) 7VARNAME (d) 7var_name

Ans. (c) VAR_1234

Q.3. What happens if the following C++ statement is compiled and executed?

int*ptr=NULL;

delete ptr;

- (a) The program is not semantically correct
(b) The program is compiled and executed successfully
(c) The program gives a compile-time error
(d) The program compiled successfully but throws an error during run-time

Ans. (b) The program is compiled and executed successfully

Q.4. What is the difference between delete and delete[] in C++?

- (a) delete is syntactically correct but delete[] is wrong and hence will give an error if used in any case
(b) delete is used to delete normal objects whereas delete[] is used to pointer objects
(c) delete is a keyword whereas delete[] is an identifier
(d) delete is used to delete single object whereas delete[] is used to multiple(array/pointer of) objects

Ans. (d) delete is used to delete single object whereas delete[] is used to multiple(array/pointer of) objects

Q.5. Which of the following correctly declares an array in C++?

- (a) array{10}; (b) array array[10];
(c) int array; (d) int array[10];

Ans. (d) int array[10];

Q.6. Which is more effective while calling the C++ functions?

- (a) call by object (b) call by pointer
(c) call by value (d) call by reference

Ans. (d) call by reference

Q.7. What is the use of the indentation in c++?

- (a) It distinguishes between comments and inner data

- (b) distinguishes between comments and outer data
- (c) distinguishes between comments and code
- (d) distinguishes between comments and outer data
- (b) distinguishes between comments and outer data

Ans.

Q.8. Which of the following is used to terminate the function declaration in C++?

- (a) ; (b)] (c)) (d)

Ans.

Q.9. Rick Mascitti coined the name _____

- (a) Visual BASIC (b) COBOL
- (c) C++ (d) BASIC

Ans. (c) C++

Q.10. How many fundamental data types are there in C++?

- (a) 1 (b) 2 (c) 3 (d) 4

Ans. (b) 2

Q.11. The C++ code which causes abnormal termination/behaviour of a program should be written under _____ block.

- (a) catch (b) throw (c) try (d) finally

Ans. (b) throw

Q.12. What is Inheritance in C++?

- (a) Deriving new classes from existing classes
- (b) Overloading of classes
- (c) Classes with same names
- (d) Wrapping of data into a single class

Ans. (a) Deriving new classes from existing classes

Q.13. What is meant by a polymorphism in C++?

- (a) class having only single form
- (b) class having four forms
- (c) class having many forms
- (d) class having two forms

Ans. (c) class having many forms

Q.14. Pick the incorrect statement about inline functions in C++?

- (a) Saves overhead of a return call from a function
- (b) They are generally very large and complicated function
- (c) These functions are inserted/substituted at the point of call
- (d) They reduce function call overheads

Ans. (b) They are generally very large and complicated function

Q.15. What is abstract class in C++?

- (a) Any Class in C++ is an abstract class
- (b) Class from which any class is derived
- (c) Class specifically used as a base class with atleast one virtual functions
- (d) Class specifically used as a base class with atleast one pure virtual functions

Ans. (d) Class specifically used as a base class with atleast one pure virtual functions

- Q.16. How structures and classes in C++ differ?
- (a) Structures by default hide every member whereas classes do not
 - (b) In Structures, members are public by default whereas, in Classes, they are private by default
 - (c) Structures cannot have private members whereas classes can have
 - (d) In Structures, members are private by default whereas, in Classes, they are public by default

Ans. (b) In Structures, members are public by default whereas, in Classes, they are private by default

Q.17. What is the benefit of C++ input and output over c input and output?

- (a) Both Type safety & Exception
- (b) Sequence container
- (c) Exception
- (d) Type safety

Ans. (a) Both Type safety & Exception

Q.18. What will be the output of the following C++ program?

```
#include <iostream>
#include <string>
using namespace std;
int main ()
{
    string str ("Sanfoundry");
    for(size_t i = 0; i < str.length();)
    {
        cout << str.at(i-1);
    }
    return 0;
}
```

- (a) runtime error
- (b) runtime
- (c) S
- (d) Sanfoundry

Ans. (b) runtime

Q.19. Which of the following is "address of operator"?

- (a) *
- (b) &
- (c) []
- (d) &&

Ans. (b) *

Q.20. goto can be classified into?

- (a) label
- (b) variable
- (c) operator
- (d) function

Ans. (a) label

Q.21. Identify the correct definition of "*" operator in pointer

- (a) Address of operator
- (b) Value of address operator
- (c) Multiplication operator
- (d) All of the above

Ans. (b) Value of address operator

Q.22. By which of the following can the if-else statement be replaced?

- (a) Bitwise operator
- (b) Logical operator
- (c) Conditional operator
- (d) Arithmetic operator

Ans. (c) Conditional operator

Q.23. Using which of the following data type can 19.54 be represented?

- (a) void
- (b) double
- (c) int
- (d) None

Ans. (b) double

Q.24. Choose the correct option which is mandatory in a function

- (a) return_type
- (b) parameters
- (c) function_name
- (d) Both 1 and 3

Ans. (d) Both a and c

Q.25. The constants in C++ are also known as?

- (a) pre-processor
- (b) literals
- (c) const
- (d) none

Ans. (b) literals

Q.26. Identify the size of int datatype in C++.

- (a) 1 byte
- (b) 2 bytes
- (c) 4 bytes
- (d) Depends on compiler

Ans. (d) Depends on compiler

Q.27. What is the ASCII value of '\0' character?

- (a) 32
- (b) 24
- (c) 48
- (d) 0

Ans. (d) 0

Q.28. Identify the format string among the following

- (a) &
- (b) \n
- (c) %d
- (d) None

Ans. (c) %d

Q.29. Choose the type of loop which is guaranteed to execute at-least once?

- (a) for loop
- (b) do-while
- (c) while
- (d) None

Ans. (b) do-while

Q.30. What does a C++ class hold?

- (a) Function
- (b) Data
- (c) Arrays
- (d) Both a and b

Ans. (d) Both a and b

Q.31. Under which pillar of OOPS does base class and derived class relationship come?

- (a) Polymorphism
- (b) Inheritance
- (c) Encapsulation
- (d) Abstraction

Ans. (b) Inheritance

Q.32. Which of the following functions can be inherited from base class?

- (a) Constructor
- (b) Destructor
- (c) Static
- (d) None

Ans. (d) None

Q.33. When the inheritance is private, the private methods in base class are _____ in the derived class (in C++)

- (a) inaccessible
- (b) Accessible
- (c) Protected
- (d) Public

Ans. (a) Inaccessible

Q.34. What is meant by multiple inheritance?

- (a) Deriving a base class from derived class
- (b) Deriving a derived class from base class
- (c) Deriving a derived class from more than one base class
- (d) None of the mentioned

Ans. (a) Deriving a base class from derived class

Q.35. Inheritance allow in C++ Program?

- (a) Class Re-usability
- (b) Creating a hierarchy of classes
- (c) Extendibility
- (d) All of the above

Ans. (d) All of the above

Q.36. Which symbol is used to create multiple inheritances?

- (a) Dot
- (b) Comma
- (c) Dollar
- (d) None of the above

Ans. (db) Comma

Q.37. Which of the following can be overloaded?

- (a) Object
- (b) Operators
- (c) Both a & b
- (d) None of the above

Ans. (c) Both a & b

Q.38. _____ which stores a fixed-size sequential collection of elements of the same type.

- (a) loop
- (b) array
- (c) exception
- (d) number

Ans. (b) array

Q.39. All arrays consist of _____ memory locations.

- (a) simple
- (b) contiguous
- (c) distant
- (d) None of the above

Ans. (b) contiguous

Q.40. The lowest address of array is?

- (a) 0
- (b) 1
- (c) 2
- (d) 3

Q.41. C++ supports multidimensional arrays.

- (a) Yes
- (b) No
- (c) Can be yes or no

Ans. (a) Yes

Q.42. What is the scope of the variable declared in the user defined function?

- (a) Whole program

- (b) Only inside the {} block
- (c) The main function
- (d) None of the above

Ans. (b) Only inside the {} block

Q.43.Which of the following in Object Oriented Programming is supported by Function overloading and default arguments features of C++

- (a) Inheritance
- (b) Polymorphism
- (c) Encapsulation
- (d) None of these

Ans. (b) Polymorphism

Q.45.Logical AND (&&) and Logical OR (||) are _____ operators.

- (a) Logical
- (b) Equality
- (c) Class member
- (d) Comma

Ans. (a) Logical

Q.46.Generic pointers can be declared with _____

- (a) auto
- (b) void
- (c) asm
- (d) None of the above

Ans. (b) void

Q.47.What is size of generic pointer in c?

- (a) 0
- (b) 1
- (c) 2
- (d) Null

Ans. (c) 2

Q.48.A void pointer cannot point to which of these?

- (a) Methods in C++
- (b) Class member in C++
- (c) Both a & b
- (d) None of the above

Ans. (c) Both a & b

Q.49.Which stream class is to only write on files?

- (a) ofstream
- (b) ifstream
- (c) fstream
- (d) iostream

Ans. (a) ofstream

Q.50.It is not possible to combine two or more file opening mode in open () method.

- (a) TRUE
- (b) FALSE
- (c) May Be
- (d) Can't Say

Ans. (a) TRUE

Q.51.If we have object from of stream class, then default mode of opening the file is _____

- (a) ios::in
- (b) ios::out
- (c) ios::in|ios::trunk
- (d) ios::out|ios::trunk

Ans. (a) ios::in

Q.52.When fopen() is not able to open a file, it returns

- (a) EOF
- (b) Null
- (c) Runtime error
- (d) Compiler dependent

Ans. (b) Null

Q.53.By default, all the files are opened in which of the following mode?

- (a) Binary Mode (b) Text Mode
(c) Sequential Mode (d) Both 1 and 2
Ans. (b) Text Mode

- Q.54. We can prevent a function from throwing any exceptions.
(a) TRUE (b) FALSE
(c) May Be (d) Can't Say
Ans. (a) TRUE

- Q.55. Which type of program is recommended to include in try block?
(a) Static memory allocation
(b) Dynamic memory allocation
(c) Const reference
(d) Pointer
Ans. (b) Dynamic memory allocation

- Q.56. What does STL stand for?
(a) Simple Template Library
(b) Standard Template Library
(c) Static Type Library
(d) Single Type-based Library
Ans. (b) Standard Template Library

- Q.57. Which one of the following is not a valid reserved keyword in C++
(a) Explicit (b) Public
(c) Implicit (d) Private
Ans. (c) Implicit

- Q.58. Each pass through a loop is called a/an
(a) enumeration (b) iteration
(c) culmination (d) pass through
Ans. (b) iteration

- Q.59. 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
Ans. (b) 'is-a' relationship

- Q.60. Which of the following is not a component of file system
(a) Access method
(b) Auxiliary storage management
(c) Free integrity mechanism
(d) None of the above
Ans. (d) None of the above

- Q.61. Which looping process checks the test condition at the end of the loop?
(a) for
(b) while

(c) do-while

(d) no looping process checks the test condition at the end

Ans. (c) do-while

Q.62. The default access level assigned to members of a class is _____

(a) Private (b) Public

(c) Protected (d) Needs to be assigned

Ans. (a) Private

Q.63. Which of the following languages is a subset of C++ language?

(a) C language (b) Java Language

(c) C# language (d) language

Ans. (a) C language

Q.64. How do we declare an 'interface' class?

(a) By making all the methods pure virtual in class

(b) By making all the methods abstract using the keyword 'abstract' in a class

(c) By declaring the class as interface with keyword 'interface'

(d) It is not possible to create interface class in C++

Ans. (a) By making all the methods pure virtual in class

Q.65. 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

Ans. (c) It can cause an error

Q.66. Which of the following language feature is not an access specifier in C++?

(a) public (b) private

(c) C protected (d) internal

Ans. (d) internal

Q.67. The statement `i++;` is equivalent to

(a) `i = i + i;` (b) `i = i + 1;` (c) `i = i - 1;` (d) `i --;`

Ans. (b) `i = i + 1;`

Q.68. Which of the following library function below by default aborts the program?

(a) `Terminate()` (b) `end()` (c) `Abort()` (d) `exit()`

Ans. (c) `Abort()`

Q.69. 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

Ans. (c) creates a dynamic table per class

Q.70. 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

Ans. (a) Class A first Class B next

Q.71. 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()

Ans. (c) catch(...)

Q.72. 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

Ans. (c) all loops are executed the same number of times

Q.73. Inline functions are invoked at the time of

- (a) Run time
- (b) Compile time
- (c) Depends on how it is invoked
- (d) Both 2 and 3 above

Ans. (b) Compile time

Q.74. Statement scanf("%d", 80);

- (a) Assign an integer to variable i
- (b) Give an error message
- (c) Print the value of i
- (d) Assign a float to variable i

Ans. (b) Give an error message

Q.75. Which looping process is best used when the number of iterations is known?

- (a) for
- (b) while
- (c) do-while
- (d) all looping processes require that the iterations be known

Ans. (a) for

Q.76. In a C language '3' represents

- (a) A digit
- (b) An integer
- (c) A character
- (d) A word

Ans. (c) A character

Q.77. The output of this program is

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

- }
- (a) Syntax error (b) 10 20
- (c) 2010 (d) 20 20

Ans. (c) 2010

Q.78. How many types of polymorphisms are supported by C++?

- (a) 3 (b) 2 (c) 1 (d) 4

Ans. (a) 3

Q.79. Which of the following correctly describes overloading of functions?

- (a) Ad-hoc polymorphism
- (b) Transient polymorphism
- (c) Virtual polymorphism
- (d) Pseudo polymorphism

Ans. (a) Ad-hoc polymorphism

Q.80. Which of the following also known as an instance of a class?

- (a) Friend Functions (b) Member Variables
- (c) Member Functions (d) Object

Ans. (d) Object

Q.81. Which of the following means "The use of an object of one class in definition of another class"?

- (a) Encapsulation (c) Abstraction
- (c) Composition (d) Inheritance

Ans. (c) Composition

Q.82. Which of the following statement is correct?

- (a) The default value for an argument cannot be function call.
- (b) C++ does not allow the redefinition of a default parameter.
- (c) Both (1) and (2).
- (d) C++ allows the redefinition of a default parameter

Ans. (a) The default value for an argument cannot be function call.

Q.83. Which of the following function / types of function cannot have default parameters?

- (a) Member function of class
- (b) Member function of structure
- (c) main()
- (d) Both (b) and (c)

Ans. (c) main()

Q.84. 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?

- (a) Runtime error (b) Preprocessing error
- (c) Compile-time error (d) Runtime exception

Ans. (c) Compile-time error

Q.85. Which of the following never requires any arguments?
(a) Default constructor (b) Friend function
(c) Member function (d) Const function

Ans. (a) Default constructor

Q.86. Which one of the following is a keyword?

- (a) Size (b) Key (c) Jump (d) Switch

Ans. (d) Switch

Q.87. _____ is the smallest individual unit in a program

- (a) Variable (b) Control
(c) Character (d) Token

Ans. (d) Token

Q.88. Virtual functions can't be made friend function of other classes.

- (a) True (b) False

Ans. (a) True

Q.89. The modulus operator uses _____ character.

- (a) + (b) * (c) / (d) %

Ans. (d) %

Q.90. Auto, static, extern and register are called as _____

- (a) Static (b) Register
(c) Auto (d) Storage specifier

Ans. (d) Storage specifier

Q.91. Signed, unsigned, long and short are some of the _____

- (a) Void (b) Data
(c) Derived data (d) Modifiers

Ans. (d) Modifiers

Q.92. Float and double are related to _____ data type.

- (a) Void (b) Floating
(c) Fixed (d) Integral

Ans. (b) Floating

Q.93. Integer values are stored in _____ bit format in binary form.

- (a) 8 (b) 16 (c) 32 (d) 64

Ans. (c) 32

Q.94. Addressing is done using _____ number system.

- (a) Decimal (b) Hexadecimal
(c) Octal (d) Binary

Ans. (b) Hexadecimal

Q.95. _____ Operator requires two operands.

- (a) Logical (b) Binary
(c) Unary (d) Ternary

Ans. (b) Binary

Q.96. The keyword void is used to declare

- (a) Objects that can be modified outside of program control
(b) A synonym for an existing type

- (c) A member function that is defined in a subclass
- (d) Absence of a type
- (d) Absence of a type

Ans. (d)

Q.97. Run time polymorphism in C++ Program is

- (a) New and delete operator overloading
- (b) ++ and -- operator overloading
- (c) operator overloading
- (d) None

Ans. (c)

operator overloading

Q.98. In function overloading do not use the _____ function name for two unrelated functions.

- (a) Same (b) Different
- (c) Similar (d) Complement

Ans. (a) Same

Q.99. Which type of inheritance leads to diamond problem?

- (a) Single level (b) Multi-level
- (c) Multiple (d) Hierarchical

Ans. (c) Multiple

Q.100. If a derived class object is created, which constructor is called first?

- (a) Base class constructor
- (b) Derived class constructor
- (c) Depends on how we call the object
- (d) Not possible

Ans. (a)

Base class constructor