MCQ with Highlighted bold Answer

1 What is the role of a constructor in classes?
a) To modify the data whenever required
b) To destroy an object
c) To initialize the data members of an object when it is created
d) To call private functions from the outer world

2 Why constructors are efficient instead of a function init() defined by the user to initialize the data members of an object?
a) Because user may forget to call init() using that object leading segmentation fault
b) Because user may call init() more than once which leads to overwriting values
c) Because user may forget to define init() function
d) All of the mentioned

3 What is a copy constructor?
a) A constructor that allows a user to move data from one object to another
b) A constructor to initialize an object with the values of another object
c) A constructor to check the whether to objects are equal or not
d) A constructor to kill other copies of a given object.

4 How many parameters does a default constructor require?
a) 1
b) 2
c) 0
d) 3

5. How constructors are different from other member functions of the class?
a) Constructor has the same name as the class itself
b) Constructors do not return anything
c) Constructors are automatically called when an object is created
d) All of the mentioned

6. How many types of constructors are there in C++?
a) 1
b) 2
c) 3
d) 4

7. What is the role of destructors in Classes?
a) To modify the data whenever required

b) To destroy an object when the lifetime of an object ends

c) To initialize the data members of an object when it is created

d) To call private functions from the outer world

8. When destructors are called?

a) When a program ends

b) When a function ends

c) When a delete operator is used

d) All of the mentioned

9. Which of the following gets called when an object is being created?

A. Constuctor

B. Virtual Function

C. Destructors

D. Main

10. Destructor has a same name as the constructor and it is preceded by?

A. !

B. ?

C. ~

D. $

11. Like constructors, can there be more than one destructors in a class?

A. Yes

B. No

C. May Be

D. Can't Say

12. Which contructor function is designed to copy object of same class type?

A. Copy constructor

B. Create constructor

C. Object constructor

D. Dynamic constructor

13. which of this can not be declared as virtual

A. Constructor

B. Destructor

C. Both A & B

D. None of the above

14. . We must use initializer list in a constructor when

A. There is a reference variable in class
B. There is a constant variable in class
C. There is an object of another class. And the other class doesn't have default constructor
D. All of the above

15. Which of the following implicitly creates a default constructor when the programmer does not explicitly define at least one constructor for a class?

A. Preprocessor
B. Linker
C. Loader
D. compiler

16. constructor _____ to allow different approaches of object construction

A. Cannot overloaded
B. Can be overloaded
C. Can be called
D. Can be nested

17. When are the Global objects destroyed?

A. When the control comes out of the block in which they are being used
B. When the program terminates
C. When the control comes out of the function in which they are being used.
D. As soon as local objects die

18. Choose the correct statements.

A. A destructor is not inherited
B. A constructor cannot be called explicitly
C. A constructor is not inherited
D. All of the above

19. Which of the following remarks about the differences between constructors and destructors are correct ?

A. Constructors can take arguments but destructors cannot.
B. Constructors can be overloaded but destructors cannot be overloaded.
C. Destructors can take arguments but constructors cannot.
D. Both A and B

20. Allocation of memory to objects at the time of their construction is known as _____ of objects.

A. Run time construction
B. Dynamic Construction
C. Initial Construction
D. Staic Construction

21. 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

22. Which design patterns benefit from the multiple inheritances?

A. Adapter and observer pattern
B. Code pattern
C. Glue pattern
D. None of the mentioned

23. 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

24. Inheritance allow in C++ Program?

A. Class Re-usability
B. Creating a hierarchy of classes
C. Extendibility
D. All of the above

25. Can we pass parameters to base class constructor though derived class or derived class constructor?

A. Yes
B. No
C. May Be
D. Can't Say

26. What are the things are inherited from the base class?

A. Constructor and its destructor
B. Operator=() members
C. Friends
D. All of the above

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

A. Dynamic binding
B. Polymorphism

C. Both Dynamic binding & Polymorphism
D. None of the mentioned

28. Which symbol is used to create multiple inheritance?

A. Dot
B. Comma
C. Dollar
D. None of the above

29 C++ Inheritance relationship is?

A. Association
B. Is-A
C. Has-A
D. None of the above

30 Which value is placed in the base class?

A. Derived values
B. Default type values
C. Both A & B
D. None of the mentioned

31class X, class Y and class Z are derived from class BASE. This is _____ inheritance.

A. Multiple
B. Multilevel
C. Hierarchical
D. Single

32. Reusability of the code can be achieved in CPP through _____ .

A. Polymorphism
B. Encapsulation
C. Inheritance
D. Both A and C

33 Private members of the class are not inheritable.

A. TRUE
B. FALSE
C. May Be
D. Can't Say

34 Which keyword is used to handle the expection?

A. Try
B. Throw

C. Catch
D. None of the above

35 Which is used to throw a exception?

A. Try
B. Throw
C. Catch
D. None of the above

36 How do define the user-defined exceptions?

A. Inherting & overriding exception class functionlity
B. Overriding class functionlity
C. Inherting class functionlity
D. None of the above

37 We can prevent a function from throwing any exceptions.

A. TRUE
B. FALSE
C. May Be
D. Can't Say

38 In nested try block, if inner catch handler gets executed, then _____?

A. Program execution stops immediately.
B. Outer catch handler will also get executed.
C. Compiler will jump to the outer catch handler and then executes remaining executable statements of main().
D. Compiler will execute remaining executable statements of outer try block and then the main().

39 Return type of uncaught_exception() is _____.

A. int
B. bool
C. char *
D. double

40 If inner catch handler is not able to handle the exception then_____ .

A. Compiler will look for outer try handler
B. Program terminates abnormally
C. Compiler will check for appropriate catch handler of outer try block
D. None of the above

41 Which type of program is recommended to include in try block?

A. Static memory allocation
B. Dynamic memory allocation
C. Const reference
D. Pointer

42 Which illustrate predefined exceptions

A. Memory allocation error
B. I/O error
C. Both A and B
D. None of the above

43. What is not called terminate() function in an constructor?

A. Main
B. Class
C. Destructor
D. None of the above

44Which statement is used to catch all types of exceptions?

A. Catch()
B. Catch(Test t)
C. Catch(...)
D. None of the above

45 How to handle error in the destructor?

A. Throwing
B. Terminate
C. Both throwing & terminate
D. None of the above

46What kind of exceptions are available in c++?

A. Handled
B. Unhandled
C. Static
D. Dynamic

47   How to handle exception in constructor, in c++?

A. We have to return an exception
B. We have to throw an exception
C. Both A and B
D. None of the above
.

48   How many parameter does the throw expression has, in c++?

A. 1
B. 2
C. 3
D. 4

49 **base class and derived class relationship comes under**

A. **Inheritance**
B. Polymorphism
C. encapsulation
D. None

50 **Types of inheritance in C++ are**

A. Multilevel
B. Multiple
C. Hierarchical
D. **All the above**

51 **Inheritance allow in C++ Program?**

A. Class Re-usability
B. Creating a hierarchy of classes
C. Extendibility
D. **All**

52 **Functions that can be inherited from base class in C++ program**

A. Constructor
B. Destructor
C. Static function
D. **None**

53 _____ **members of base class are inaccessible to derived class**

A. **Private**
B. Protected
C. Public
D. None

54 **Accessing functions from multiple classes to a derived class is known as**

A. **multiple inheritance**
B. single inheritance
C. Hybrid inheritance
D. multilevel inheritance

55 What is a template?

A. A template is a formula for creating a generic class
B. A template is used to manipulate the class
C. A template is used for creating the attributes
D. None of the above

56 Templates are abstract recipe for producing a concrete code, and it is used for

A. Producing functions
B. Producing classes
C. Nothing
D. Both A and B

57 From where does the template class derived?

A. Regular non-templated C++ class
B. Templated class
C. Both A or B
D. None of the above

58 Can we have overloading of the function templates?

A. Yes
B. No
C. May Be
D. Can't Say

59 A container class is a class whose instances are

A. Containers
B. Functions
C. Strings
D. None of the above

60. How many types of templates are there in c++?

A. 1
B. 2
C. 3
D. 4

61 What is an exception in C++ program?
a) A problem that arises during the execution of a program
b) A problem that arises during compilation
c) Also known as the syntax error
d) Also known as semantic error

62 By default, what a program does when it detects an exception?
a) Continue running
b) Results in the termination of the program

c) Calls other functions of the program

d) Removes the exception and tells the programmer about an exception

63 Why do we need to handle exceptions?

a) To avoid unexpected behaviour of a program during run-time

b) To let compiler remove all exceptions by itself

c) To successfully compile the program

d) To get correct output

64 How Exception handling is implemented in the C++ program?

a) Using Exception keyword

b) Using try-catch block

c) Using Exception block

d) Using Error handling schedules

65 Which part of the try-catch block is always fully executed?

a) try part

b) catch part

c) finally part

d) throw part

66 Which of the following is an exception in C++?

a) Divide by zero

b) Semicolon not written

c) Variable not declared

d) An expression is wrongly written

67 What is an error in C++?

a) Violation of syntactic and semantic rules of a languages

b) Missing of Semicolon

c) Missing of double quotes

d) Violation of program interface

68 What is the difference between error and exception?

a) Both are the same

b) Errors can be handled at the run-time but the exceptions cannot

c) Exceptions can be handled at the run-time but the errors cannot

d) Both can be handled during run-time

69 Which keyword is used to throw an exception?

a) try

b) throw

c) throws

d) except

70 Which of the header file is used to implement algorithms provided by C++ STL?

a) <algorithm>

b) <header>

c) <algos>

d) <Algori>

71   Which of the following is a Modifying Sequence Operation?

a) all_of()

b) any_of()

c) equal()

d) swap()

72 Which of the following is a Non-modifying Sequence Operation?

a) swap()

b) transform()

c) remove()

d) search()

73 What is the property of stable sort function provided by the STL algorithm?

a) sorts the elements of a sequence in ascending order preserving the relative order of equivalent elements

b) sorts the elements of a sequence in descending order preserving the relative order of equivalent elements

c) arranges the sequence randomly preserving the relative order of equivalent elements

d) same as sort function of STL algorithm

75 Which function can be used to find the sum of a vector container?

a) findsum()

b) accumulate()

c) calcsum()

d) checksum()

77 Which header file is required to use accumulate() function?

a) <algorithm>

b) <numeric>

c) <vector>

d) <iostream>

78 Which header file is required to use file I/O operations?

a) <ifstream>

b) <ostream>

c) <fstream>

d) <iostream>

79 Which of the following is used to create an output stream?

a) ofstream

b) ifstream

c) iostream

d) fsstream

80   Which of the following is used to create a stream that performs both input and output operations?

a) ofstream

b) ifstream

c) iostream

d) fstream

81 Which of the following is not used as a file opening mode?

a) ios::trunc

b) ios::binary

c) ios::in

d) ios::ate

82 Which of the following statements are correct?

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

2) It is possible to combine two or more file opening mode in open() method.

3) ios::in and ios::out are input and output file opening mode respectively.

a) 1, 3

b) 2, 3

c) 3 only

d) 1, 2

84 By default, all the files in C++ are opened in _____ mode.

a) Text

b) Binary

c) ISCII

d) VTC

85 What is the use of ios::trunc mode?

a) To open a file in input mode

b) To open a file in output mode

c) To truncate an existing file to half

d) To truncate an existing file to zero

87 Which of the following is the default mode of the opening using the ofstream class?

a) ios::in

b) ios::out

c) ios::app

d) ios::trunk

88 What is the return type open() method?

a) int

b) char

c) bool

d) float

89   Which of the following is not used to seek file pointer?

a) ios::set

b) ios::end

c) ios::cur

d) ios::beg

90 Which of the following is the default mode of the opening using the ifstream class?

a) ios::in

b) ios::out

c) ios::app

d) ios::trunk

91 Which of the following is the default mode of the opening using the fstream class?

a) ios::in

b) ios::out

c) ios::in|ios::out

d) ios::trunk

92 Which function is used in C++ to get the current position of file pointer in a file?

a) tell_p()

b) get_pos()

c) get_p()

d) tell_pos()

93   Which function is used to reposition the file pointer?

a) moveg()

b) seekg()

c) changep()

d) go_p()

94 Which of the following is used to move the file pointer to start of a file?

a) ios::beg

b) ios::start

c) ios::cur

d) ios::first

95 Members which are not intended to be inherited are declared as _____

a) Public members

b) Protected members

c) Private members

d) Private or Protected members

96 What is Inheritance in C++?

a) Wrapping of data into a single class

b) Deriving new classes from existing classes

c) Overloading of classes

d) Classes with same names

97 If a class is derived privately from a base class then _____

a) no members of the base class is inherited

b) all members are accessible by the derived class

c) all the members are inherited by the class but are hidden and cannot be accessible

d) no derivation of the class gives an error

98 Which statement is incorrect about virtual function.

a) They are used to achieve runtime polymorphism

b) They are used to hide objects

c) Each virtual function declaration starts with the virtual keyword

d) All of the mentioned

99 The concept of deciding which function to invoke during runtime is called _____

a) late binding

b) dynamic linkage

c) static binding

d) both late binding and dynamic linkage

100 What is a pure virtual function?

a) A virtual function defined inside the base class

b) A virtual function that has no definition relative to the base class

c) A virtual function that is defined inside the derived class

d) Any function that is made virtual

**************Best Luck *************