

Question Bank

Object Oriented Programming

1. Which of the following is not an OOP feature in C++?
 - A. Encapsulation
 - B. Abstraction
 - C. Polymorphism
 - D. Exceptions
2. What encapsulates both data and data manipulation functions?
 - A. Object
 - B. Class
 - C. Super Class
 - D. Sub Class
3. Which of the following describes “Is- a Relationship”?
 - A. Aggregation
 - B. Inheritance
 - C. Dependency
 - D. Polymorphism
4. Which was the first purely object oriented programming language developed?
 - A. Java
 - B. C++
 - C. SmallTalk
 - D. Kotlin
5. Which header file is required in C++ to use OOP?
 - A. iostream.h
 - B. stdio.h
 - C. stdlib.h
 - D. OOP can be used without using any header file
6. Class is pass by _____
 - A. Value
 - B. Reference
 - C. Value or Reference, depending on program
 - D. Copy
7. Hiding the implementation complexity can _____
 - A. Make the programming easy
 - B. Make the programming complex
 - C. Provide more number of features
 - D. Provide better features
8. What is abstraction?
 - A. Hiding the implementation
 - B. Showing the important data

- C. Hiding the important data
 - D. Hiding the implementation and showing only the features
9. Find which of the following uses encapsulation?
- A. `void main() { int a; void fun (int a = 10; cout<<a); fun();}`
 - B. `class student {int a; public: int b;};`
 - C. `class student :{int a; public: void disp() { cout<<a;}};`
 - D. `struct topper{ char name[10]; public : int marks;}`
10. If same message is passed to objects of several different classes and all of those can respond in a different way, what is this feature called?
- A. Inheritance
 - B. Overloading
 - C. Polymorphism
 - D. Overriding
11. What is the size of the object of following class (64 bit system)?
- ```
class student
{ int rollno;
 char name[20];
 static int studentno;
};
```
- A. 20
  - B. 22
  - C. 24
  - D. 28
12. Object declared in main() function \_\_\_\_\_
- A. Can be used by any other function
  - B. Can't be used by any other function
  - C. Can be used by main() function of any other program
  - D. Can be accessed using scope resolution operator
13. A constructor is called whenever
- A. An object is declared
  - B. An object is used
  - C. A class is declared
  - D. A class is used
14. Which among the following is true for copy constructor?
- A. The argument object is passed by reference
  - B. It can be defined with zero arguments
  - C. Used when an object is passed by value to a function
  - D. Used when a function returns an object
15. Destructors can be \_\_\_\_\_
- A. Abstract type

- B. Void
  - C. Any type depending on situation
  - D. Virtual
16. What is the syntax of friend function?
- A. friend class1 Class2;
  - B. friend class;
  - C. friend class
  - D. friend class()
17. How many types of member functions are generally there in C++?
- A. 2
  - B. 3
  - C. 4
  - D. 5
18. What happens if non static members are used in static member function?
- A. Compile time error
  - B. Runtime error
  - C. Executes fine
  - D. Executes if that member function is used
19. Which of the following is proper syntax for class given below?
- ```
class A
{
    int a, b;
    public : void disp();
}
```
- A. void disp::A(){ }
 - B. void A::disp(){ }
 - C. void A:disp(){cout<<a<<b;} }
 - D. void disp:A(){cout<<a<<b;} }
20. If a virtual member function is defined _____
- A. It should not contain any body and defined by subclasses
 - B. It must contain body and overridden by subclasses
 - C. It must contain body and be overloaded
 - D. It must not contain any body and should not be derived
21. Local utility functions are called
- A. Public member functions
 - B. Access functions
 - C. Private member functions
 - D. Protected member functions
22. How many private member functions are allowed in a class?
- A. Only 1

- B. Only 7
 - C. Only 255
 - D. As many as required
23. What is the correct example of a binary operator?
- A. ++
 - B. -
 - C. Dereferencing operator(*)
 - D. +
24. Which is called ternary operator?
- A. ?:
 - B. ==
 - C. -
 - D. /
25. Which is also called as abstract class?
- A. Virtual function
 - B. Pure virtual function
 - C. Derived class
 - D. Base class
26. Polymorphism is achieved by
- A. Operators
 - B. Arrays
 - C. Constructors
 - D. Virtual function
27. Which among the following is an important use of abstract classes?
- A. Header files
 - B. Class Libraries
 - C. Class definitions
 - D. Class Inheritance
28. Use of pointers or reference to an abstract class gives rise to which among the following feature?
- A. Compile time Polymorphism
 - B. Polymorphism within methods
 - C. Runtime polymorphism
 - D. Compile polymorphism
29. In which of the following we cannot overload the function?
- A. Return function
 - B. Caller
 - C. Called function
 - D. Main function
30. What should be passed in parameters when function does not require any parameters?

- A. Void
 - B. Blank space
 - C. Both void and blank space
 - D. Tab space
31. Which of the following operator functions cannot be global, i.e, must be a member function.
- A. New operator
 - B. Delete operator
 - C. Conversion operator
 - D. Free operator
32. If class A is a friend of b, then B doesn't become a friend of A automatically.
- A. TRUE
 - B. FALSE
 - C. Can be true and false
 - D. Can't say
33. Which symbol is used to create multiple inheritance?
- A. Dot
 - B. Comma
 - C. Dollar
 - D. Exclamation mark
34. When the inheritance is private, the private methods in base class are _____ in the derived class.
- A. Inaccessible
 - B. Accessible
 - C. Protected
 - D. Public
35. What will be the output of this program?
- ```
#include <iostream>
using namespace std;
class Base {};
class Derived: public Base {};

int main()
{
 Base *p = new Derived;
 Derived *q = new Base;
}
```
- A. Error: invalid conversion from "Derived\*" to "Base\*"
  - B. No compile error
  - C. Error: invalid conversion from "Base\*" to "Derived\*"
  - D. Runtime error

36. Which keyword is used to handle the exception?
- A. Try
  - B. Catch
  - C. Throw
  - D. Accept
37. 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()
38. Return type of `uncaught_exception ()` is \_\_\_\_\_
- A. int
  - B. bool
  - C. char\*
  - D. double
39. Which type of program is recommended to include in try block?
- A. Static memory allocation
  - B. Dynamic memory allocation
  - C. Const reference
  - D. Pointer
40. If single inheritance is used with class A and B. A is base class. Then class C,D and E where C is base class and D is derived from c, then e is derived from d. Class C is made to inherit from class B. Which is the resultant type?
- A. Single level
  - B. Hybrid
  - C. Multiple
  - D. Multilevel
41. A template class can have \_\_\_\_\_
- A. More than one generic data type
  - B. Only one generic data type
  - C. At most two data types
  - D. Only generic type of integers and not characters
42. What is the syntax to use explicit class specialization?
- A. `template<int> class myClass<>{ }`
  - B. `template<int> class myClass<int>{ }`
  - C. `template<> class myClass<>{ }`
  - D. `template<> class myClass<int>{ }`
43. What are the two specializations of I/O template classes in C++?

- A. 16-bit character and wide characters
  - B. 8 - bit character and wide characters
  - C. 32- bit character and locale characters
  - D. 64- bit character and locale characters
44. Which stream class is to only write on files?
- A. ofstream
  - B. ifstream
  - C. fstream
  - D. iostream
45. ios::trunc is used for?
- A. If the file is opened for output operations and it already existed, no actions are taken.
  - B. If the file is opened for output operations and it already existed, its previous content is deleted and replaced by the new one.
  - C. If the file is opened for output operations and it already existed, then a new copy is created.
  - D. If the file is opened for input operations and it already existed, then its new copy is deleted.
46. Which stream class is to only read from files?
- A. ofstream
  - B. ifstream
  - C. fstream
  - D. iostream
47. What is use of eof()?
- A. Returns true if a file open for reading has reached the next character.
  - B. Returns true if a file open for reading has reached the next word.
  - C. Returns true if a file open for reading has reached the end.
  - D. Returns true if a file open for reading has reached the middle.
48. What is the output of following program?

```
template <typename T>
void test(const T&x)
{
 static int count = 0;
 cout &&&& "x = " &&&& x &&&& " count = " &&&& count &&&& endl;
 ++count;
 return;
}
void main()
{
 test<int> (2);
 test<int>(2);
```

```
test<double>(2.2);
}
```

- A. x = 2 count = 0  
x = 2.2 count = 0  
x = 2.3 count = 0
  - B. x = 2 count = 1  
x = 2.2 count = 0  
x = 2.3 count = 2
  - C. x = 2 count = 0  
x = 2 count = 1  
x = 2.2 count = 0
  - D. x = 2 count = 0  
x = 2 count = 1  
x = 2.2 count = 2
49. eof() is used to get
- A. Easy code review
  - B. End of file
  - C. Debug report
  - D. File close
50. Which is correct syntax?
- A. myfile:open ("example.bin",ios::out);
  - B. myfile.open ("example.bin",ios::out);
  - C. myfile::open ("example.bin",ios::out);
  - D. myfile.open ("example.bin",ios:out);
51. Constructor should be declared under the scope \_\_\_\_\_
- A. Public
  - B. Private
  - C. Protected
  - D. Pointer
52. C++ was originally developed by
- A. Sir Richard Hadlee
  - B. Clocksin and Mellish
  - C. Donald E. Knuth
  - D. Bjame Stroustrup
53. Destructors \_\_\_\_ for automatic objects if the program terminates with a call to function exit or function abort.
- A. Are called

- B. Are not called
  - C. Are inherited
  - D. Are created
54. Which of the following true about FILE \*fp?
- A. FILE is a structure and fp is a pointer to the structure of FILE type
  - B. FILE is a buffered stream
  - C. FILE is a keyword in C for responding files and fp is a variable of FILE type
  - D. FILE is a stream
55. Which operator is used to insert the data into file?
- A. >>
  - B. <<
  - C. <
  - D. >
56. Which among following is used to open a file in binary mode?
- A. ios::app
  - B. ios::out
  - C. ios::in
  - D. ios::binary
57. The \_\_\_\_\_ class is a specialization of a more general template class.
- A. String
  - B. Integer
  - C. Digit
  - D. Math
58. On which specifier's data, does the size of a class's object depend?
- A. All the data members are added
  - B. Only private members are added
  - C. Only public members are added
  - D. Only default data members are added
59. Encapsulation helps in writing \_\_\_\_\_ classes in java.
- A. Mutable
  - B. Abstract
  - C. Wrapper
  - D. Immutable
60. Abstraction can apply to \_\_\_\_\_
- A. Control and data
  - B. Only data
  - C. Only control
  - D. Classes