1. What is a class in C++?
   1. A predefined data type
   2. A variable that holds multiple values
   3. **A blueprint for creating objects**
   4. A pointer to a function
2. Which keyword is used to create an object of a class?
   1. instance
   2. **new**
   3. create
   4. object
3. What is a constructor in C++?
   1. **A member function that destructs objects**
   2. A member function that creates objects
   3. A special member function that initializes objects
   4. A built-in function for memory allocation
4. How many constructors can a class have?
   1. Only one
   2. At least two
   3. **As many as needed**
   4. Two, one for objects and one for pointers
5. Which constructor is called when an object is created without any arguments?
   1. **Default constructor**
   2. Parameterized constructor
   3. Copy constructor
   4. Destructor
6. What is the purpose of a copy constructor?
   1. To create a new instance of a class
   2. **To initialize an object with an existing object's data**
   3. To compare two objects
   4. To deallocate memory used by an object
7. When is the copy constructor called?
   1. When a new object is created
   2. When an object is passed by value as an argument
   3. When an object is returned by value from a function
   4. **All of the above**
8. What is the syntax of a destructor in C++?
   1. **~ClassName()**
   2. Destructor()
   3. ClassName::()
   4. destructor ClassName
9. When is the destructor called?
   1. When an object is created
   2. **When an object goes out of scope**
   3. When an object is copied
   4. When an object is passed by value to a function
10. Can a class have both a copy constructor and a copy assignment operator?
    1. **Yes, but they should have different names**
    2. No, they are mutually exclusive
    3. Yes, but the copy assignment operator is optional
    4. Yes, but they should take different arguments
11. Which operator is used to perform copy assignment in C++?
    1. **=**
    2. =>
    3. ->
    4. <>
12. What is the purpose of the copy assignment operator?
    1. **To copy data from one object to another**
    2. To compare two objects
    3. To create a new object
    4. To initialize an object with default values
13. How is memory allocated to an object in C++?
    1. Objects don't require memory allocation
    2. **Using the new operator**
    3. Automatically by the compiler
    4. Using the malloc() function
14. Which of the following is not a storage class in C++?
    1. auto
    2. register
    3. **class**
    4. static
15. What is the purpose of the "this" pointer in C++?
    1. **To point to the current object**
    2. To point to the previous object
    3. To point to the next object
    4. To point to a null object
16. Which access specifier allows the members of a class to be accessible from outside the class?
    1. **public**
    2. private
    3. protected
    4. internal
17. Which access specifier restricts the access of the members within the class only?
    1. public
    2. **private**
    3. protected
    4. internal
18. What is encapsulation in C++?
    1. **A way to hide the implementation details of a class**
    2. A way to make all members of a class public
    3. A way to make a class inaccessible
    4. A way to define variables within a class
19. Which of the following statements is true about constructors?
    1. Constructors have a return type
    2. Constructors can be called explicitly using their names
    3. **Constructors are automatically called when an object is created**
    4. Constructors can be inherited from base classes
20. How can you prevent copying of objects in C++?
    1. **By making the copy constructor private**
    2. By making the copy constructor public
    3. By making the copy assignment operator private
    4. By using the "readonly" keyword
21. What happens if you don't provide a destructor for a class in C++?
    1. **The compiler will automatically generate a default destructor**
    2. The class cannot be instantiated
    3. The program will fail to compile
    4. Memory leaks can occur as resources won't be properly deallocated
22. Which of the following is not a valid constructor?
    1. MyClass()
    2. MyClass(int x)
    3. **void MyClass()**
    4. explicit MyClass(int x)
23. Which operator is used to access members of a class using a pointer to an object?
    1. \*
    2. **->**
    3. ::
    4. .
24. What is the default access specifier for members of a class in C++?
    1. public
    2. **private**
    3. protected
    4. internal
25. What is the purpose of the "const" keyword in a member function declaration?
    1. **To indicate that the function is constant and won't modify the object**
    2. To indicate that the function cannot be called
    3. To indicate that the function is for internal use only
    4. To indicate that the function has a constant return value
26. Which of the following statements is true about destructors?
    1. Destructors are called explicitly using their names
    2. Destructors can take parameters
    3. **Destructors are automatically called when an object goes out of scope**
    4. Destructors can return values
27. What is the purpose of a parameterized constructor?
    1. To create objects with default values
    2. To create objects without any values
    3. **To create objects with specified initial values**
    4. To create objects with dynamic memory allocation
28. Which member function is called when an object is about to be destroyed?
    1. delete()
    2. clear()
    3. destructor()
    4. **~ClassName()**
29. Which of the following statements is true about default constructors?
    1. They always take parameters
    2. **They are automatically provided by the compiler**
    3. They can be explicitly defined by the programmer
    4. They cannot be overloaded
30. What is the purpose of a constructor with a default argument?
    1. To create objects with uninitialized values
    2. **To create objects with specified initial values**
    3. To create objects without any values
    4. To create objects with dynamic memory allocation
31. Which constructor is used to create a shallow copy of an object?
    1. Default constructor
    2. **Copy constructor**
    3. Parameterized constructor
    4. Move constructor
32. What is the use of the "explicit" keyword in C++ constructor declarations?
    1. It enforces the constructor to be private
    2. It enforces the constructor to be public
    3. **It prevents implicit conversions from the constructor's argument type**
    4. It allows the constructor to be called without arguments
33. When is the copy assignment operator used?
    1. When an object is created
    2. When an object goes out of scope
    3. **When one object is assigned the value of another object**
    4. When an object is passed by reference to a function
34. What is the purpose of a constructor initializer list?
    1. **To initialize the members of the class after the constructor body**
    2. To specify the order in which constructors are called
    3. To provide a list of parameters for the constructor
    4. To define the access specifiers of the class
35. Which of the following is not a characteristic of a destructor?
    1. It has the same name as the class with a tilde (~) prefix
    2. It is called automatically when an object goes out of scope
    3. It can release resources held by the object
    4. **It can take parameters**