Multiple section

1. Who invented OOP?
a) Andrea Ferro
b) Adele Goldberg
c) Alan Kay
d) Dennis Ritchie

2. Which is not a feature of OOP in general definitions?
a) Efficient Code
b) Code reusability
c) Modularity
d) Duplicate/Redundant data

3. Which was the first purely object oriented programming language developed?
a) Kotlin
b) SmallTalk
c) Java
d) C++

4. When OOP concept did first came into picture?
a) 1980's
b) 1995
c) 1970's
d) 1993

5. Which feature of OOP indicates code reusability?
a) Abstraction
b) Polymorphism
c) Encapsulation
d) Inheritance

6. Which header file is required in C++ to use OOP?
a) OOP can be used without using any header file
b) stdlib.h
c) iostream.h
d) stdio.h

7. Why Java is Partially OOP language?
a) It allows code to be written outside classes
b) It supports usual declaration of primitive data types
c) It does not support pointers
d) It doesn't support all types of inheritance

8. Which among the following doesn't come under OOP concept?
a) Data hiding
b) Message passing
c) Platform independent

d) Data binding

9. Which is the correct syntax of inheritance?
a) class base_classname :access derived_classname{ /*define class body*/ };
b) class derived_classname : access base_classname{ /*define class body*/ };
c) class derived_classname : base_classname{ /*define class body*/ };
d) class base_classname : derived_classname{ /*define class body*/ };

10. Which feature of OOP is indicated by the following code?

```
class student{  int marks;  };
class topper:public student{  int age;  topper(int age){ this.age=age; } };
```

a) Encapsulation and Inheritance
b) Inheritance and polymorphism
c) Polymorphism
d) Inheritance

11. The feature by which one object can interact with another object is _____
a) Message reading
b) Message Passing
c) Data transfer
d) Data Binding

12. Which among the following, for a pure OOP language, is true?
a) The language should follow at least 1 feature of OOP
b) The language must follow only 3 features of OOP
c) The language must follow all the rules of OOP
d) The language should follow 3 or more features of OOP

13. How many types of access specifiers are provided in OOP (C++)?
a) 4
b) 3
c) 2
d) 1

14. In multilevel inheritance, which is the most significant feature of OOP used?
a) Code efficiency
b) Code readability
c) Flexibility
d) Code reusability

15. What is encapsulation in OOP?
a) It is a way of combining various data members and member functions that operate on those data members into a single unit
b) It is a way of combining various data members and member functions into a single unit which can operate on any data
c) It is a way of combining various data members into a single unit

d) It is a way of combining various member functions into a single unit

16. Which of the following is not true about polymorphism?
a) Helps in redefining the same functionality
b) Increases overhead of function definition always
c) It is feature of OOP
d) Ease in readability of program

17. Which constructor will be called from the object created in the below C++ code?

```
class A
{
        int i;
        A()
        {
                i=0; cout&lt;&lt;i;
        }
        A(int x=0)
        {
                i=x;  cout&lt;&lt;I;
        }
};
A obj1;
```

a) Parameterized constructor
b) Default constructor
c) Run time error
d) Compile time error

18. What is an abstraction in object-oriented programming?
a) Hiding the implementation and showing only the features
b) Hiding the important data
c) Hiding the implementation
d) Showing the important data

19. Which among the following can show polymorphism?
a) Overloading &&
b) Overloading <<
c) Overloading ||
d) Overloading +=
20. In which access should a constructor be defined, so that object of the class can be created in any function?
a) Any access specifier will work
b) Private
c) Public
d) Protected

21. Which among the following is correct for the class defined below?

```
class student
{
```

```
    int marks;
    public: student(){}
    student(int x)
    {
         marks=x;
    }
};
main()
{
    student s1(100);
    student s2();
    student s3=100;
    return 0;
}
```

a) Program will give compile time error
b) Object s3, syntax error
c) Only object s1 and s2 will be created
d) Program runs and all objects are created

22. The copy constructors can be used to _____
a) Copy an object so that it can be passed to another primitive type variable
b) Copy an object for type casting
c) Copy an object so that it can be passed to a function
d) Copy an object so that it can be passed to a class

23. Which constructor will be called from the object obj2 in the following C++ program?

```
class A
{
        int i;
        A()
        {
                i=0;
        }
        A(int x)
        {
                i=x+1;
        }
        A(int y, int x)
        {
                i=x+y;
        }
};
A obj1(10);
A obj2(10,20);
A obj3;
```

a) A(int y, int x)
b) A(int y; int x)
c) A(int y)
d) A(int x)

24. Which among the following represents correct constructor?
a) –classname()

b) classname()
c) ()classname
d) ~classname()

25. What happens when an object is passed by reference?
a) Destructor is called at end of function
b) Destructor is called when called explicitly
c) Destructor is not called
d) Destructor is called when function is out of scope

26. Which access specifier is usually used for data members of a class?
a) Protected
b) Private
c) Public
d) Default

27. How to access data members of a class?
a) Dot, arrow or direct call
b) Dot operator
c) Arrow operator
d) Dot or arrow as required

28. Which feature of OOP reduces the use of nested classes?
a) Inheritance
b) Binding
c) Abstraction
d) Encapsulation

29. Which keyword among the following can be used to declare an array of objects in java?
a) allocate
b) arr
c) new
d) create

30. Which operator can be used to free the memory allocated for an object in C++?
a) Unallocate
b) Free()
c) Collect
d) delete

31. Which of the following is not a property of an object?
a) Properties
b) Names
c) Identity
d) Attributes

32. Which type of members can’t be accessed in derived classes of a base class?
a) All can be accessed
b) Protected

c) Private
d) Public

33. Which among the following best describes the Inheritance?
a) Using the data and functions into derived segment
b) Using already defined functions in a programming language
c) Using the code already written once
d) Copying the code already written

34. Single level inheritance supports _____ inheritance.
a) Language independency
b) Multiple inheritance
c) Compile time
d) Runtime

35. How to overcome diamond problem?
a) Using seperate derived class
b) Using virtual keyword with same name function
c) Can't be done
d) Using alias name

36. Which keyword is used to declare virtual functions?
a) virt
b) virtually
c) virtual
d) anonymous

37. What happens if non static members are used in static member function?
a) Executes fine
b) Compile time error
c) Executes if that member function is not used
d) Runtime error

38. What is friend member functions in C++?
a) Non-member functions which have access to all the members (including private) of a class
b) Member function which doesn't have access to private members
c) Member function which can modify any data of a class
d) Member function which can access all the members of a class

39. Where is the memory allocated for the objects?
a) Cache
b) ROM
c) HDD
d) RAM

40. Which of the following best describes member function overriding?
a) Member functions having the same name in derived class only
b) Member functions having the same name and different signature inside main function

c) Member functions having the same name in base and derived classes
d) Member functions having the same name in base class only

41. Encapsulation and abstraction differ as _____
a) Hiding and hiding respectively
b) Binding and Hiding respectively
c) Hiding and Binding respectively
d) Can be used any way

42. Which feature of OOP is exhibited by the function overriding?
a) Polymorphism
b) Encapsulation
c) Abstraction
d) Inheritance

43. How to access the private member function of a class?
a) Using class address
b) Using object of class
c) Using object pointer
d) Using address of member function

44. Which keyword should be used to declare static variables?
a) const
b) common
c) static
d) stat

45. Which is correct syntax for declaring pointer to object?
a) *className objectName;
b) className* objectName;
c) className objectName();
d) className objectName;

46. Which class/set of classes can illustrate polymorphism in the following C++ code?

```
abstract class student
{
   public : int marks;
   calc_grade();
}
class topper:public student
{
    public : calc grade()
    {
        return 10;
    }
};
class average:public student
{
     public : calc_grade()
```

```
    {
        return 20;
    }
};
class failed{ int marks; };
```

a) Only class student and topper together can show polymorphism
b) Only class student can show polymorphism
c) Class failed should also inherit class student for this code to work for polymorphism
d) All class student, topper and average together can show polymorphism

47. If data members are private, what can we do to access them from the class object?
a) Private data members can never be accessed from outside the class
b) Create public member functions to access those data members
c) Create private member functions to access those data members
d) Create protected member functions to access those data members

48. Which among the following is not a necessary condition for constructors?
a) Its name must be same as that of class
b) It must not have any return type
c) It must contain a definition body
d) It can contains arguments

49. Object being passed to a copy constructor _____
a) Must not be mentioned in parameter list
b) Must be passed with integer type
c) Must be passed by value
d) Must be passed by reference

50. If in multiple inheritance, class C inherits class B, and Class B inherits class A. In which sequence are their destructors called if an object of class C was declared?
a) ~A() then ~B() then ~C()
b) ~C() then ~A() then ~B()
c) ~C() then ~B() then ~A()
d) ~B() then ~C() then ~A()

51. Instance of which type of class can’t be created?
a) Parent class
b) Abstract class
c) Anonymous class
d) Nested class

52. _____ underlines the feature of Polymorphism in a class.
a) Virtual Function
b) Inline function
c) Enclosing class
d) Nested class

53. Which feature in OOP is used to allocate additional functions to a predefined operator in any language?

a) Function Overloading
b) Function Overriding
c) Operator Overloading
d) Operator Overriding

54. Which feature can be implemented using encapsulation?
a) Polymorphism
b) Overloading
c) Inheritance
d) Abstraction

Inheritance

1. Which among the following best describes the Inheritance?
a) Copying the code already written
b) Using the code already written once
c) Using already defined functions in programming language
d) Using the data and functions into derived segment

2. How many basic types of inheritance are provided as OOP feature?
a) 4
b) 3
c) 2
d) 1

3. Which among the following best defines single level inheritance?
a) A class inheriting a derived class
b) A class inheriting a base class
c) A class inheriting a nested class
d) A class which gets inherited by 2 classes

4. Which among the following is correct for multiple inheritance?
a) class student{public: int marks;}s; class stream{int total;}; class topper:public student, public stream{ };
b) class student{int marks;}; class stream{ }; class topper: public student{ };
c) class student{int marks;}; class stream:public student{ };
d) class student{ }; class stream{ }; class topper{ };

5. Which programming language doesn’t support multiple inheritance?
a) C++ and Java
b) C and C++
c) Java and SmallTalk
d) Java

6. Which among the following is correct for a hierarchical inheritance?
a) Two base classes can be used to be derived into one single class

b) Two or more classes can be derived into one class
c) One base class can be derived into other two derived classes or more
d) One base class can be derived into only 2 classes

7. Which is the correct syntax of inheritance?
a) class derived_classname : base_classname{ /*define class body*/ };
b) class base_classname : derived_classname{ /*define class body*/ };
c) class derived_classname : access base_classname{ /*define class body*/ };
d) class base_classname :access derived_classname{ /*define class body*/ };

8. Which type of inheritance leads to diamond problem?
a) Single level
b) Multi-level
c) Multiple
d) Hierarchical

9. Which access type data gets derived as private member in derived class?
a) Private
b) Public
c) Protected
d) Protected and Private

10. If a base class is inherited in protected access mode then which among the following is true?
a) Public and Protected members of base class becomes protected members of derived class
b) Only protected members become protected members of derived class
c) Private, Protected and Public all members of base, become private of derived class
d) Only private members of base, become private of derived class

11. 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

12. While inheriting a class, if no access mode is specified, then which among the following is true? (in C++)
a) It gets inherited publicly by default
b) It gets inherited protected by default
c) It gets inherited privately by default
d) It is not possible

13. 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

14. The private members of the base class are visible in derived class but are not accessible directly.
a) True
b) False

15. How can you make the private members inheritable?
a) By making their visibility mode as public only
b) By making their visibility mode as protected only
c) By making their visibility mode as private in derived class
d) It can be done both by making the visibility mode public or protected

1. How many types of inheritance are possible in C++?
a) 2
b) 3
c) 4
d) 5

2. Which among the following is true?
a) Java supports all types of inheritance
b) Java supports multiple inheritance
c) Java doesn’t support multiple inheritance
d) Java doesn’t support inheritance

3. Which type of inheritance is illustrated by the following code?

```
class student{ public: int marks; };
class topper: public student { public: char grade; };
class average{ public: int makrs_needed; };
class section: public average{ public: char name[10];  };
class overall: public average{  public: int students;  };
```

a) Single level
b) Multilevel and single level
c) Hierarchical
d) Hierarchical and single level

4. Which among the following best describes multiple inheritance?
a) Two classes being parent of any other classes
b) Three classes being parent of other classes
c) More than one class being parent of other child classes
d) More than one class being parent of single child

5. How many types of inheritance can be used at a time in a single program?
a) Any two types
b) Any three types
c) Any 4 types
d) Any type, any number of times

6. Which type of inheritance results in the diamond problem?
a) Single level
b) Hybrid
c) Hierarchical
d) Multilevel
7. If 6 classes uses single level inheritance with pair classes (3 pairs), which inheritance will this be called?
a) Single
b) Multiple
c) Hierarchical
d) Multilevel

8. Which among the following is correct for the following code?

```
class A
{
    public : class B
    {
        public : B(int i): data(i)
        {
        }
        int data;
    }
};
class C: public A
{
     class D:public A::B{ };
};
```

a) Multi-level inheritance is used, with nested classes
b) Multiple inheritance is used, with nested classes
c) Single level inheritance is used, with enclosing classes
d) Single level inheritance is used, with both enclosing and nested classes

9. Which among the following is false?
a) If one class inherits the inherited class in single level inheritance, it is multi-level inheritance
b) Hybrid inheritance always contains multiple inheritance
c) Hierarchical inheritance involves inheriting same class into more than one classes
d) Hybrid inheritance can involve any types of inheritance together

10. If class A has two nested classes B and C. Class D has one nested class E, and have inherited class A. If E inherits B and C, then _____
a) It shows multiple inheritance
b) It shows hierarchical inheritance
c) It shows multiple inheritance
d) Multiple inheritance among nested classes, and single level for enclosing classes

11. In hierarchical inheritance, all the classes involve some kind of inheritance.
a) True

b) False

12. Which type of inheritance cannot involve private inheritance?
a) Single level
b) Multiple
c) Hybrid
d) All types can have private inheritance

13. How many classes can be inherited by a single class in multiple inheritance (C++)?
a) Only 2
b) Only 27
c) Only 1024
d) Any number of classes can be inherited

14. How many classes can be inherited by a single class in java?
a) Only 1
b) Only 27
c) Only 255
d) Only 1024

15. If multi-level inheritance is used, First class B inherits class A, then C inherits B and so on. Till how many classes can this go on?
a) Only till class C
b) Only till class J
c) Only till class Z
d) There is no limit

1. Which among the following defines single level inheritance?
a) One base class derives another class
b) One derived class inherits from one base class
c) One base class inherits from one derived class
d) One derived class derives from another derived class

2. If class A and class B are derived from class C and class D, then _____
a) Those are 2 pairs of single inheritance
b) That is multilevel inheritance
c) Those is enclosing class
d) Those are all independent classes

3. If single inheritance is used, program will contain _____
a) At least 2 classes
b) At most 2 classes
c) Exactly 2 classes
d) At most 4 classes

4. Single level inheritance supports _____ inheritance.
a) Runtime

b) Compile time
c) Multiple inheritance
d) Language independency

5. Which method in the code below is single level inherited?

```
class A
{
        protected int a, b;
        public: void show()
        {
                cout&lt;&lt;a&lt;&lt;b;
        }
};
class B: public A
{
        public: void disp()
        {
                cout&lt;&lt;a++&lt;&lt;b++;
        }
};
class C: private A, public B
{
        void avg()
        {
                cout&lt;&lt;(a+b)/2;
        }
};
```

a) Class A
b) Class B
c) Class C
d) None

6. If single level inheritance is used and an abstract class is created with some undefined functions, can its derived class also skip some definitions?
a) Yes, always possible
b) Yes, possible if only one undefined function
c) No, at least 2 undefined functions must be there
d) No, the derived class must implement those methods

7. Which among the following is false for single level inheritance?
a) There can be more than 2 classes in program to implement single inheritance
b) There can be exactly 2 classes to implement single inheritance in a program
c) There can be more than 2 independent classes involved in single inheritance
d) The derived class must implement all the abstract method if single inheritance is used

8. Which concept will result in derived class with more features (consider maximum 3 classes)?
a) Single inheritance
b) Multiple inheritance

c) Multilevel inheritance
d) Hierarchical inheritance

9. Single level inheritance is safer than _____
a) Multiple inheritance
b) Interfaces
c) Implementations
d) Extensions

10. Which language doesn't support single level inheritance?
a) Java
b) C++
c) Kotlin
d) All languages support it

11. What is the output of the following program?

```
class A
{
        protected: int a,b;
        public: void disp()
        {
                cout&lt;&lt;a&lt;&lt;b;
        }
};
class B:public A
{
        int x,y;
};
```

a) Garbage value
b) Compile time error
c) Runtime error
d) Runs but gives random values as output

12. What is the output of the following program?

```
class A
{
        float sal=40000;
}
class B extends A
{
        int salBonus=10000;
        public static void main(String args[])
        {
                B p=new B();
                System.out.println("B salary is:"+p.sal);
                System.out.println("Bonus of B is:"+p.bonus);
        }
}
```

a)

B salary is: 4000.0

Bonus of B is: 10000

b)

B salary is 10000

Bonus of B is: 4000.0

c) Compile time error
d) Runtime error

13. Single level inheritance will be best for_____
a) Inheriting a class which performs all the calculations
b) Inheriting a class which can print all the calculation results
c) Inheriting a class which can perform and print all calculations
d) Inheriting all the classes for different calculations

14. Which constructor will be called first from the classes involved in single inheritance from object of derived class?
a) Base class constructor
b) Derived class constructor
c) Both class constructors at a time
d) Runtime error

15. If base class contains 2 nested classes, will it be possible to implement single level inheritance?
a) Yes, always
b) Yes, only if derived class also have nested classes
c) No, it will use more than 2 classes which is wrong

1. Which among the following best defines multilevel inheritance?
a) A class derived from another derived class
b) Classes being derived from other derived classes
c) Continuing single level inheritance
d) Class which have more than one parent

2. If there are 5 classes, E is derived from D, D from C, C from B and B from A. Which class constructor will be called first if the object of E or D is created?
a) A
b) B
c) C
d) A and B

3. If there are 3 classes. Class C is derived from class B and B is derived from A, Which class destructor will be called at last if object of C is destroyed.
a) A
b) B
c) C
d) All together

4. Which Class is having highest degree of abstraction in multilevel inheritance of 5 levels?
a) Class at 1st level
b) Class 2nd last level
c) Class at 5th level
d) All with same abstraction

5. If all the classes use private inheritance in multilevel inheritance then _____
a) It will not be called multilevel inheritance
b) Each class can access only non-private members of its parent
c) Each subsequent class can access all members of previous level parent classes
d) None of the members will be available to any other class

6. Multilevel inheritance allows _____ in the program.
a) Only 7 levels of inheritance
b) At least 7 levels of inheritance
c) At most 16 levels of inheritance
d) As many levels of inheritance as required

7. What is the minimum number of levels for a implementing multilevel inheritance?
a) 1
b) 2
c) 3
d) 4

8. In multilevel inheritance one class inherits _____
a) Only one class
b) More than one class
c) At least one class
d) As many classes as required

9. All the classes must have all the members declared private to implement multilevel inheritance.
a) True
b) False

10. Can abstract classes be used in multilevel inheritance?
a) Yes, always
b) Yes, only one abstract class
c) No, abstract class doesn’t have constructors

d) No, never

11. How many abstract classes can be used in multilevel inheritance?
a) Only 1
b) Only 2
c) At least one less than number of levels
d) Can’t be used

12. If all the classes used parameterized constructors and no default constructor then _____
a) The object of lower level classes can’t be created
b) Object of lower level classes must call parent class constructors explicitly
c) Object of lower level classes must define all the default constructors
d) Only object of first class can be created, which is first parent

13. In multilevel inheritance, which is the most significant feature of OOP used?
a) Code readability
b) Flexibility
c) Code reusability
d) Code efficiency

14. Does following code show multiple inheritance?

```
class A
{
        int a;
};
class B
{
        int b;
};
class C:public A, public B
{
        int c;
};
class D:public C
{
        int d;
};
```

a) Yes, class C and class D
b) Yes, All together it’s multilevel
c) No, 4 classes are used
d) No, multiple inheritance is used with class A, B and C

15. Is it compulsory for all the classes in multilevel inheritance to have constructors defined explicitly if only last derived class object is created?
a) Yes, always
b) Yes, to initialize the members

c) No, it not necessary
d) No, Constructor must not be defined

1. Multiple inheritance is _____
a) When a class is derived from another class
b) When a class is derived from two or more classes
c) When a class is derived from other two derived classes
d) When a class is derived from exactly one class

2. Which problem arises due to multiple inheritance, if hierarchical inheritance is used previously for its base classes?
a) Diamond
b) Circle
c) Triangle
d) Loop

3. How many classes should a program contain to implement the multiple inheritance?
a) Only 1
b) At least 1
c) At least 3
d) Exactly 3

4. Which programming language restricts the use of multiple inheritance?
a) C++
b) PHP
c) SmallTalk
d) Java

5. Is it possible to have all the abstract classes as base classes of a derived class from those?
a) Yes, always
b) Yes, only if derived class implements all the methods
c) No, because abstract classes doesn’t have constructors
d) No, never

6. If class A inherits class B and class C as “class A: public class B, public class C {// class body ;}; ”, which class constructor will be called first?
a) Class A
b) Class B
c) Class C
d) All together
View Answer

7. Why does diamond problem arise due to multiple inheritance?
a) Methods with same name creates ambiguity and conflict
b) Methods inherited from the superclass may conflict
c) Derived class gets overloaded with more than two class methods
d) Derived class can’t distinguish the owner class of any derived method

8. How many base classes can a derived class have which is implementing multiple inheritance?
a) Only 2
b) At least 2
c) At most 2
d) As many as required
View Answer
9. How to overcome diamond problem?
a) Using alias name
b) Using seperate derived class
c) Using virtual keyword with same name function
d) Can’t be done

10. When multiple inheritance is used, which class object should be used in order to access all the available members of parent and derived class?
a) Derived class object
b) Parent class objects
c) Use Abstract derived class
d) Derive a class from derived class

11. If all the members of all the base classes are private then _____
a) There won’t be any use of multiple inheritance
b) It will make those members public
c) Derived class can still access them in multiple inheritance
d) Compile time error
View Answer
12. Is it compulsory to have constructor for all the classes involved in multiple inheritance?
a) Yes, always
b) Yes, only if no abstract class is involved
c) No, only classes being used should have a constructor
d) No, they must not contain constructors
View Answer
13. If a class contains 2 nested class and is being inherited by another class, will there be any multiple inheritance?
a) No, only single level inheritance is used
b) No, only multilevel inheritance is used
c) Yes, because 3 classes are involved
d) Yes, because more than 1 classes are being derived

14. Which members can’t be accessed in derived class in multiple inheritance?
a) Private members of base
b) Public members of base
c) Protected members of base
d) All the members of base
View Answer
15. Can the derived class be made abstract if multiple inheritance is used?
a) No, because other classes must be abstract too

b) Yes, if all the functions are implemented
c) Yes, if all the methods are predefined
d) No, since constructors won't be there

1. Which among the following is best to define hierarchical inheritance?
a) More than one classes being derived from one class
b) More than 2 classes being derived from single base class
c) At most 2 classes being derived from single base class
d) At most 1 class derived from another class

2. Do members of base class gets divided among all of its child classes?
a) Yes, equally
b) Yes, depending on type of inheritance
c) No, it's doesn't get divided
d) No, it may or may not get divided

3. Each class can inherit the base class _____
a) Independently using any inheritance
b) Independently with private inheritance only
c) With same type of inheritance
d) With each class using different inheritance only

4. How many classes must be there to implement hierarchical inheritance?
a) Exactly 3
b) At least 3
c) At most 3
d) At least 1
View Answer
5. Base class _____
a) Can be made abstract
b) Can't be made abstract
c) Must be abstract
d) If made abstract, compile time error

6. Which access specifiers should be used so that all the derived classes restrict further inheritance of base class members?
a) Private
b) Public
c) Protected
d) Any inheritance type can be used
View Answer
7. Which class uses hierarchical inheritance in following code?

```
class A
{
        int a;
};
class B:class A
```

```
{
        int b;
};
class C:class A,class B
{
        int c;
};
class D:class A
{
        int d;
};
```

a) Class A, B, C
b) Class B, C, D
c) Class A, C, D
d) Class D, A, B

8. Which among the following is correct for following code?

```
abstract class A
{
        public Int a;
        public void disp();
};
class B:public A
{
        public: void dis()
        {
                court&lt;&lt;a;
        }
};
class C:private A
{
        public void incr()
        {
                a++;
        }
}
void main()
{
        B b.disp();
}
```

a) Compile time error
b) Runtime error
c) Program runs and o/p is 0
d) Program runs and o/p is garbage value

View Answer

9. How many classes can be derived from the base class using hierarchical inheritance?
a) As many as required
b) Only 7
c) Only 3
d) Up to 127

View Answer

10. If one class have derived the base class privately then another class can’t derive the base class publically.
a) True
b) False
View Answer
11. Which among the following is true?
a) Hierarchical inheritance is subset of multiple inheritances
b) Hierarchical inheritance is strongest inheritance type
c) Hierarchical inheritance uses only 2 classes for implementation
d) Hierarchical inheritance allows inheritance of common features to more than one class
View Answer
12. Hierarchical inheritance can be a subset of _____
a) Hybrid inheritance
b) Multiple inheritance
c) Single level inheritance
d) Multilevel inheritance
View Answer
13. Which type of inheritance is most suitable for inheriting Same syllabus into different colleges with different streams?
a) Multiple
b) Single
c) Hierarchical
d) Multilevel
View Answer
14. Which class constructor is called first when an object of derived class is created?
a) Base class constructor
b) Derived class constructor
c) Firstly created derived class constructor
d) Last created derived class constructor

15. All the derived classes can access only a few members of base class that other derived classes can’t access at same time, in hierarchical inheritance.
a) True
b) False

1. Which among the following best defines the hybrid inheritance?
a) Combination of two or more inheritance types
b) Combination of same type of inheritance
c) Inheritance of more than 7 classes
d) Inheritance involving all the types of inheritance

2. How many types of inheritance should be used for hybrid?
a) Only 1
b) At least 2
c) At most two
d) Always more than 2

3. 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) Multilevel
c) Hybrid
d) Multiple

4. Diamond problem includes _____ hybrid inheritance.
a) Hierarchical and Multiple
b) Hierarchical and Hierarchical
c) Multiple and Multilevel
d) Single, Hierarchical and Multiple

5. If _____ inheritance is done continuously, it is similar to tree structure.
a) Hierarchical
b) Multiple
c) Multilevel
d) Hierarchical and Multiple

6. Which amongst the following is true for hybrid inheritance?
a) Constructor calls are in reverse
b) Constructor calls are priority based
c) Constructor of only derived class is called
d) Constructor calls are usual

7. Which type of inheritance must be used so that the resultant is hybrid?
a) Multiple
b) Hierarchical
c) Multilevel
d) None

8. The private member’s are made public to all the classes in inheritance.
a) True
b) False

9. If hierarchical inheritance requires to inherit more than one class to single class, which syntax is correct? (A, B, C are class names)
a) hierarchical class A: public B, public C
b) multiple class A: public B, public C
c) many class A: public B, public C
d) class A: public B, public C

10. What is the maximum number of classes allowed in hybrid inheritance?
a) 7
b) 127
c) 255

d) As many as required

11. What is the minimum number of classes to be there in a program implementing hybrid inheritance?
a) 2
b) 3
c) 4
d) No limit

12. If object of lowest level class is created (last derived class) _____ of its parent class constructors are called.
a) Few
b) All
c) Only parent and parent
d) Base and Derived

13. If hybrid inheritance is used, it mostly shows _____ feature of OOP.
a) Flexibility
b) Reusability
c) Efficiency
d) Code readability

14. The sequence of destructors being called while using hybrid inheritance is _____
a) Reverse of constructors being called
b) Reverse of classes being made
c) Reverse of objects being created
d) Reverse of code calling objects

15. Overloading operators are possible only by using hybrid inheritance.
a) True
b) False