QB365 Question Bank Software Study Materials

Inheritance 50 Important 1 Marks Questions With Answers (Book Back and Creative)

11th Standard

Computer Science

Total Marks : 50

<u>Multiple Choice Question</u>

50 x 1 = 50

1) Which of the following is the process of creating new classes from an existing class

   (a) Polymorphism   **(b) Inheritance**   (c) Encapsulation   (d) super class

2) Which of the following derives a class student from the base class school

   (a) school: student   (b) class student: public school   (c) student: public school   **(d) class school: public student**

3) The type of inheritance that reflects the transitive nature is

   (a) Single Inheritance   (b) Multiple Inheritance   **(c) Multilevel Inheritance**   (d) Hybrid Inheritance

4) Which visibility mode should be used when you want the features of the base class to be available to the derived Class but not to the classes that are derived from the derived class?

   (a) Private   (b) Public   (c) Protected   (d) All of these

5) Inheritance is a process of creating new class from

   (a) Base class   (b) abstract   (c) derived class   (d) Function

6) A class is derived from a class which is a derived class itself, then this is referred to as

   (a) multiple inheritance   **(b) multilevel inheritance**   (c) single inheritance   (d) double inheritance

7) Which amongst the following is executed in the order of inheritance?

   (a) Destructor   (b) Member function   **(c) Constructor**   (d) Object

8) Which of the following is true with respect to inheritance?

   (a) Private members of base class are inherited to the derived class with private.

   (b) Private members of base class are not inherited to the derived class with private accessibility

   (c) public members of base class are inherited but not visible to the derived class.

   (d) Protected members of base class are inherited but not visible to the outside class.

9) class vehicle
   { int wheels;
   public:
   void input_data(float,float);
   void output_data();
   protected:
   int passenger;
   };
   class heavy_vehicle : protected vehicle {
   int diesel_petrol;
   protected:
   int load;
   public:
   void read_data(float,float)
   void write_data(); };

class bus: private heavy_vehicle {

char Ticket[20];

public:

void fetch_data(char);

void display_data(); };

Which is the base class of the class heavy_vehicle?

(a) Bus   (b) heavy_vehicle   **(c) Vehicle**   (d) Both (a) and (c)

10)   class vehicle

{ int wheels;

public:

void input_data(float,float);

void output_data();

protected:

int passenger;

};

class heavy_vehicle : protected vehicle {

int diesel_petrol;

protected:

int load;

public:

void read_data(float,float)

void write_data(); };

class bus: private heavy_vehicle {

char Ticket[20];

public:

void fetch_data(char);

void display_data(); };

The data member that can be accessed from the function display data()

(a) passenger   (b) load   (c) Ticket   **(d) All of these**

11)   class vehicle

{ int wheels;

public:

void input_data(float,float);

void output_data();

protected:

int passenger;

};

class heavy_vehicle : protected vehicle {

int diesel_petrol;

protected:

int load;

public:

void read_data(float,float)

void write_data(); };

class bus: private heavy_vehicle {

char Ticket[20];

public:

void fetch_data(char);

void display_data(); };

The member function that can be accessed by an objects of bus Class is

(a) input data(), output _data()   (b) read _data() ,write _data()   (c) fetch _data(), display_data()   **(d) All of these**

12)   class vehicle

{ int wheels;

public:

```
void input_data(float,float);
void output_data();
protected:
int passenger;
};
class heavy_vehicle : protected vehicle {
int diesel_petrol;
protected:
int load;
public:
void read_data(float,float)
void write_data(); };
class bus: private heavy_vehicle {
char Ticket[20];
public:
void fetch_data(char);
void display_data(); };
```

The member function that is inherited as public by Class Bus

(a) input_data(), output_data()   (b) read_data(), write_data()   (c) fetch _data(),display _data()   **(d) none of these**

13)   A class that is used to derive another class is called_____.

(a) sub class   **(b) super class**   (c) nested class   (d) derived class

14)   Which of the following statement is true or false?
(i) A class that is used as the base for inheritage is called parent class.
(ii) A class used to derived a new class called derived class.
(iii) The derived is a power packed class.
(iv) Inheritage allows to inherit all the members of one class to another class.

(a) (i) false, (ii) false, (iii) true, (iv)-true   (b) (i) false,(ii) true, (iii) false, (iv)-true   **(c) (i) true, (ii) false,(iii) true, (iv)-false**

(d) (i) true, (ii) true, (iii) false, (iv)-false

15)   Which of the following class is a power packed class?

(a) sub class   (b) child class   (c) derived class   **(d) all of these**

16)   Which of the following statement is true or false?
(i) Inheritance represents read world relationships
(ii) Inheritance does not provide code resuability
(iii) Inheritance does not supports transitivity
(iv) Inheritance support private visibility mode

(a) (i) false, (ii) false, (iii) true, (iv) false   **(b) (i) true, (ii) false, (iii) false, (iv) true**   (c) (i) true, (ii) false, (iii) false, (iv) true

(d) (i) false, (ii) true, (iii) true, (iv) false

17)   How many types of inheritanse are there?

(a) 3   (b) 4   **(c) 5**   (d) 2

18)   Which of the following is not a type of inheritance?

(a) Abstract   (b) Multiple   (c) Hybrid   (d) Hierarchical

19)   When a derived class inherits from multiple base classes is known as _____.

(a) Multilevel   **(b) Multiple**   (c) Hierarchical   (d) Hybrid
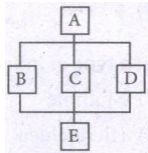
20)   Match the following.

(i)	Multiple Inheritance	1)	Combination of inheritance types
(ii)	Multilevel Inheritance	2)	One derived class one base class

(iii)	Hierarchical Inheritance	3)	A derived class become a base class
(iv)	Hybrid Inheritance	4)	One derived class many base class
(v)	Single Inheritance	5)	Many derived class one base class

(a)

i)	ii)	iii)	iv)	v)
4	5	3	2	1

(b)

i)	ii)	iii)	iv)	v)
5	4	3	1	2

(c)

i)	**ii)**	**iii)**	**iv)**	**v)**
4	**3**	**5**	**1**	**2**

(d)

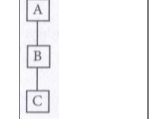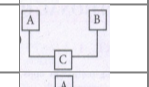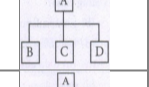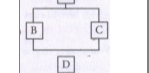| i)	ii)	iii)	iv)	v)
4	3	5	2	1
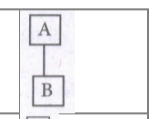
21) Which of the following statement is true or false?

(i) When a derived class inherits from many base classes is known as multilevel inheritance

(ii) When many derived classes are created from single base class called multiple inheritance

(iii) The transitive nature of inheritance is multilevel inheritance
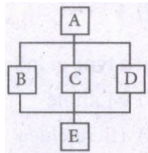
(iv) is an example of hierarchical inheritance.

(a) (i) false, (ii) false, (iii) true, (iv) true   (b) (i) true, (ii) false, (iii) true, (iv) true   (c) (i) true, (ii) false, (iii) true, (iv) false

(d) (i) false, (ii) false, (iii) false, (iv) true

22) Match the following

(i)		1)	Multiple Inheritance
(ii)		2)	Hybrid inheritance
(iii)		3)	Single Inheritance
(iv)		4)	Hierarchical Inheritance
(v)		5)	Multilevel Inheritance

(a)

i)	**ii)**	**iii)**	**iv)**	**v)**
5	**3**	**2**	**1**	**4**

(b)

i)	ii)	iii)	iv)	v)
3	5	2	1	4

(c)

i)	ii)	iii)	iv)	v)
3	5	4	1	2

(d)

| i)	ii)	iii)	iv)	v)
3	5	1	4	2

23) The default visibility mode is _____.

(a) public   **(b) private**   (c) protected   (d) class

24) Which of the following base class members can be accessed by derived class?

(i) private

(ii) protected

(iii) public

(a) only (i)   (b) only (ii)   **(c) both (ii) and (iii)**   (d) both (i) and (ii)

25) In which type of inheritance the order in which the derived class to inherit the base class?

(a) right to left   **(b) left to right**   (c) top to bottom   (d) bottom to top

26)
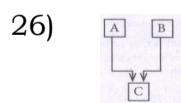
The order of inheritance by derived class to inherit the base in the above diagram _____.

(a) left to right   (b) right to left   (c) bottom to top   (d) top to bottom

27) In which type of inheritance the derived class acquired all the base classes properties even though the base clause have no relationship?

(a) Multilevel inheritance   **(b) Multiple inheritance**   (c) Hybrid inheritance   (d) Hierarchical inheritance

28) In which inheritance a derived class itself acts as a base class to derive another class?

(a) Multiple   (b) Hybrid   (c) Hierarchical   **(d) Multilevel**

29) When the public and protected members of the base class remain the same of the derived class?

(a) Publicly derived class   (b) Protected derived class   (c) Privately derived class   (d) Publicly base class

30) Shadowing functions-resolved using_____.

(a) dot operator   **(b) scope resolution operator**   (c) membership operator   (d) comma operator

31) Overriding of the members are resolved by using_____.

(a) .   (b) ;   **(c) ::**   (d) this

32) Which of the following is used to refere the current objects members?

(a) pointers   (b) members   **(c) this pointer**   (d) ::

33) This pointer returns _____.

(a) NLCC   **(b) Object that is accessing the function**   (c) Address of current variable   (d) Address of overriding operator

34) Which symbol inheritance?

(a) Dot   **(b) Comma**   (c) Dollar   (d) At the rate of

35) Which type of inheritance is illustrated by the following code?·
Class student {public: int marks;};
Class topper: public student {public:char grade};
Class overage {public: int marks-needed;};
Class section :public average {public: char name [10]};
Class overall: public average
{public: int students};

(a) single   (b) multilevel and single   **(c) hierarchical**   (d) Hierarchical and single

36) The base class constructor can called by derived class? In which of the following definition.

(a) Base class name: base class constructor( ) ;   **(b) Base class name : : base class constructor ( ) ;**

(c) Base class name; base class constructor ( );   (d) Base class name! base class consctor ( );

37) _____ pointer is a constant pointer that holds the memory address of the current object.

(a) member function   **(b) this pointer**   (c) comma operator   (d) data member

38) Specialization and derivation is another name of _____.

(a) inheritance   (b) composition   (c) provision   (d) containment

39) There are how many ways to use existing classes to define a new class?

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

40) _____ inheritance may lead to duplication of inherited members from a "grandparent" base class.

(a) Multipath   (b) Multiple   (c) Multilevel   (d) Hierarchical

41) A derived class with only one base class is called _____ inheritance.

(a) single   (b) multiple   (c) multilevel   (d) hierarchical

42) When a base class is privately inherited by the derived class then _____.

(a) protected members of the base class become private members of derived class

(b) public members of the base class become private members of derived class   **(c) both a and b**   (d) only b

43) Which symbol is used to create multiple inheritance?

(a) Dot   **(b) Comma**   (c) Dollar   (d) None of these

44) _____ members of base class are inaccessible to derived class.

(a) private   (b) protected   (c) public   (d) none

45) 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**

46) Which type of inheritance leads to diamond problem?

(a) single level   (b) multi-level   **(c) multiple**   (d) hierarchical

47) 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 these

48) Which class destructor will be called first when the following code go out of scope?

Class A {};

ClassB{};

Class C: Public B {} ;

Aa;

Bb;

Cc;

(a) -A( )   (b) -B( )   **(c) -C( )**   (d) -B( ) and -C( )

49) **Assertion:** The derived class in a power packed class.

Reason: The class which inherits the other class is called derived class.

(a) Both A and R are true, R is the correct explanation of A

(b) Both A and R are true, R is not the correct explanation of A   (c) Both A and R are false   (d) A is true but R is false

50) **Assertion (A):** Visibility modes in C++ are four types.

Reason (R): The default visibility mode is private.

(a) Both A and R are true, R is the correct explanation of A.   (b) Both A and R are true, R is not the correct explanation of A.

(c) Both A and R are false.   **(d) A is false But R is true.**