

OOPS ASSESSMENT WITH SOLUTION

Question : 1

Methods in the same class can be overridden

(Choose one)

TRUE

FALSE

Question : 2

Say that there are three classes: Computer, AppleComputer, and IBMComputer. What are the likely relationships between these classes?

(Choose one)

- **Computer is the superclass, AppleComputer and IBMComputer are subclasses of Computer.**
- IBMComputer is the superclass, AppleComputer and Computer are subclasses of IBMComputer
- Computer, AppleComputer and IBMComputer are sibling classes.
- Computer is a superclass, AppleComputer is a subclasses of Computer, and IBMComputer is a subclass of AppleComputer

Question : 3

Using the same name for different operations in a class is called

(Choose one)

Method Overloading

Method overriding

Method overruling

Method overtaking

Question : 4

A clerk enters sales order details. Here 'clerk' can be:

(Choose one)

a class

an object

a method

a state

Question : 5

What is the output of the below code,

```
interface A { }
```

```
class C { }
```

```
class D extends C { }
```

```
class B extends D implements A { }
```

```

public class Test extends Thread{
    public static void main(String[] args){
        B b = new B();
        if (b instanceof A)
            System.out.println("b is an instance of A");
        if (b instanceof C)
            System.out.println("b is an instance of C");
    }
}

```

(Choose one)

b is an instance of A

b is an instance of A

b is an instance of C

b is an instance of C

Nothing gets Printed

Question : 6

Savings account, Fixed deposit, Current account are types of Bank Account. However Bank Account object cannot be created. Why?

(Choose one)

Bank account is a parent class

Bank account may not have methods

Bank account may not have attributes

Bank Account is an abstract class

Question : 7

To prevent any method from overriding, we declare the method as,

(Choose one)

static

abstract

final

const

Question : 8

_____ refers to an object's ability to behave differently depending on its type.

(Choose one)

Inheritance

Abstraction

Polymorphism

Encapsulation

Question : 9

Which of the following techniques is used for hiding the internal implementation details of an object?

(Choose one)

Encapsulation

Inheritance
Polymorphism
Data Binding

Question : 10

Identify the relationship between a Bank deposit and a fixed deposit
(Choose one)

- is-a**
- Has-a
- Uses-a
- Conatins-a

Question : 11

```
abstract class C1 {  
  
public C1() { System.out.print(1); }  
  
}  
  
class C2 extends C1 {  
  
public C2() { System.out.print(2); }  
  
}  
  
class C3 extends C2 {  
  
public C3() { System.out.println(3); }  
  
}  
  
public class Test {  
  
public static void main(String[] a) { new C3(); }  
  
}
```

What is the result?

(Choose one)

- 1
- 12
- 123**
- 23
- 2

Question : 12

Method with the same name or different return type and difference in the parameters either in number or type is known as

(Choose one)

- Overriding
- Overloading**
- Abstraction
- Encapsulation

Question : 13

Which two of the following are legal declarations for abstract classes and interfaces?

1. final abstract class Test {}
2. public static interface Test {}
3. interface Test {}
4. protected abstract class Test {}
5. protected interface Test {}
6. abstract public class Test {}

(Choose one)

1 and 2

3 and 6

1 and 5

3 and 4

4 and 6

Question : 14

Multiple inheritance means

(Choose one)

One class inheriting from multiple parent classes

One class inheriting from a parent class which inherits another parent class and so on.

Multiple classes inheriting from the same parent class

Creating multiple objects of a child class

Question : 15

Creating a class/classes using a common class is

(Choose one)

Generalization

Specialization

Aggregation

Association

Question : 16

Interaction among modules in procedural programming is achieved through

(Choose one)

interaction of one object with other

local or global data

Abstraction

pointers

Question : 17

Which of the following is not a type of object oriented abstraction?

(Choose one)

Abstraction of data

Abstraction of function

Abstraction of structure

Abstraction of name

Question : 18

Class A has a method process(). Can it have one more method with the same name?
(Choose one)

Yes, provided its parameters are different

Yes, provided its return type is different but with same parameters

Yes, with same parameters & return type

Not possible.

Question : 19

Identify the relationship between a Classroom and a Projector
(Choose one)

is-a

Has-a

Uses-a

Conatins-a

Question : 20

Which of the following is encapsulation process?
(Choose one)

Declaring a class

Creating an object from a class

Defining methods in a class

Using appropriate access specifiers to attributes

Question : 21

Objects interacting with each other can be defined as _____
(Choose one)

Inheritance

Encapsulation

Abstraction

Message passing

Question : 22

What is the process of defining a method in subclass having same name & type signature as a method in its superclass?
(Choose one)

Method overloading

Method overriding

Method hiding

None of the mentioned

Question : 23

Software systems get complex due to:
(Choose one)

Functional requirements

Non-functional requirements

Developmental process

All of these

Question : 24

Referring to a 'telephone' object, the term 'busy' can be:

(Choose one)

Its state

Its attribute

Its method

Its identity

Question : 25

Which of the following access specifier makes a declaration that is accessible to itself ?

(Choose one)

Public

Private

Protected

Privately protected

Question : 26

What is the output of the following program:

```
public class testmeth
{
    static int i = 1;
    public static void main(String args[])
    {
        System.out.println(i+"", "");
        m(i);
        System.out.println(i);
    }
    public void m(int i)
    {
        i += 2;
    }
}
```

(Choose one)

1,1

1,3

3,1

1,0

Question : 27

Identify the multiplicity of the relationship:

Player plays for a team, team has many players

(Choose one)

One-One

One-Many

Many-Many

None of these

Question : 28

Which of the following is FALSE about object oriented programming?

(Choose one)

It gives emphasis on the objects that cause the event

It uses Top-Down Approach

It is useful to develop complex systems

Ensures loose coupling and high cohesion among its components

Question : 29

State of a class is realized using _____

(Choose one)

member functions

inheritance

member variables

polymorphism

Question : 30

Which of the following is FALSE about class?

(Choose one)

class and object are same

Several objects may be associated with a single class

An object is an instance of a class

A class is a template for objects that share common structure and behavior

Question : 31

Which three of the following are true?

a) An abstract class cannot be instantiated

b) An interface can extend multiple interfaces

c) All methods in abstract class must be abstract

d) If a class B directly extends class A , then class B must implement all the abstract methods which are declared in class A

e) If concrete class C extends concrete class B, and B implements interface A , then all the methods from interface A can be invoked on an instance of C.

(Choose one)

A,B,C

A,B,E

B,D,E

A,C,E

B,C,E

Question : 32

Abstraction is about:

(Choose one)

An object's ability to behave differently depending on its type

Exposing essential details while hiding the non-essential details

Concept wherein a class shares some common structure or behavior with one or more classes

Always hiding all the attributes and exposing all the activities

Question : 33

Which of the following statements are incorrect?

- a) public members of class can be accessed by any code in the program.
- b) private members of class can only be accessed by other members of the class.
- c) private members of class can be inherited by a sub class, and become protected members in sub class.
- d) protected members of a class can be inherited by a sub class.

(Choose one)

- a
- b**
- c
- d

Question : 34

Which of the following is FALSE about an Object?

(Choose one)

An Object has a state

An object exhibits some well defined behavior

Object has a unique Identity

Class is an instance of object

Question : 35

Object-oriented systems tend to have ____ coupling and ____ cohesion

(Choose one)

low, low

low, high

high, low

high, low

Question : 36

Which class is considered as "Cosmic Class" in java?

(Choose one)

Class

Object

Cosmic

String

none of the above

Question : 37

Class B is the child of Class A. Both of them have a method named 'moo()'. Which among the following about this is true?

(Choose one)

Class B also can have a method moo(); but it should not inherit from class A.

Class B overloads method moo() of Class A

Class B overrides method moo() of Class A

Class B also cannot have a method moo()

Question : 38

By 'message passing' between two objects means,

(Choose one)

One object calling method of another object

One object accessing attribute of another object

One object instantiating another object

One object calling another object

Question : 39

Member functions of a class exhibits _____

(Choose one)

variants of the class

state of the class

behaviour of the class

Objects of a class

Question : 40

In object oriented programming access to private data is restricted to

(Choose one)

methods of the same class

methods of other class

methods of same class and other class

methods of child class