Pregunta 1

Given:

Class A { }

Class B { }

Interface X { }

Interface Y { }

Which two definitions of class C are valid?

A. class C extends A implements X { }

B. class C implements Y extends B { }

C. class C extends A, B { }

D. class C implements X, Y extends B { }

E. class C extends B implements X, Y { }

Pregunta 2

Given the following:

```
abstract class Car{

        protected void run(){}   //line 1

        abstract Object stop();    //line 2

}

class MyCar extends Car{

        void run(){}   //line 3

        protected void stop(){}      //line 4

}
```

Which two modifications are necessary to enable the code to compile?

A. Make the method at line 1 public.

B. Make the method at line 2 public.

C. Make the method at line 3 public.

D. Change the return type of method in line 4 to String.

E. Make the method at line 4 public.

Pregunta 3

Given the code:

```
public static void main(String[] args){
        Short a=100;
        Integer b=300;
        Long c=(long)a+b; //line 1
        String d=(String)(c*b);  //line 2
        System.out.println("Result: "+d)
}
```

What is the result?

A.Sum is 400

B.Compilation fails at line 1.

C.Compilation fails at line 2.

D.A ClassCastException is thrown at line 1.

E.A ClassCastException is thrown at line 2.

Pregunta 4

Which two are benefits of polymorphism?

A.Faster code at runtime

B.More efficient code at runtime

C.More dynamic code at runtime

D.More flexible and reusable code

E.Code that is protected from extension by other classes

Pregunta 5

Given the following class declarations:

```
public abstract class Animal

public interface Hunter

public class Cat extends Animal implements Hunter

public class Tiger extends Cat
```

Which answer fails to compile?

A. ArrayList<Animal> ml=new ArrayList<>()

```
ml.add(new Tiger());
```

B. ArrayList<Hunter> ml=new ArrayList<>()

```
ml.add(new Cat());
```

C. ArrayList<Hunter> ml=new ArrayList<>()

```
ml.add(new Tiger());
```

D. ArrayList<Tiger> ml=new ArrayList<>()

```
ml.add(new Cat());
```

E. ArrayList<Animal> ml=new ArrayList<>()

```
ml.add(new Cat());
```

Pregunta 6

Which two statements correctly describe capabilities of interfaces and abstract classes? (Choose two.)

A. Interfaces cannot have protected methods but abstract classes can.

B. Both interfaces and abstract classes can have final methods.

C. Interfaces cannot have instance fields but abstract classes can.

D. Interfaces cannot have static methods but abstract classes can.

E. Interfaces cannot have methods with bodies but abstract classes can.