Java: Interface

Quiz

Question 1

```
interface X{static void doIt();}
public class Test1 implements X{
public static void doIt(){
  System.out.println("OK");}
public static void main(String st[]){
Test1.doIt();
}}
```

Which of the following is true about the code above?

A. The code does not compile because of a problem in interface.
B. The code does not compile of a problem in Test1 class
C. The code compiles and prints “OK” at execution time.
D. The code compiles but throws a runtime error.

Question 2

```
interface X{
int k=90;
 int doIt();}
public class Test1 implements X{
 int l=doIt();
// insert method declarartion for doIt()
{ return X.k;}
public static void main(String st[]){
Test1 t=new Test1();
t.doIt();
System.out.print(t.l);}}
```

Which of the following declaration(s) for doIt() in Test1 will compile the code?

A. `int doIt()`
B. `public int doIt()`
C. `public static int doIt()`
D. Code has syntax error and will not compile for any declaration of **`doIt()`**

Question 3

```
1. interface X{ int k=90;}
2. public class Test1 implements X{
3. static{System.out.print(k);}
4. public static void main(String st[]){
5. }}
```

What will happen on compilation or execution of code?

A. Compilation error at line 1
B. Compilation error at line 3
C. Code prints 90
D. Code prints 0

Question 4

Which of the following is true about interfaces?

A. Interface is an abstract class
B. Interface is always public
C. Interface can have a package declaration
D. Interface automatically inherits from Object class

Question 5

```
public class Flower implements Cloneable{
// insert method declaration here
{ return(Flower) super.clone();}
}
```

Which of the following is/are NOT right declaration for clone method?

A. `public Object clone()throws CloneNotSupportedException`

B. `protected Object clone()throws CloneNotSupportedException`

C. `Object clone()throws CloneNotSupportedException`

D. `public Flower clone() throws CloneNotSupportedException`

Question 6

```
interface A {
    int a = 1;
// 1    public int b = 2;
// 2    public static int c = 3;
// 3
}
```

Which field declaration results in a compile-time error?

A. 1
B. 2
C. 3
D. None of the above

Question 7

```
interface I1 {String name = "I1"; }
interface I2 {String name = "I2"; }
class X implements I1, I2 {          //line 1
public static void main(String[] args) {
System.out.print(name);              //line 2
}}
```

What is the result of attempting to compile and run the program?

A. **I1**
B. I2
C. Compilation error at line 1
D. Compilation error at line 2

Question 8

```
interface I {final void f();}
abstract class X implements I{
public final void f(){}
public static void main(String[] args) {
new X().f();}}
```

Spot the all the problems in the code .

A. **Interface I cannot have final method**

B. **Class X cannot be declared as abstract since it implements interface**

C. **Method f() cannot be overridden in class X**

D. **Instance of X cannot be created**

Question 9

```
1. public interface X {
2. void f();}
3. abstract class A implements X{
4. public final void f(){}
5. public static void main(String[] args) {
6. }}
```

Which lines will cause compilation error

A. Line 1
B. Line 3
C. Line 4
D. No compilation error

Question 10

```
interface Y {}
public class X{
static String s;
public static void main(String[] args) {
X a1= new X();
System.out.print(a1 instanceof X); ///Line 1
System.out.print(a1 instanceof Y); //Line 2
System.out.print(s instanceof Y); //Line 3
System.out.print(null instanceof Y); //Line 4
}}
```

Which of the following is true about the code?

A. Line 1 prints true

B. Line 2 prints false

C. Line 3 gives compilation error

D. Line 4 prints false

Question 11

```
interface A {int i = 1; int m1();}
interface B extends A {int i = 10; int m1();}
class X implements B {
public int m1() {return i;}
public static void main(String[] args) {
System.out.print(new X().m1());
}}
```

What happens on compilation and execution of the code?

A. Prints 1
B. Prints 10
C. Compilation error
D. Runtime error

Question 12

```
interface I1 { }
interface I2 {}
class C1 implements I1{}
class C2 implements I2 {}
class C3 implements I1,I2 {}
```

Assume the following declarations.

```
C1 obj1;      C2 obj2;      C3 obj3;
```

Which of the following are valid assignments

```
A. obj2 = obj1;
B. I1 a = obj2;
C. I2 a = obj2;
D. I2 c = obj1;
```

Question 13

```
interface A {}
class Y{}
class X implements A {
public static void main(String str[]){
X a = new X();
A a0=(A)a;//Line 1
Y a1=(Y)a;//Line 2
Cloneable a2=(Cloneable)a;//Line 3
}}
```

Which statement causes compilation error?

A. Line 1

B. Line 2

C. Line 3

D. None

Question 14

Which of the following are marker interface?

A. Serilaizable

B. Comparable

C. Cloneable

D. Comparator

Question 15

```
import java.util.*;

public class A {
static int[] b = { 10,30,5,20 };
public static void main(String a[]){
System.out.println(Arrays.binarySearch(b, 5));
}
}
```

What will the code display?

A. 0
B. 1
C. 2
D. Result is undefined

Question 16

```
final class Z{}
public class X{
public static void main(String[] args) {
Z z= new Z();
System.out.print(z instanceof Object); //Line 1
System.out.print(z instanceof Comparable);
//Line 2
}
}
```

Which of the following statements are true?

A. Code will display true for Line 1 and false for Line 2
B. Code will not compile for Line 2 because Z is final class
C. Code will not compile for Line 1 because Z is final class
D. Code will not compile for Line 2 because Comparable is not defined