

Java-SE-3

Total Questions: 15

Most Correct Answers: #11

Least Correct Answers: #7

1. finalize block is optional when try and catch block exists

15/25 ☐ A True

10/25 ☒ B False

2. Given:

```
11. public class Test {  
12. public static void main(String [] args) {  
13. int x = 5;  
14. boolean b1 = true;  
15. boolean b2 = false;  
16.  
17. if ((x == 4) && !b2 )  
18. System.out.print("1 ");  
19. System.out.print("2 ");  
20. if ((b2 = true) && b1 )  
21. System.out.print("3 ");  
22. }  
23. }
```

What is the result?

7/25 ☐ A 2

1/25 ☐ B 3

0/25 ☐ C 1 2

9/25 ☒ D 2 3

0/25 ☐ E 1 2 3

6/25 ☐ F Compilation fails.

2/25 ☐ G An exception is thrown at runtime.

3. Given:
 10. interface Foo {}
 11. class Alpha implements Foo {}
 12. class Beta extends Alpha {}
 13. class Delta extends Beta {}
 14. public static void main(String[] args) {
 15. Beta x = new Beta();
 16. //insert code here
 17. }
 18. }

Which code, inserted at line 16, will cause a java.lang.ClassCastException?

- 3/25 ☐ A Alpha a = x;
- 7/25 ☒ B Foo f = (Delta)x;
- 5/25 ☐ C Foo f = (Alpha)x;
- 10/25 ☐ D Beta b = (Beta)(Alpha)x;

4. Given:
 public void go() {
 String o = "";
 z:
 for(int x = 0; x < 3; x++) {
 for(int y = 0; y < 2; y++) {
 if(x==1) break;
 if(x==2 && y==1) break z;
 o = o + x + y;
 }
 }
 System.out.println(o);
 }

What is the result when the go() method is invoked?

- 0/25 ☐ A 00
- 0/25 ☐ B 0001
- 14/25 ☒ C 000120
- 0/25 ☐ D 00012021
- 11/25 ☐ E Compilation fails.
- 0/25 ☐ F An exception is thrown at runtime.

5. Given:

```

public class Yippee {
    public static void main(String [] args) {
        for(int x = 1; x < args.length; x++) {
            System.out.print(args[x] + " ");
        }
    }
}

```

and two separate command line invocations:

```

java Yippee
java Yippee 1 2 3 4

```

What is the result?

- 2/25 ☐ A No output is produced.
1 2 3
- 8/25 ☒ B No output is produced.
2 3 4
- 7/25 ☐ C No output is produced.
1 2 3 4
- 0/25 ☐ D An exception is thrown at runtime.
1 2 3
- 8/25 ☐ E An exception is thrown at runtime.
2 3 4
- 0/25 ☐ F An exception is thrown at runtime.
1 2 3 4

6. Given:

```

34. HashMap props = new HashMap();
35. props.put("key45", "some value");
36. props.put("key12", "some other value");
37. props.put("key39", "yet another value");
38. Set s = props.keySet();
39. //insert code here

```

What, inserted at line 39, will sort the keys in the props HashMap?

- 0/25 ☐ A Arrays.sort(s);
- 7/25 ☒ B s = new TreeSet(s);
- 14/25 ☐ C Collections.sort(s);
- 4/25 ☐ D s = new SortedSet(s);

7. Which two scenarios are NOT safe to replace a StringBuffer object with a StringBuilder object? (Choose two.)

- 8/25 ☒ A When using versions of Java technology earlier than 5.0.
- 20/25 ☒ B When sharing a StringBuffer among multiple threads.
- 6/25 ☐ C When using the java.io class StringBufferInputStream.
- 9/25 ☐ D When you plan to reuse the StringBuffer to build more than one string.

8. Given:

```

public class NamedCounter {
    private final String name;
    private int count;
    public NamedCounter(String name) {
        this.name = name;
    }
    public String getName() {
        return name;
    }
    public void increment() {
        count++;
    }
    public int getCount() {
        return count;
    }
    public void reset() {
        count = 0;
    }
}

```

Which three changes should be made to adapt this class to be used safely by multiple threads? (Choose three.)

- 22/25 ☒ A declare reset() using the synchronized keyword
- 4/25 ☐ B declare getName() using the synchronized keyword
- 13/25 ☒ C declare getCount() using the synchronized keyword
- 12/25 ☐ D declare the constructor using the synchronized keyword
- 24/25 ☒ E declare increment() using the synchronized keyword

9. Given:

```

1. public class Threads3 implements Runnable {
2.     public void run() {
3.         System.out.print("running");
4.     }
5.     public static void main(String[] args) {
6.         Thread t = new Thread(new Threads3());
7.         t.run();
8.         t.run();
9.         t.start();
10.    }
11.}

```

What is the result?

- 6/25 ☐ A Compilation fails.
- 2/25 ☐ B An exception is thrown at runtime.
- 0/25 ☐ C The code executes and prints "running".
- 1/25 ☐ D The code executes and prints "runningrunning".
- 16/25 ☒ E The code executes and prints "runningrunningrunning"

10. Given:

```
1. public class TestOne {  
2. public static void main (String[] args) throws Exception {  
3. Thread.sleep(3000);  
4. System.out.println("sleep");  
5. }  
6. }
```

What is the result?

5/25

☐ A Compilation fails.

0/25

☐ B An exception is thrown at runtime

20/25

☒ C The code executes normally and prints "sleep".

0/25

☐ D The code executes normally, but nothing is printed.

11. Given:

```
class Alpha {  
public void foo() { System.out.print("Afoo "); }  
}  
public class Beta extends Alpha {  
public void foo() { System.out.print("Bfoo "); }  
public static void main(String[] args) {  
Alpha a = new Beta();  
Beta b = (Beta)a;  
a.foo();  
b.foo();  
}  
}
```

What is the result?

1/25

☐ A Afoo Afoo

2/25

☐ B Afoo Bfoo

0/25

☐ C Bfoo Afoo

20/25

☒ D Bfoo Bfoo

1/25

☐ E Compilation fails.

1/25

☐ F An exception is thrown at runtime.

12. Given:
 11. public interface A111 {
 12. String s = "yo";
 13. public void method1();
 14. }
 17. interface B { }
 20. interface C extends A111, B {
 21. public void method1();
 22. public void method1(int x);
 23. }

What is the result?

- 10/25 ☒ A Compilation succeeds.
- 2/25 ☐ B Compilation fails due to multiple errors.
- 3/25 ☐ C Compilation fails due to an error only on line 20.
- 2/25 ☐ D Compilation fails due to an error only on line 21.
- 5/25 ☐ E Compilation fails due to an error only on line 22.
- 3/25 ☐ F Compilation fails due to an error only on line 12.

13. Which two code fragments correctly create and initialize a static array of int elements? (Choose two.)

- 22/25 ☒ A static final int[] a = { 100,200 };
- 18/25 ☒ B static final int[] a; static { a=new int[2]; a[0]=100; a[1]=200; }
- 3/25 ☐ C static final int[] a = new int[2]{ 100,200 };
- 4/25 ☐ D static final int[] a;
static void init() { a = new int[3]; a[0]=100; a[1]=200; }

14. Given:
 11. class Converter {
 12. public static void main(String[] args) {
 13. Integer i = args[0];
 14. int j = 12;
 15. System.out.println("It is " + (j == i) + " that j==i.");
 16. }
 17. }

What is the result when the programmer attempts to compile the code and run it with the command java Converter 12?

- 6/25 ☐ A It is true that j==i.
- 0/25 ☐ B It is false that j==i.
- 2/25 ☐ C An exception is thrown at runtime.
- 17/25 ☒ D Compilation fails because of an error in line 13.

15. Which three statements concerning the use of the `java.io.Serializable` interface are true? (Choose three.)

- 7/25 ☐ A Objects from classes that use aggregation cannot be serialized
- 18/25 ☒ B An object serialized on one JVM can be successfully deserialized on a different JVM.
- 5/25 ☐ C The values in fields with the `volatile` modifier will NOT survive serialization and deserialization
- 24/25 ☒ D The values in fields with the `transient` modifier will NOT survive serialization and deserialization.
- 20/25 ☒ E It is legal to serialize an object of a type that has a supertype that does NOT implement `java.io.Serializable`.