Capítulo 1 - SELF TEST

The following questions will help you measure your understanding of the material presented in this chapter. Read all the choices carefully! These questions are *very* similar to the kinds of questions you'll see on the latest exam. Again, don't worry if you have trouble with them at first; the style of the exam questions can take some getting used to. For example, you might find yourself looking at the answers and wanting to kick yourself for missing little things that you actually knew, but just didn't see in the question. The best advice we have for both the practice questions and the real exam is to *always look again.* As soon as you get an idea in your head about the answer to a question, imagine someone standing next to you and whispering in your ear, "Are you sure? Look again." Much of the time, you'll look again and say, "I'm sure," especially since your first reaction is often the best one to go with. But you'll be surprised by how often that second look brings up something new.

Java Programming Language Keywords (Objective 4.4.)

1.- Given the following,

```
1.  public class Test {
2.      public static void main (String [] args) {
3.          signed int x = 10;
4.              for (int y=0; y<5; y++, x--)
5.                  System.out.print (" " + x);
6.      }
7.  }
```

What is the result? (Choose one.)
A. 10 9 8 7 6
B. 9 8 7 6 5
C. Compilation fails
D. An exception is thrown at runtime

2.- Which is a reserved word in the Java programming language? (Choose one.)

A. method
B. native
C. subclasses
D. reference
E. array

3.- Which one of these lists contains only Java programming language keywords? (Choose one.)

A. class, if, void, long, Int, continue
B. goto, instanceof, native, finally, default, throws
C. try, virtual, throw, final, volatile, transient
D. strictfp, constant, super, implements, do
E. byte, break, assert, switch, include

4.- Which two are keywords? (Choose two.)

A. interface
B. unsigned
C. Float
D. this
E. string

Literals and Ranges of All Primitive Data Types (Objective 4.6)

5.- Which three are valid declarations of a char? (Choose three.)

A. char c1 = 064770;
B. char c2 = `face´;
C. char c3 = 0xbeef;
D. char c4 = \u0022;
E. char c5 = `\iface´;
F. char c6 = `\uface´;

6.- Which two are valid declarations of a String? (Choose two.)

A. String s1 = nu11;
B. String s2 = `nu11´;
C. String s3 = (String) `abc´;
D. String s4 = (String) `\ufeed´;
E. String s5 = “strings rule”;

7.- Which one is a valid declaration of a boolean? (Choose one.)

A. boolean b1 = 0;
B. boolean b2 = ‘false’;
C. boolean b3 = false;
D. boolean b4 = Boolean . false ( );
E. boolean b5 = no;

8.- What is the numerical range of a char? (Choose one.)

A. -128 to 127
B. –(2 ^ 15) to (2 ^15) – 1
C. 0 to 32767
D. Platform dependent
E. 0 to 65535

9.- Which three are valid declarations of a float? (Choose three.)

A. float f1 = -343;
B. float f2 = 3.14;
C. float f3 = 0x12345;
D. float f4 = 42e7;
E. float f5 = 2001.0D;
F. float f6 = 2.81F;

Array Declaration, Construction, and Initialization (Objective 1.1)

10.- Which three are legal array declarations? (Choose three.)

A. int [ ] myScores [ ];
B. char [ ] myChars;
C. int [6] myScores;
D. Dog myDogs [ ];
E. Dog myDogs [7];

11.- Given the following,

```
1.  public class Test {
2.      public static void main (String [ ] args) {
3.      int [ ]  [ ]  [ ]  x = new int [3]  [ ]  [ ] ;
4.      int i, j;
5.      x[0] = new int [4] [ ] ;
6.      x[1] = new int [2] [ ] ;
7.      x[2] = new int [5] [ ] ;
8.      for  (i=0; i<x.length; i++)
9.          for  (j=0; j<x[i] . length; j++) {
10.             x[i] [j] = new int [i + j + 1] ;
11.             System.out.println("size = " + x[i] [j] . length) ;
12.         }
13.     }
14. }
```

how many lines of output will be produced? (Choose one.)

A. 7
B. 9
C. 11
D. 13
E. Compilation fails
F. An exception is thrown at runtime

12.- Given the following,

```
1.    public class Test {
2.        public static void main (String [ ] args) {
3.            byte [ ] [ ] big = new byte [7] [7] ;
4.            byte [ ] [ ] b = new byte [2] [1] ;
5.            byte b3 = 5;
6.            byte b2 [ ] [ ] [ ] [ ] = new byte [2] [3] [1] [2] ;
7.
8.         }
9.    }
```

which of the following lines of code could be inserted at line 7, and still allow the code to compile? (Choose four that would work.)

A. b2 [0] [1] = b;
B. b [0] [0] = b3;
C. b2 [1] [1] [0] = b[0] [0];
D. b2 [1] [2] [0] = b;
E. b2 [0] [1] [0] [0] = b [0] [0];
F. b2 [0] [1] = big;

13.- Which two will declare an array and initialize it with five numbers? (Choose two.)
A. Array a = new Array (5);
B. int [ ] a = {23, 22,21,20,19};
C. int [ ] array;
D. int array [ ] = new int [5];
E. int a [ ] = new int (5);
F. int [5] array;

14.- Which will legally declare, construct. And initialize an array? (Choose one.)

A. int [ ] myList = {“1”, “2”, “3”};
B. int [ ] myList = (5, 8, 2);
C. int myList [ ] [ ] = {4, 9, 7, 0};

D. int myList [ ] = {4, 3, 7};
E. int [ ] myList = [3, 5, 6];
F. int myList [ ] = {4; 6; 5};

Using a Variable or Array Element That is Uninitialized and Unassigned (Objective 4.5)

15.- Wich four describe the correct default values for array elements of the types indicated? (Choose four.)

A. int -> 0
B. String -> "null"
C. Dog -> null
D. char -> `\u0000´
E. float -> 0.0f
F. boolean -> true

16.- Given the following,

```
1.  public class TestDogs {
2.      public static void main (String [ ] args) {
3.          Dog [ ] [ ] theDogs = new Dog [3] [ ] ;
4.          System.out.println(theDogs[2] [0] .toString() ) ;
5.      }
6.  }
7.
8.  class Dog {}
```

what is the result? (Choose one.)

A. null
B. theDogs
C. Compilation fails
D. An exception is thrown at runtime

17.- Given the following,

```
1.  public class X {
2.      public static void main (String [ ] args) {
3.          String names [ ] = new String [5];
4.              for (int x=0; x < args.length; x++)
5.                  names [x] = args [x] ;
6.              System.out.println(names[2] ) ;
7.      }
8.  }
```

and the command line invocation is

```
java X a b
```

what is the result? (Choose one.)

A. names
B. null
C. Compilation fails
D. An exception is thrown at runtime

Command-Line Arguments to Main (Objetive 4.3)

18.- Given the following,

```
1.  public class CommandArgs {
2.      public static void main (String [ ] args) {
3.          String s1 = args [1] ;
4.          String s2 = args [2] ;
5.          String s3 = args [3] ;
6.          String s4 = args [4] ;
7.          System.out.print (“ args [2] = “ + s2) ;
8.      }
9.  }
```

And the command-line invocation,

```
java CommandArgs 1 2 3 4
```

what is the result?

A. args [2] = 2
B. args [2] = 3
C. args [2] = null
D. args [2] = 1
E. Compilation fails
F. An exception is thrown at runtime

19.- Given the following,

```
1.    public class ComandArgsTwo {
2.        public static void main (String [ ] argh) {
3.            String [ ] args;
4.            int x;
5.            x = argh.length;
6.            for (int y = 1; y <= x; y++) {
7.                System.out.print ( " " + argh [y] );
8.            }
9.        }
10.   }
```

and the command-line invocation,

```
java CommandArgsTwo 1 2 3
```

what is the result?

A. 0 1 2
B. 1 2 3
C. 0 0 0
D. null null null
E. Compilation fails
F. An Exception is thrown at runtime

20.- Given the following,

```
1.    public class CommandArgsThree {
2.        public static void main (String [ ] args) {
3.            String [ ] [ ] argCopy = new String [2] [2] ;
4.            int x;
5.            argCopy [0] = args;
6.            x = argCopy [0] . length;
7.            for (int y = 0; y < x; y++) {
8.                System.out.print(" " + argCopy [0] [y]) ;
9.            }
10.       }
11.   }
```

and the command-line invocation,

```
java CommandArgsThree 1 2 3
```

what is the result?

A. 0 0
B. 1 2
C. 0 0 0
D. 1 2 3
E. Compilation fails
F. An exception is thrown at runtime