1z0-851 SCJP

Exam A

QUESTION 1
Given:

```
class Hexy {
     public static void main(String[] args) {
         Integer i = 42;
         String s = (i<40)?"life":(i>50)?"universe":"everything";
         System.out.println(s);
     }
}
```

What is the result?

A. null
B. life
C. universe
D. everything
E. Compilation fails
F. An exception is thrown at runtime

Correct Answer: D

QUESTION 2
Given:

```
4. public class SpecialOps {
5.          public static void main(String[] args) {
6.               String s = "";
7.               Boolean b1 = true;
8.               Boolean b2 = false;
9.               if((b2 = false) | (21%5) > 2) s += "x";
10.              if(b1 || (b2 = true)) s += "y";
11.              if(b2 == true) s += "z";
12.              System.out.println(s);
13.         }
14. }
```

Which are true? (Choose all that apply.)

A. Compilation fails
B. x will be included in the output
C. y will be included in the output
D. z will be included in the output
E. An exception is thrown at runtime

Correct Answer: C

QUESTION 3
Given two files:

```
1. class One {
2.       public static void main(String[] args) {
3.          int assert = 0;
4.       }
5. }
1. class Two {
2.       public static void main(String[] args) {
3.           assert(false);
4.       }
5. }
```

And the four command-line invocations:

```
javac -source 1.3 One.java
javac -source 1.4 One.java
javac -source 1.3 Two.java
javac -source 1.4 Two.java
```

What is the result? (Choose all that apply.)

A. Only one compilation will succeed
B. Exactly two compilations will succeed
C. Exactly three compilations will succeed
D. All four compilations will succeed
E. No compiler warnings will be produced
F. At least one compiler warning will be produced

Correct Answer: BF

QUESTION 4
Given:

```
3. public class Clumsy {
4.      public static void main(String[] args) {
5.          int j = 7;
6.          assert(++j > 7);
7.          assert(++j > 8): "hi";
8.          assert(j > 10): j=12;
9.          assert(j==12): doStuff();
10.         assert(j==12): new Clumsy();
11.     }
12.     static void doStuff() { }
13. }
```

Which are true? (Choose all that apply.)

A. Compilation succeeds
B. Compilation fails due to an error on line 6
C. Compilation fails due to an error on line 7
D. Compilation fails due to an error on line 8
E. Compilation fails due to an error on line 9
F. Compilation fails due to an error on line 10

Correct Answer: E

QUESTION 5
Given:

```
12. public class AssertStuff {
13.
14.    public static void main(String [] args) {
15.       int x = 5;
16.       int y = 7;
17.
18.       assert (x> y): "stuff";
19.       System.out.println("passed");
20.    }
21. }
```

And these command line invocations:

java AssertStuff
java -ea AssertStuff

What is the result?

A. passed
   stuff
B. stuff
   passed
C. passed
   An AssertionError is thrown with the word "stuff" added to the stack trace.
D. passed
   An AssertionError is thrown without the word "stuff" added to the stack trace.
E. passed
   An AssertionException is thrown with the word "stuff" added to the stack trace.
F. passed
   An AssertionException is thrown without the word "stuff" added to the stack trace.

Correct Answer: C

QUESTION 6
Given:

```
8. public class test {
9.     public static void main(String [] a) {
10.      assert a.length == 1;
11.   }
12. }
```

Which two will produce an AssertionError? (Choose two.)

A. java test
B. java -ea test
C. java test file1
D. java -ea test file1
E. java -ea test file1 file2
F. java -ea:test test file1

Correct Answer: BE

QUESTION 7
Given:

```
try {
    int x = Integer.parseInt("two");
}
```

Which could be used to create an appropriate catch block? (Choose all that apply.)

A. ClassCastException
B. IllegalStateException
C. NumberFormatException
D. IllegalArgumentException
E. ExceptionInInitializerError
F. ArrayIndexOutOfBoundsException

Correct Answer: CD

QUESTION 8
Given:

```
1. class Loopy {
```

```
2.       public static void main(String[] args) {
3.           int[] x = {7,6,5,4,3,2,1};
4.           // insert code here
5.                System.out.print(y + " ");
6.           }
7.       }
8. }
```

Which, inserted independently at line 4, compiles? (Choose all that apply.)

A. for(int y : x) {
B. for(x : int y) {
C. int y = 0; for(y : x) {
D. for(int y=0, z=0; z<x.length; z++) { y = x[z];
E. for(int y=0, int z=0; z<x.length; z++) { y = x[z];
F. int y = 0; for(int z=0; z<x.length; z++) { y = x[z];

Correct Answer: ADF

QUESTION 9
Given:

```
1. public class Frisbee {
2.     // insert code here
3.        int x = 0;
4.        System.out.println(7/x);
5.     }
6. }
```

And given the following four code fragments:

```
I. public static void main(String[] args) {
II. public static void main(String[] args) throws Exception {
III. public static void main(String[] args) throws IOException {
IV. public static void main(String[] args) throws RuntimeException {
```

A. All four will compile and execute without exception
B. All four will compile and execute and throw an exception
C. Some, but not all, will compile and execute without exception
D. Some, but not all, will compile and execute and throw an exception
E. When considering fragments II, III, and IV, of those that will compile, adding a try/catch block around line 6 will cause compilation to fail

Correct Answer: D

QUESTION 10
Given:

```
3. public class Wind {
4.        public static void main(String[] args) {
5.            foreach:
6.            for(int j=0; j<5; j++) {
7.                 for(int k=0; k< 3; k++) {
8.                     System.out.print(" " + j);
9.                     if(j==3 && k==1) break foreach;
10.                    if(j==0 || j==2) break;
11.                }
12.           }
13.       }
14. }
```

What is the result?

A. 0 1 2 3
B. 1 1 1 3 3
C. 0 1 1 1 2 3 3
D. 1 1 1 3 3 4 4 4
E. 0 1 1 1 2 3 3 4 4 4
F. Compilation fails

Correct Answer: C

QUESTION 11
Given:

```
3. public class Circles {
4.      public static void main(String[] args) {
5.           int[] ia = {1,3,5,7,9};
6.           for(int x : ia) {
7.              for(int j = 0; j < 3; j++) {
8.                  if(x > 4 && x < 8) continue;
9.                  System.out.print(" " + x);
10.                 if(j == 1) break;
11.                 continue;
12.             }
13.             continue;
14.          }
15.     }
16. }
```

What is the result?

A. 1 3 9
B. 5 5 7 7
C. 1 3 3 9 9
D. 1 1 3 3 9 9
E. 1 1 1 3 3 3 9 9 9
F. Compilation fails

Correct Answer: D

QUESTION 12
Given:

```
3. public class Ebb {
4.      static int x = 7;
5.      public static void main(String[] args) {
6.          String s = "";
7.          for(int y = 0; y < 3; y++) {
8.              x++;
9.              switch(x) {
10.                 case 8: s += "8 ";
11.                 case 9: s += "9 ";
12.                 case 10: { s+= "10 "; break; }
13.                 default: s += "d ";
14.                 case 13: s+= "13 ";
15.             }
16.         }
17.         System.out.println(s);
18.     }
19.     static { x++; }
20. }
```

What is the result?

A. 9 10 d
B. 8 9 10 d
C. 9 10 10 d
D. 9 10 10 d 13
E. 8 9 10 10 d 13
F. 8 9 10 9 10 10 d 13
G. Compilation fails

Correct Answer: D

QUESTION 13
Given:

```
3. import java.text.*;
4. public class Slice {
5.      public static void main(String[] args) {
6.          String s = "987.123456";
7.          double d = 987.123456d;
8.          NumberFormat nf = NumberFormat.getInstance();
9.          nf.setMaximumFractionDigits(5);
10.         System.out.println(nf.format(d) + " ");
11.         try {
12.            System.out.println(nf.parse(s));
13.         } catch (Exception e) { System.out.println("got exc"); }
14.      }
15. }
```

Which are true? (Choose all that apply.)

A. The output is 987.12345 987.12345
B. The output is 987.12346 987.12345
C. The output is 987.12345 987.123456
D. The output is 987.12346 987.123456
E. The try/catch block is unnecessary
F. The code compiles and runs without exception
G. The invocation of parse() must be placed within a try/catch block

Correct Answer: DFG

QUESTION 14
Given:

```
3. import java.io.*;
4. public class Talker {
5.      public static void main(String[] args) {
6.          Console c = System.console();
7.          String u = c.readLine("%s", "username: ");
8.          System.out.println("hello " + u);
9.          String pw;
10.         if(c != null && (pw = c.readPassword("%s", "password: ")) != null)
11.             // check for valid password
12.     }
13. }
```

If line 6 creates a valid Console object, and if the user enters fred as a username and 1234 as a password, what is the result? (Choose all that apply.)

A. username:
   password:
B. username: fred
   password:

C. username: fred
password: 1234
D. Compilation fails
E. An exception is thrown at runtime

Correct Answer: D

QUESTION 15
Given:

```
3. public class Theory {
4.    public static void main(String[] args) {
5.       String s1 = "abc";
6.       String s2 = s1;
7.       s1 += "d";
8.       System.out.println(s1 + " " + s2 + " " + (s1==s2));
9.
10.      StringBuffer sb1 = new StringBuffer("abc");
11.      StringBuffer sb2 = sb1;
12.      sb1.append("d");
13.      System.out.println(sb1 + " " + sb2 + " " + (sb1==sb2));
14.    }
15. }
```

Which are true? (Choose all that apply.)

A. Compilation fails
B. The first line of output is abc abc true
C. The first line of output is abc abc false
D. The first line of output is abcd abc false
E. The second line of output is abcd abc false
F. The second line of output is abcd abcd true
G. The second line of output is abcd abcd false

Correct Answer: DF

QUESTION 16
Given that 1119280000000L is roughly the number of milliseconds from Jan. 1, 1970, to June 20, 2005, and that you want to print that date in German, using the LONG style such that "June" will be displayed as "Juni", complete the code using the fragments below. Note: you can use each fragment either zero or one times, and you might not need to fill all of the slots.

Select and Place:

```
import java._____
import java._____

class DateTwo {
  public static void main(String[] args) {
    Date d = new Date(1119280000000L);
    DateFormat df = _____________________________

                    _____________ , _____________ );

    System.out.println(_____________
  }
}
```

Fragments:

```
io.*;      new DateFormat(                Locale.LONG
nio.*;     DateFormat.getInstance(        Locale.GERMANY
util.*;    DateFormat.getDateInstance(    DateFormat.LONG
text.*;    util.regex;                    DateFormat.GERMANY
date.*;    df.format(d));                 d.format(df));
```

Correct Answer:

```
import java. util.*;
import java. text.*;

class DateTwo {
  public static void main(String[] args) {
    Date d = new Date(1119280000000L);
    DateFormat df = DateFormat.getDateInstance(

                    DateFormat.LONG , Locale.GERMANY );

    System.out.println(d.format(df));
  }
}
```

Fragments:

```
io.*;      new DateFormat(                Locale.LONG
nio.*;     DateFormat.getInstance(

           util.regex;                    DateFormat.GERMANY
date.*;    df.format(d));
```

QUESTION 17
Given:

```
1. class Dims {
2.     public static void main(String[] args) {
3.        int[][] a = {{1,2,}, {3,4}};
4.        int[] b = (int[]) a[1];
5.        Object o1 = a;
6.        int[][] a2 = (int[][]) o1;
7.        int[] b2 = (int[]) o1;
8.        System.out.println(b[1]);
9.  } }
```

What is the result?

A. 2
B. 4
C. An exception is thrown at runtime
D. Compilation fails due to an error on line 4
E. Compilation fails due to an error on line 5
F. Compilation fails due to an error on line 6
G. Compilation fails due to an error on line 7

Correct Answer: C