1Z0-851 Oracle Certified Professional, Java SE 6 Programmer

Exam A

QUESTION 1
Given:

```
35. String #name = “Jane Doe”;
36. int $age = 24;
37. double _height = 123.5;
38. double ~temp = 37.5;
```

Which two are true? (Choose two)

A. Line 35 will not compile
B. Line 36 will not compile
C. Line 37 will not compile
D. Line 38 will not compile

Correct Answer: AD

QUESTION 2
Which are valid declarations? (Choose all that apply)

A. int $x;
B. int 123;
C. int _123;
D. int #dim;
E. int %percent;
F. int *divide;
G. int central_sales_region_Summer_2005_gross_sales;

Correct Answer: ACG

QUESTION 3
The given code will compile without errors.

```
float f = 4.5;
```

A. True
B. False

Correct Answer: B

QUESTION 4
The code given bellow will not compile

```
double d = 102.34D;
```

A. True
B. False

Correct Answer: B

QUESTION 5
Which of the given options will compile? (Select all that apply)

A. char c = null;
B. char c = 0;
C. char c = ‘0’;

Correct Answer: BC

QUESTION 6
Which of the given code fragments will compile without errors? (Select all that apply)

A. int i = true;
B. float b = 0;
C. double d = -1;
D. float s = 1.2;

Correct Answer: BC

QUESTION 7
Which of the given code snippets will compile? (Select all that apply)

A. long id = 6;
   int i = id;
B. float f = 6.32f;
   int i = f;
C. char c = 'A';
   int i = c;
D. int i = 0;
   byte b = (byte)i;

Correct Answer: CD

QUESTION 8
Which of the given options is a legal assignment? (Select all that apply)

A. double d = 1.4;
B. double d = 1.3D;
C. double d = 1.2d;
D. All of the above

Correct Answer: D

QUESTION 9
Which of the given code fragments will not compile? (Select all that apply)

A. byte a = 128;
B. byte b = 100;
   b *= 1;
C. byte b = 1;
   b = b+1;
D. int i= 128;

Correct Answer: AC

QUESTION 10
Given:

```
1. // insert code here
2. class StatTest {
3.    public static void main(String[] args) {
4.         System.out.println(Integer.MAX_VALUE);
5.    }
6. }
```

Which, inserted independently at line 1, compiles? (Choose all that apply.)

A. import static java.lang;
B. import static java.lang.Integer;
C. import static java.lang.Integer.*;
D. import static java.lang.Integer.*_VALUE;
E. import static java.lang.Integer.MAX_VALUE;
F. None of the above statements are valid import syntax

Correct Answer: CE

QUESTION 11
Given:

```
1. // insert code here
2. public class TestStaticImport {
3.    public static void main(String[] args) {
4.         out.println(MAX_VALUE);
5.         out.println(toHexString(42));
6.    }
7. }
```

Which, inserted independently at line 1, compiles? (Choose all that apply.)

A. import java.lang.*;
B. import static java.lang.Integer.*;
C. import java.lang.System;
D. import static java.lang.System.out;
E. static import java.lang.System.*;
F. import java.lang.System.*;
G. import java.lang.Integer.toHexString;

Correct Answer: BD

QUESTION 12
Given a class Repetition:

```
package utils;

public class Repetition {
    public static String twice(String s) { return s + s; }
}
```

and given another class Demo:

```
01. public class Demo {
02.    public static void main(String[] args) {
03.        System.out.println(twice("pizza"));
04.    }
05. }
```

Which code should be inserted at line 1 of Demo.java to compile and run Demo to print "pizzapizza"?

A. `import utils.*;`
B. `static import utils.*;`
C. `import utils.Repetition.*;`
D. `static import utils.Repetition.*;`
E. `import utils.Repetition.twice();`
F. `import static utils.Repetition.twice;`
G. `static import utils.Repetition.twice;`

Correct Answer: F

QUESTION 13
Given:

```
package com.sun.scjp;
public class Geodetics {
        public static final double DIAMETER = 12756.32; // kilometers
}
```

Which two correctly access the DIAMETER member of the Geodetics class? (Choose two.)

A.
```
import com.sun.scjp.Geodetics;
public class TerraCarta {
     public double halfway() {
        return Geodetics.DIAMETER/2.0;
     }
}
```

B.
```
import static com.sun.scjp.Geodetics;
public class TerraCarta {
    public double halfway() {
       return DIAMETER/2.0;
    }
}
```

C.
```
import static com.sun.scjp.Geodetics. *;
public class TerraCarta {
      public double halfway() {
          return DIAMETER/2.0;
      }
}
```

D.
```
package com.sun.scjp;
public class TerraCarta {
      public double halfway() {
          return DIAMETER/2.0;
      }
}
```

Correct Answer: AC

QUESTION 14
Which of the given expressions is true, for the given code?

String s1 = new String(“abc”);
String s2 = new String(“abc”);

A. s1 == s2
B. s1.equals(s2)
C. Both A and B
D. Any answer is valid

Correct Answer: B

QUESTION 15
Which of the given options is the output produced by the code given below?

```
String s1 = new String(“hello”);
String s2 = “hello”;
String s3 = “hello”;
System.out.println(s1==s3);
System.out.println(s2==s3);
System.out.println(s1.equals(s2));
```

A. true true false

B. false true true
C. false false true
D. false true false
E. true false false
F. false false false
G. true true true

Correct Answer: B

QUESTION 16
What is displayed when the following code is compiled and executed?

```
String s1 = new String("Test");
String s2 = new String("Test");
if (s1==s2)
        System.out.println("Same");
if (s1.equals(s2))
        System.out.println("Equals");
```

A. Same
B. Equals
C. The code compiles, but nothing is displayed upon execution
D. The code fails to compile

Correct Answer: B

QUESTION 17
Given the following code?

```
public class ImmutableStrings
{
   public static void main(String[] args)
   {
       String one = "someString";
       String two = new String("someString");

       one = two = null;
   }
}
```

When the last line of main method is reached, how many objects are eligible for GC?

A. 0 objects
B. 1 object
C. 2 objects
D. Compilation fails.
E. It is not possible to know.
F. An exception is thrown at runtime.

Correct Answer: B

QUESTION 18
Given this method in a class:

```
        public String toString() {
              StringBuffer buffer = new StringBuffer();
               buffer.append('<');
               buffer.append(this.name);
               buffer.append('>');
               return buffer.toString();
```

```
    }
```

Which is true?

A. This code is NOT thread-safe
B. The programmer can replace StringBuffer with StringBuilder with no other changes
C. This code will perform well and converting the code to use StringBuilder will not enhance the performance
D. This code will perform poorly. For better performance, the code should be rewritten: return “<“+ this. name + “>”;

Correct Answer: B

QUESTION 19
Given:

```
1. public class MyLogger {
2.    private StringBuilder logger = new StringBuilder();
3.    public void log(String message, String user) {
4.       logger.append(message);
5.       logger.append(user);
6.    }
7. }
```

The programmer must guarantee that a single MyLogger object works properly for a multi-threaded system. How must this code be changed to be thread-safe?

A. synchronize the log method
B. replace StringBuilder with StringBuffer
C. No change is necessary, the current MyLogger code is already thread-safe.
D. replace StringBuilder with just a String object and use the string concatenation (+=) within the log method

Correct Answer: A

QUESTION 20
What will happen when you attempt to compile and run the following code snippet?

```
String str = "Java";
StringBuffer buffer = new StringBuffer(str);
if(str.equals(buffer))
{
    System.out.println("Both are equal");
}
else
{
     System.out.println("Both are not equal");
}
```

A. It will print - Both are not equal
B. It will print - Both are equal
C. Compile time error as you can not use equals for objects of different classes
D. Runtime error as you can not use equals for objects of different classes
E. None of these

Correct Answer: A

QUESTION 21
Given:

```
1. public class KungFu {
2.      public static void main(String[] args) {
```

```
3.          Integer x = 400;
4.          Integer y = x;
5.          x++;
6.          StringBuilder sb1 = new StringBuilder("123");
7.          StringBuilder sb2 = sb1;
8.          sb1.append("5");
9.          System.out.println((x == y) + " " + (sb1 == sb2));
10.     }
11. }
```

What is the result?

A. true true
B. false true
C. true false
D. false false
E. Compilation fails.
F. An exception is thrown at runtime.

Correct Answer: B

QUESTION 22
Which two scenarios are NOT safe to replace a StringBuffer object with a StringBuilder object? (Choose two.)

A. When using versions of Java technology earlier than 5.0
B. When sharing a StringBuffer among multiple threads
C. When using the java.io class StringBufferInputStream
D. When you plan to reuse the StringBuffer to build more than one string

Correct Answer: AB

QUESTION 23
Given:

```
public class TestString  {
      public static void main(String[] args) {
           String str = “420”;
           str += 42;
           System.out.print(str);
      }
 }
```

What is the output?

A. 42
B. 420
C. 462
D. 42042
E. Compilation fails
F. An exception is thrown at runtime

Correct Answer: D

QUESTION 24
How many String objects are created when the following method is invoked?

```
11. public String makingStrings() {
12.       String s="Fred";
```

```
13.       s=s+"47";
14.       s=s.substring(2,5);
15.       s=s.toUpperCase();
16.       return s.toString();
17. }
```

A. 1
B. 2
C. 3
D. 4
E. 5
F. 6

Correct Answer: C

QUESTION 25
Given:

```
01. public class TestString3 {
02.     public static void main(String[] args) {
03.         // insert code here
04.         System.out.println(s);
05.     }
06. }
```

Which two code fragments, inserted independently at line 3, generate the output 4247? (Choose two.)

A.
```
String s = "123456789";
s = (s-"123").replace(1,3,"24") - "89";
```
B.
```
StringBuffer s = new StringBuffer("123456789");
s.delete(0,3).replace(1,3,"24").delete(4,6);
```
C.
```
StringBuffer s = new StringBuffer("123456789");
s.substring(3,6).delete(1,3).insert(1, "24");
```
D.
```
StringBuilder s = new StringBuilder("123456789");
s.substring(3,6).delete(1,2).insert(1, "24");
```
E.
```
StringBuilder s = new StringBuilder("123456789");
s.delete(0,3).delete(1,3).delete(2,5).insert(1, "24");
```

Correct Answer: BE

QUESTION 26
Given:

```
22. StringBuilder sb1 = new StringBuilder("123");
23. String s1 = "123";
24. // insert code here
25. System.out.println(sb1 + " " + s1);
```

Which code fragment, inserted at line 24, outputs "123abc 123abc"?

A. `sb1.append("abc"); s1.append("abc");`
B. `sb1.append("abc"); s1.concat("abc");`
C. `sb1.concat("abc"); s1.append("abc");`
D. `sb1.concat("abc"); s1.concat("abc");`
E. `sb1.append("abc"); s1 = s1.concat("abc");`
F. `sb1.concat("abc"); s1 = s1.concat("abc");`
G. `sb1.append("abc"); s1 = s1 + s1.concat("abc");`
H. `sb1.concat("abc"); s1 = s1 + s1.concat("abc");`

Correct Answer: E

QUESTION 27
Given:

```
import static java.lang.System.*;

class _ {
   static public void main(String... __A_V_) {
      String $ = "";
      for(int x=0; ++x < __A_V_.length; )
          $ += __A_V_[x];
      out.println($);
   }
}
```

And the command line:

```
java _ - A .
```

What is the result?

A. -A
B. A.
C. -A.
D. _A.
E. _-A.
F. Compilation fails
G. An exception is thrown at runtime

Correct Answer: B

QUESTION 28
Given:

```
class Fork {

    public static void main(String[] args) {

        if (args.length == 1 | args[1].equals("test")) {
              System.out.println("test case");
        } else {
               System.out.println("porduction " + args[0]);
        }

    }

}
```

And the command-line invocation:

java Fork live2

What is the result?

A. test case
B. production live2
C. test case live2
D. Compilation fails
E. An exception is thrown at runtime

Correct Answer: E

QUESTION 29
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?

A. No output is produced.
   1 2 3
B. No output is produced.
   2 3 4
C. No output is produced.
   1 2 3 4
D. An exception is thrown at runtime.
   1 2 3
E. An exception is thrown at runtime.
   2 3 4
F. An exception is thrown at runtime.
   1 2 3 4

Correct Answer: B

QUESTION 30
Given:

```
12. public class Commander {
13.     public static void main(String[] args) {
14.         String myProp = /* insert code here */
15.         System.out.println(myProp);
16.     }
17. }
```

and the command line: **`java -Dprop.custom=gobstopper Commander`**

Which two, placed on line 13, will produce the output gobstopper? (Choose two.)

A. `System.load("prop.custom");`
B. `System.getenv("prop.custom");`
C. `System.property("prop.custom");`
D. `System.getProperty("prop.custom");`
E. `System.getProperties().getProperty("prop.custom");`

Correct Answer: DE

QUESTION 31
Given:

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

```
public class Values {

    public static void main(String[] args) {

              Properties p = System.getProperties();
              p.setProperty("myProp", "myValue");
              System.out.print(p.getProperty("cmdProp") + " ");
              System.out.print(p.getProperty("myProp") + " ");
              System.out.print(p.getProperty("noProp") + " ");
              p.setProperty("cmdProp", "newValue");
              System.out.print(p.getProperty("cmdProp"));
    }
}
```

And given the command line invocation:

java -DcmdProp=cmdValue Values

A. null myValue null null
B. cmdValue null null cmdValue
C. cmdValue null null newValue
D. cmdValue myValue null cmdValue
E. cmdValue myValue null newValue
F. An exception is thrown at runtime

Correct Answer: E

QUESTION 32
Given:

```
public class Donkey2 {
    public static void main(String[] args) {
        boolean assertsOn = true;
        assert (assertsOn) : assertsOn = true;
        if(assertsOn) {
            System.out.println("assert is on");
        }
    }
}
```

If class Donkey is invoked twice, the first time without assertions enabled, and the second time with assertions enabled, what are the results?

A. no output
B. no output
   assert is on
C. assert is on
D. no output
   An AssertionError is thrown.
E. assert is on
   An AssertionError is thrown.

Correct Answer: C

QUESTION 33
Given:

```
public class Donkey {
    public static void main(String[] args) {
        boolean assertsOn = false;
        assert (assertsOn) : assertsOn = true;
        if(assertsOn) {
```

```
            System.out.println("assert is on");
        }
    }
}
```

If class Donkey is invoked twice, the first time without assertions enabled, and the second time with assertions enabled, what are the results?

A. no output
B. no output
   assert is on
C. assert is on
D. no output
   An AssertionError is thrown.
E. assert is on
   An AssertionError is thrown.

Correct Answer: D

QUESTION 34
Given:

```
1. public class Mule {
2.     public static void main(String[] args) {
3.         boolean assert = true;
4.         if(assert) {
5.             System.out.println("assert is true");
6.         }
7.     }
8. }
```

Which command-line invocations will compile?

A. `javac Mule.java`
B. `javac -source 1.3 Mule.java`
C. `javac -source 1.4 Mule.java`
D. `javac -source 1.5 Mule.java`

Correct Answer: B

QUESTION 35
Given:

```
11.    public void go(int x) {
12.        assert (x > 0);
13.        switch(x) {
14.            case 2: break;
15.            default: assert false;
16.        }
17.    }
18.    private void go2(int x) { assert (x < 0); }
```

Which statement is true?

A. All of the assert statements are used appropriately.
B. Only the assert statement on line 12 is used appropriately.
C. Only the assert statement on line 15 is used appropriately.
D. Only the assert statement on line 18 is used appropriately.
E. Only the assert statements on lines 12 and 15 are used appropriately.
F. Only the assert statements on lines 12 and 18 are used appropriately.

G. Only the assert statements on lines 15 and 18 are used appropriately.

Correct Answer: G

QUESTION 36
Given a method that must ensure that its parameter is not null:

```
11. public void someMethod(Object value) {
12. // check for null value
...
20. System.out.println(value.getClass());
21. }
```

What, inserted at line 12, is the appropriate way to handle a null value?

A. `assert value == null;`
B. `assert value != null, "value is null";`
C. `if (value == null) { throw new AssertionException("value is null"); }`
D. `if (value == null) { throw new IllegalArgumentException("value is null"); }`

Correct Answer: D

QUESTION 37
Given:

```
12. System.out.format("Pi is approximately %d.", Math.PI);
```

What is the result?

A. Compilation fails
B. Pi is approximately 3.
C. Pi is approximately 3.141593.
D. An exception is thrown at runtime.

Correct Answer: D

QUESTION 38
Given the following code:

```
package console;

public class Ques02 {

    public static void main(String[] args) {

        int anInt = 100;
        double aDouble = 100.00;

        System.out.format("%2d - %1f", anInt, aDouble);
    }
}
```

What is the output?

A. The program will output '100.000000 – 100'.
B. The program will output '100 - 100.000000'.
C. The program will throw a IllegalFormatConversionException at runtime.
D. The program will output '100 – 100'.

Correct Answer: B

QUESTION 39

Given:

```
01. public class LineUp {
02.   public static void main(String[] args) {
03.         double d = 12.345;
04.         // insert code here
05.     }
06. }
```

Which code fragment, inserted at line 4, produces the output | 12.345|?

A. `System.out.printf("|%7d| \n", d);`
B. `System.out.printf("|%7f| \n", d);`
C. `System.out.printf("|%3.7d| \n", d);`
D. `System.out.printf("|%3.7f| \n", d);`
E. `System.out.printf("|%7.3d| \n", d);`
F. `System.out.printf("|%7.3f| \n", d);`

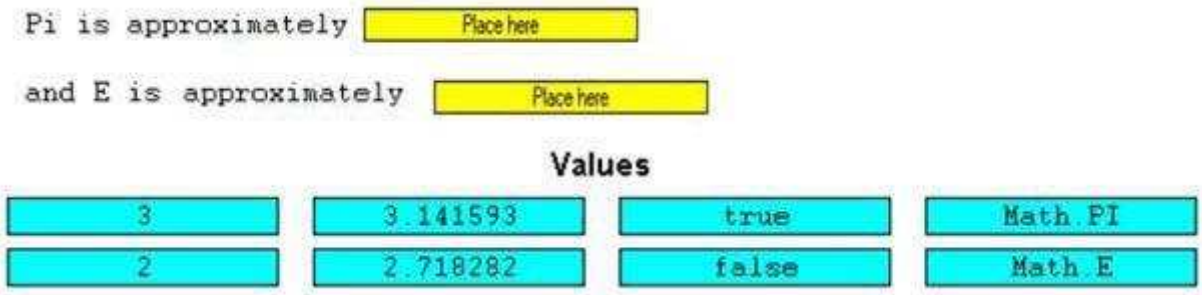
Correct Answer: F

QUESTION 40
Given:

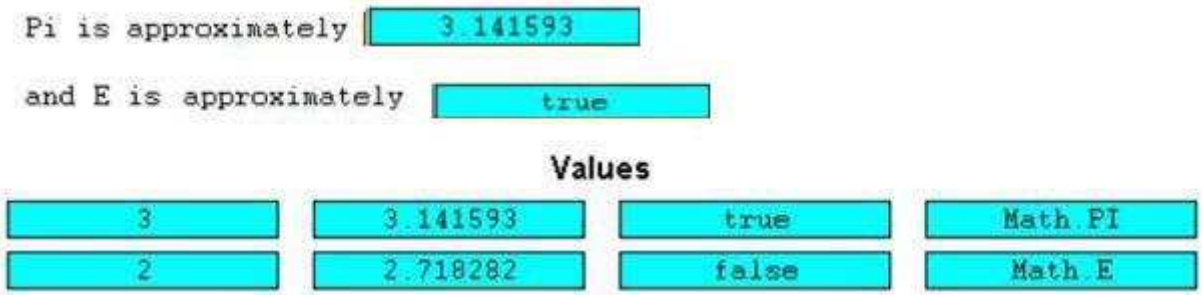
```
System.out.printf("Pi is approximately %f and E is approximately %b", Math.PI,
Math.E);
```

Place the values where they would appear in the output.

Select and Place:



Correct Answer:



QUESTION 41
Given that c is a reference to a valid java.io.Console object, and:

```
11. String pw = c.readPassword("%s", "pw: ");
12. System.out.println("got " + pw);
13. String name = c.readLine("%s", "name: ");
14. System.out.println(" got ", name);
```

If the user types fido when prompted for a password, and then responds bob when prompted for a name, what is the result?

A. pw: got fido name: bob got bob
B. pw: fido got fido name: bob got bob
C. pw: got fido name: bob got bob
D. pw: fido got fido name: bob got bob
E. Compilation fails.
F. An exception is thrown at runtime.

Correct Answer: E

QUESTION 42
Given:

```
01. import java.io.*;
02.
03. public class Talk {
04.    public static void main(String[] args) {
05.        Console c = new Console();
06.        String pw;
07.        System.out.print("password: ");
08.        pw = c.readLine();
09.        System.out.println("got " + pw);
10.    }
11. }
```

If the user types the password aiko when prompted, what is the result?

A. password:
   got
B. password:
   got aiko
C. password: aiko
   got aiko
D. An exception is thrown at runtime.
E. Compilation fails due to an error on line 5.

Correct Answer: E

QUESTION 43
Given that c is a reference to a valid java.io.Console object, which two code fragments read a line of text from the console? (Choose two.)

A. `String s = c.readLine();`
B. `char[] c = c.readLine();`
C. `String s = c.readConsole();`
D. `char[] c = c.readConsole();`
E. `String s = c.readLine("%s", "name ");`
F. `char[] c = c.readLine("%s", "name ");`

Correct Answer: AE