QUESTION
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
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: B

QUESTION
Given the following code, when the last line of main method is reached, how many objects are eligible for GC?

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

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
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
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
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
Consider the following program:

```
class StrEqual {
	public static void main(String []args) {
		String s1 = "hi";
		String s2 = new String("hi");
		String s3 = "hi";
		if(s1 == s2) {
			System.out.println("s1 and s2 equal");
		} else {
			System.out.println("s1 and s2 not equal");
		}
		if(s1 == s3) {
			System.out.println("s1 and s3 equal");
		} else {
			System.out.println("s1 and s3 not equal");
		}
	}
}
```

Which one of the following options provides the output of this program when executed?

a)
s1 and s2 equal
s1 and s3 equal
b)
s1 and s2 equal
s1 and s3 not equal
c)
s1 and s2 not equal
s1 and s3 equal
d)
s1 and s2 not equal
s1 and s3 not equal

Correct Answer: C

QUESTION
Consider the following program and predict the output:

```
class Test {
        public static void main(String []args) {
                String s = new String("5");
                System.out.println(1+10+s+1+10);
        }
}
```

a) 11511
b) 1105110
c) 115110
d) 27

Correct Answer: C

QUESTION
Consider the following program and predict the output:

```
class Test {
        public static void main(String []args) {
                String s = new String("5");
                System.out.println(1.0+10.5+s+(1.0+10.5));
        }
}
```

a) 11.5511.5
b) 11.551.010.5
c) 1.010.551.010.5
d) 11.55(1.010.5)
e) 11.55(11.5)

Correct Answer: A

QUESTION
Consider the following program:

```
class PrintlnTest {
        public static void main(String[] args) {
                String two = "2";
                System.out.println("1 + 2 + 3 + 4 = "
                                        + 1 + Integer.parseInt(two) + 3 + 4); // PARSE
        }
}
```

Which one of the following options correctly describes the behavior of this program?

a) When compiled, this program will give a compiler error in line marked with comment PARSE for missing catch handler for NumberFormatException.
b) When executed, the program prints the following: 1 + 2 + 3 + 4 = 1234.
c) When executed, the program prints the following: 1 + 2 + 3 + 4 = 10.
d) When executed, the program prints the following: 1 + 2 + 3 + 4 = 127.
e) When executed, the program prints the following: 1 + 2 + 3 + 4 = 19.
f) When executed, the program throws a NumberFormatException in the line marked with comment PARSE.

Correct Answer: B

QUESTION
Consider the following program:

```
class NullAccess {
        public static void main(String []args) {
                String str = null;
                System.out.println(str.valueOf(10));
        }
}
```

Which of the following statements correctly describes the behavior of this program?
a) This program will result in a compiler error.
b) This program will throw a NullPointerException.
c) This program will print 10 in console.
d) This program will print null in console.

Correct Answer: C

QUESTION
Consider the following code segment:

```
String str = "A.B.C!";
System.out.println(str.replaceAll(".", ",").replace("!", "?"));
```

When executed, this code segment will print the following:

a) A,B,C!
b) A,B,C?
c) ,,,,,,
d) A.B.C?

Correct Answer: C

QUESTION
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
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
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
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
Consider the following program:

```
class SBAppend {
        public static void main(String []args) {
                Object nullObj = null;
                StringBuffer strBuffer = new StringBuffer(10);
                strBuffer.append("hello ");
                strBuffer.append("world ");
                strBuffer.append(nullObj);
                strBuffer.insert(11, '!');
                System.out.println(strBuffer);
        }
}
```

Which one of the following options correctly describes the behavior of this program?

a) This program prints the following: hello world!
b) This program prints the following: hello world! null
c) This program throws a NullPointerException.
d) This program throws an InvalidArgumentException.
e) This program throws an ArrayIndexOutOfBoundsException

Correct Answer: B

QUESTION
Consider the following program:

```
import java.util.*;
class AsList {
        public static void main(String []args) {
                String hello = "hello";
                String world = "world";
                StringBuffer helloWorld = new StringBuffer(hello + world);
                List<String> list = Arrays.asList(hello, world, helloWorld.toString());
                helloWorld.append("!");
                list.remove(0); // REMOVE
                System.out.println(list);
        }
}
```

Which one of the following options is correct?

a) When compiled, this program will result in a compiler error in linked marked with comment REMOVE.

b) When run, this program will crash with throwing the exception UnsupportedOperationException when executing the line marked with comment REMOVE.
c) When run, this program will print the following output: [hello, world, helloworld]
d) When run, this program will print the following output: [world, helloworld!]
e) When run, this program will print the following output: [world, helloworld]

Correct Answer: B

QUESTION
Consider the following code segment:

```
StringBuffer strBuffer = new StringBuffer("This, that, etc.!");
System.out.println(strBuffer.replace(12, 15, "etcetera"));
```

Which one of the following options correctly describes the behavior of this code segment?
a) This code segment: This, that, etcetera.!
b) This code segment: This, that, etcetera!
c) This code segment: This, that, etc.
d) This program throws in an ArrayIndexOutOfBoundsException.

Correct Answer: A

QUESTION
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
Given a code fragment:

```
StringBuilder sb = new StringBuilder();
String h1 = "HelloWorld";
sb.append("Hello").append("world");
if (h1 == sb.toString()) {
        System.out.println("They match");
}
if (h1.equals(sb.toString())) {
        System.out.println("They really match");
}
```

What is the result?

A. They match
They really match
B. They really match
C. They match
D. Nothing is printed to the screen

Correct Answer: D

QUESTION
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
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
Given:

```
class Feline {
        public static void main(String[] args) {
                Long x = 42L;
                Long y = 44L;
                System.out.print(" " + 7 + 2 + " ");
                System.out.print(foo() + x + 5 + " ");
                System.out.println(x + y + foo());
        }
        static String foo() {
                return "foo";
        }
}
```

What is the result?

A. 9 foo47 86foo
B. 9 foo47 4244foo
C. 9 foo425 86foo
D. 9 foo425 4244foo
E. 72 foo47 86foo
F. 72 foo47 4244foo
G. 72 foo425 86foo
H. 72 foo425 4244foo
I. Compilation fails

Correct Answer: G

QUESTION
How many objects will be eligible for GC just after the method returns?

```
public void compute()
{
        Object a = new Object();
        int x = 100;
        String str = "abc";
}
```

A. 0
B. 1
C. 2
D. 3
E. 4

Correct Answer: B

QUESTION
What is the result of compiling and running the following program.

```
public class test {
        public static void main(String args[]) {
                String str1="abc";
                String str2="def";
                String str3=str1.concat(str2);
                str1.concat(str2);
                System.out.println(str1);
        }
}
```

A. abc
B. def
C. abcabc
D. abcdef
E. defabc
F. abcdefdef

Correct Answer: A

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

```
StringBuilder s1 = new StringBuilder("Test");
StringBuilder s2 = new StringBuilder("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: C