Exam Code: 310-035
Exam Name: SUN CERTIFIED PROGRAMMER FOR THE JAVA 2 PLATFORM 1.4
Vendor: Sun
Version: DEMO
Part: A

1: Click the Exhibit button.
What is the result when main is executed?

```
1. class A {
2.   public A() {
3.     System.out.println("hello from a");
4.   }
5. }
6. class B extends A {
7.   public B() {
8.     System.out.println("hello from b");
9.     super();
10. }
11. }
12. public class Test {
13.   public static void main(String args[]) {
14.     A a = new B();
15.   }
16. }
```

A. Compilation fails.
B. hello from a
C. hello from b
D. hello from b
hello from a
E. hello from a
hello from b

Correct Answers: A

2: Click the Exhibit button.
What is the result?
A. 1
B. 2
C. Compilation fails because of an error in line 8.
D. Compilation fails because of an error in line 14.

Correct Answers: A

3: Given:
1. public class ConstOver {
2.   public ConstOver(int x, int y, int z) {
3.   }
4. }
Which two overload the ConstOver constructor? (Choose two.)
A.ConstOver() { }
B.protected int ConstOver() { }
C.private ConstOver(int z, int y, byte x) { }
D.public Object ConstOver(int x, int y, int z) { }
E.public void ConstOver(byte x, byte y, byte z) { }
Correct Answers: A C

4: Given:
1. class Passenger { }
2. class Engine { }
3. interface TransportVehicle {
4.   void loadPassengers();
5. }
6. interface Helicopter extends TransportVehicle {
7.   int flyIt( String direction );
8. }
9. abstract class JetStream implements Helicopter { }
Which statement is correct?
A.TransportVehicle has a Passenger.
B.Engine is encapsulated in the JetStream class.
C.Interface TransportVehicle forms the basis for polymorphic actions.
D.Non-abstract classes extending JetStream can optionally provide a method definition for the loadPassengers() method.
Correct Answers: C

5: Given:
1. public class MyCircle {
2.   public double radius;
3.   public double diameter;
4.   public void setRadius(double radius) {
5.     this.radius = radius;
6.     this.diameter = radius * 2;
7.   }
8.   public double getRadius() {
9.     return radius;
10. }
11. }
Which statement is true?
A.The MyCircle class is fully encapsulated.
B.The diameter of a given MyCircle is guaranteed to be twice its radius.
C.Lines 5 and 6 should be in a synchronized block to ensure encapsulation.
D.The radius of a MyCircle object can be set without affecting its diameter.
Correct Answers: D
6: Given:
1. public class Outer {
2.   public static class StaticInner {
3.   }
4. }
Which two statements are true? (Choose two.)
A. Class StaticInner requires a static initializer.
B. Class StaticInner requires an instance of class Outer.
C. Class StaticInner has no reference to an instance of class Outer.
D. Class StaticInner has access to the non-static members of class Outer.
E. Static members of class StaticInner can be referenced using the class name Outer.StaticInner.
Correct Answers: C E

7: Given:
12. void start() {
13.   A a = new A();
14.   B b = new B();
15.   a.s(b);
16.   b = null;
17.   a = null;
18.   System.out.println("start completed");
19. }
When is the B object, created in line 14, eligible for garbage collection?
A. after line 16
B. after line 17
C. after line 18 (when the method ends)
D. There is no way to be absolutely certain.
E. The object is NOT eligible for garbage collection.
Correct Answers: D

8: Click the Exhibit button.
Which two statements are correct? (Choose two.)
A. There are no instances of A that will become eligible for garbage collection.
B. Explicitly setting myA to null marks that instance to be eligible for garbage collection.
C. Any call on tryIt() causes the private instance of A to be marked for garbage collection.
D. Private instances of A become eligible for garbage collection when instances of Alpha become eligible for garbage collection.
Correct Answers: B D

9: Which statement is true?
A. Memory is reclaimed by calling Runtime.gc().
B. Objects are not collected if they are accessible from live threads.
C. Objects that have finalize() methods are never garbage collected.
D. Objects that have finalize() methods always have their finalize() methods called before the program ends.
E. An OutOfMemory error is only thrown if a single block of memory cannot be found that is large enough for a particular requirement.
Correct Answers: B

10: Which two conditions can place the thread in a runnable state after wait() has been called on an object in that thread? (Choose two.)
A. A thread calls resume() on the thread.
B. A higher priority thread invokes yield().
C. A higher priority thread invokes sleep();
D. A thread calls notify() on the same object.
E. A thread calls notifyAll() on the same object.
Correct Answers: D E

11: Given:
1. public class Foo implements Runnable {
2.   public void run() {
3.     System.out.println("Running");
4.   }
5.   public void start() {
6.     System.out.println("Starting");
7.   }
8.   public static void main(String[] args) {
9.     new Thread(new Foo()).start();
10. }
11. }

What is the result?
A. Running
B. Starting
C. Compilation fails.
D. The code runs with no output.
E. An exception is thrown at runtime.
Correct Answers: A

12: Which two statements are true? (Choose two.)
A. The wait method can be called with a timeout parameter.
B. The notify method can be invoked on a specific thread of execution.
C. The wait method need not be called from within a synchronized context.
D. The wait and notify methods are defined in class java.lang.Thread.
E. The wait and notify methods are defined in class java.lang.Object.
F. The notify method releases the object's lock regardless of when it is called.
Correct Answers: A E
13: Click the Exhibit button.
Which statement at line 17 will ensure that \( j = 10 \) at line 19?
A. \( a.wait(); \)
B. \( t.wait(); \)
C. \( t.join(); \)
D. \( t.yield(); \)
E. \( t.notify(); \)
F. \( a.notify(); \)
G. \( t.interrupt(); \)
**Correct Answers:** C

14: Which statement is true?
A. To call the join() method, a thread must own the lock of the current thread.
B. To call the sleep() method, a thread must own the lock of the current thread.
C. To call the yield() method, a thread must own the lock of the current thread.
D. To call the notify() method, a thread must own the lock of the current thread.
E. To call the notify() method, a thread must own the lock of the object on which the call is to be made.
**Correct Answers:** E

15: Thread Z holds the lock on object A. Thread X is blocked inside a wait call on object A. What allows thread X to become runnable?
A. Thread X is interrupted.
B. Thread Z is interrupted.
C. Thread X's wait() times out.
D. Thread Z calls Thread.sleep(100);
E. Thread Z releases the lock on A and calls the notify() method on thread X.
F. Thread Z releases the lock on A and calls the notifyAll() method on object A.
**Correct Answers:** F

16: Click the Exhibit button.
Which is the output from this code?
A. Main
B. Worker
C. Main Worker
D. Worker Main
E. indeterminate
F. The code runs with no output.
**Correct Answers:** E

17: Given:
11. try {
12.   if (((new Object()).equals((new String("x")))) { System.out.println("equal");
13.   }
14.   } else {
15.     System.out.println("not equal");
16.   }
17. } catch (Exception e) {
18.     System.out.println("exception");
19. }

What is the result?
A.equal
B.not equal
C.exception
D.Compilation fails.

Correct Answers: B

18: Given:
11. int i = 0, j = 1;
12. if ((i++ == 1) && (j++ == 2)) {
13.     i = 42;
14. }
15. System.out.println("i = "+i+", j = "+j);

What is the result?
A.i = 1, j = 2
B.i = 1, j = 1
C.i = 42, j = 2
D.i = 42, j = 1
E.Compilation fails.

Correct Answers: B

19: Given:
1. public class X {
2.     public static void main(String[] args) {
3.         byte b = 127;
4.         byte c = 126;
5.         byte d = c - b;
6.         System.out.println("d = "+d);
7.     }
8. }

What is the result?
A.d = -1
B.d = 255
C.Compilation fails.
D.An exception is thrown at runtime.

Correct Answers: C