```
Question 0
                  Answer:
Given:
55. int []x = \{1, 2, 3, 4, 5\};
56.int y[] = x;
57. System.out.println(y[2]);
Which is true?
A. Line 57 will print the value 2.
```

- B. Line 57 will print the value 3.
- C. Compilation will fail because of an error in line 55.
- D. Compilation will fail because of an error in line 56.

## Question 1 Answer:

A programmer needs to create a logging method that can accept an arbitrary number of arguments. For example, it may be called in these ways:

```
logIt("log message 1 ");
logIt("log message2","log message3");
logIt("log message4", "log message5", "log message6");
Which declaration satisfies this requirement?
A. public void logIt(String * msgs)
B. public void logIt(String [] msgs)
C. public void logIt(String... msgs)
D. public void logIt(String msg1, String msg2, String msg3)
```

## Question 2 Answer:

```
Given:
10. class Foo {
11. static void alpha() { /* more code here */ }
12. void beta() { /* more code here */ }
13. }
Which two are true? (Choose two.)
A. Foo.beta() is a valid invocation of beta().
B. Foo.alpha() is a valid invocation of alpha().
C. Method beta() can directly call method alpha().
```

## D. Method alpha() can directly call method beta().

Question 3 Answer:

A programmer is designing a class to encapsulate the information about an inventory item. A JavaBeans component is needed to do this. The InventoryItem class has private instance variables to store the item information: 10. private int itemId;

11. private String name;

12. private String description;

Which method signature follows the JavaBeans naming standards for modifying the itemId instance variable?

A. itemID(int itemId)

B. update(int itemId) C. setItemId(int itemId)

D. mutateItemId(int itemId)

E. updateItemID(int itemId)

## Question 4 Answer: Click the Exhibit button.

```
1. public class A {
                 <del>ુ</del>hter = 0;
3. private int
4.
5. public static int getInstanceCount() {
6. return counter;
7. }
8.
9. public A() {
10. counter++;
11. }
12.
13. }
Given this code from Class B:
25.A a1 = new A();
26. A a2 = new A();
27. A a3 = new A();
28. System.out.printIn(A.getInstanceCount());
What is the result?
A. Compilation of class A fails.
B. Line 28 prints the value 3 to System.out.
```

C. Line 28 prints the value 1 to System.out.

```
E. Compilation fails because of an error on line 28.
Question 5
               Answer:
A JavaBeans component has the following field:
11. private boolean enabled;
Which two pairs of method declarations follow the JavaBeans standard
for accessing this field? (Choose two.)
A. public void setEnabled( boolean enabled)
public boolean getEnabled()
B. public void setEnabled( boolean enabled)
public void isEnabled()
C. public void setEnabled( boolean enabled)
public boolean isEnabled()
D. public boolean setEnabled( boolean enabled)
public boolean getEnabled() (=
Question 6
               Answer:
41. Given:
10. class One {
11. public One foo() { return this; }
12. }
13. class Two extends One {
14. public One foo() { return this; }
15. }
16. class Three extends Two {
17. // insert method here
18. }
Which two methods, inserted individually, correctly complete the Three
class? (Choose two.)
A. public void foo() { }
B. public int foo() { return 3; }
C. public Two foo() { return this; }
D. public One foo() { return this; }
E. public Object foo() { return this; }
Question 7
                Answer:
Click the Exhibit button.
1. public interface A {
public void doSomething(String thing);

    public class AImpl implements A {

public void doSomething(String msg) { }
3. }
1. public class B {
2. public A doit() {
3. // more code here
4. }
5.
6. public String execute() {
7. // more code here
9. }
1. public class C extends B {
2. public AImpl doit() {
3. // more code here
4. }
5.
6. public Object execute() {
7. // more code here
8. }
9. }
Which statement is true about the classes and interfaces in the
exhibit?
A. Compilation will succeed for all classes and interfaces.
B. Compilation of class C will fail because of an error in line 2.
C. Compilation of class C will fail because of an error in line 6.
```

D. Compilation of class AImpl will fail because of an error in line 2.

D. A runtime error occurs when line 25 executes.

```
Question 8
               Answer:
Click the Exhibit button.
1. public class A {
2. public String doit(int x, int y) {
3. return "a";
4. }
5.
6. public String doit(int... vals) {
7. return "b";
8. }
9. }
Given:
25. A a=new A();
26. System.out.println(a.doit(4, 5));
What is the result?
A. Line 26 prints "a" to System.out.
B. Line 26 prints 'b" to System.out.
C. An exception is thrown at line 26 at runtime.
D. Compilation of class A will fail due to an error in line 6.
Question 9
               Answer:
Given:
1. public class A {
2. public void doit() {
3. }
4. public String doit() {
5. return "a";
6. }
7. public double doit(int x) {
8. return 1.0;
9. }
10.}
What is the result?
A. An exception is thrown at runtime.
B. Compilation fails because of an error in line 7.
C. Compilation fails because of an error in line 4.
D. Compilation succeeds and no runtime errors with class A occur.
Question 10 Answer:
Click the Exhibit button.
11. class Person {
12. String name = "No name';
13. public Person(String nm) { name = nm; }
```

```
14. }
15.
16. class Employee extends Person {
17. String emplD = "0000";
18. public Employee(String id) { empID = id; }
19. }
20.
21. public class EmployeeTest {
22. public static void main(String[] args) {
23. Employee e = new Employee("4321");
24. System.out.println(e.empID);
25. }
26. }
What is the result?
A. 4321
B. 0000
C. An exception is thrown at runtime.
```

D. Compilation fails because of an error in line 18.

```
Question 11
               Answer:
Given:
10. class One {
11. public One() { System.out.print(1); }
12. }
13. class Two extends One {
14. public Two() { System.out.print(2); }
15. }
16. class Three extends Two {
17. public Three() { System.out.print(3); }
18. }
19. public class Numbers{
20. public static void main( String[] argv) { new Three(); }
What is the result when this code is executed?
A. 1
B. 3
C. 123
D. 321
E. The code rims with no output.
Question 12 Answer:
Given:
1. public class Plant {
2. private String name;
3. public Plant(String name) { this.name = name; }
4. public String getName() { return name; }
5. }
1. public class Tree extends Plant {
2. public void growFruit() { }
3. public void dropLeaves() { }
4. }
Which is true?
A. The code will compile without changes.
B. The code will compile if public Tree() { Plant(); } is added to the
Tree class.
C. The code will compile if public Plant() { Tree(); } is added to the
Plant class.
D. The code will compile if public Plant() { this("fern"); } is added to
the Plant class.
E. The code will compile if public Plant() { Plant("fern"); } is added to
the Plant class.
Question 13 Answer:
Given:
10.int x=0;
11.int y 10;
12. do {
13. y--;
14. ++x;
15. } while (x < 5);
16. System.out.print(x + "," + y);
What is the result?
A. 5,6
B. 5,5
C. 6,5
D. 6,6
Question 14 Answer:
Given:
25.int x=12;
26. while (x < 10) {
27. x--;
28. }
System.out.print(x);
What is the result?
```

A. 0

```
C. 12
D. Line 29 will never be reached.
Question 15 Answer:
Given:
35. int x = 10;
36. do {
37. x--;
38. } while(x< 10);
How many times will line 37 be executed?
A. ten times
B. zero times
C. one to me times
D. more than ten times
Question 16 Answer:
Given:
11. public static void main(String[] args) {
12. for (int i=0;i <= 10;i++){
13. if( i>6) break;
14. }
15. System.out.println(i);
16. }
What is the result?
A. 6
B. 7
C. 10
D. 11
E. Compilation fails.
F. An exception is thrown at runtime.
Question 17 Answer:
Given:
11. abstract class Vehicle { public int speed() { return 0; } }
12. class Car extends Vehicle { public int speed() { return 60; } }
13. class RaceCar extends Car { public int speed() { return 150; }}
21. RaceCar racer = new RaceCar();
Car car = new RaceCar();
23. Vehicle vehicle = new RaceCar();
24. System.out.println(racer.speed() + ", ' + car.speed()
25. + ", "+ vehicle.speed());
What is the result?
A. 0, 0,0
B. 150, 60, 0
C. Compilation fails.
D. 150, 150, 150
E. An exception is thrown at runtime.
Question 18
Given:
10. abstract class A {
11. abstract void a1();
12. void a2() { }
13. }
14. class B extends A {
15. void a1() { }
16. void a2() { }
17. }
18. class C extends B { void c1() { } }
A x = \text{new B}(); C y = \text{new C}(); A z = \text{new C}();
Which four are valid examples of polymorphic method calls? (Choose
four.)
A. x.a2();
B. z.a2();
C. z.c1();
D. z.a1();
E. y.c1();
F. x.a1();
```

B. 10

```
Question 19 Answer:
Given:
10. interface A { void x(); }
11. class B implements A { public void x() { } public voidy() { } }
12. class C extends B { public void x() {} }
And:
java.util.List<A> list = new java.util.ArrayList<A>();
21. list.add(new B());
22. list.add(new C());
23. for (A a:list) {
24. a.x();
25. a.y();;
26. }
What is the result?
A. The code runs with no output.
B. An exception is thrown at runtime.
C. Compilation fails because of an error in line 20.
D. Compilation fails because of an error in line 21.
E. Compilation fails because of an error in line 23.
F. Compilation fails because of an error in line 25.
Question 20
Given:
1. interface DoStuff2 {
2. float getRange(int low, int high); }
3.
4. interface DoMore {
5. float getAvg(int a, int b, int c); }
7. abstract class DoAbstract implements DoStuff2, DoMore { }
8.
9. class DoStuff implements DoStuff2 {
10. public float getRange(int x, int y) { return 3.14f; } }
11.
12. interface DoAll extends DoMore {
13. float getAvg(int a, int b, int c, int d); }
What is the result?
A. The file will compile without error.
B. Compilation fails. Only line 7 contains an error.
C. Compilation fails. Only line 12 contains an error.
D. Compilation fails. Only line 13 contains an error.
E. Compilation fails. Only lines 7 and 12 contain errors.
```

F. Compilation fails. Only lines 7 and 13 contain errors.

G. Compilation fails. Lines 7, 12, and 13 contain errors.