Question 1
Given:
11. public interface Status {
12. /* insert code here */ int MY_VALUE = 10;
13.
}
Which three are valid on line 12?
(Choose three.)
A. final
B. static
C. native
D. public
E. private
F. abstract
G. protected

Question 2
Given:
10. public class Bar {
11.static void foo(int...x) {
12. // insert code here 13. }
14. }
Which two code fragments, inserted independently at line 12, will allow the class to compile?
(Choose two.)
A. foreach(x) System.out.println(z);
B. for(int z : x) System.out.println(z);
C. while(x.hasNext()) System.out.println(x.next());
D. for(int i=0; i< x.length; i++) System.out.println(x[i]);

Question 3
Given:
11. public class Test {
12. public static void main(String [] args) {
13. int x =5;
14. boolean b1 = true;
15. boolean b2 = false;
16.
17.if((x==4) && !b2)
18. System.out.print("l ");
19. System.out.print("2 ");
20. if ((b2 = true) && b1)
21. System.out.print("3 ");
22. }
23. }
What is the result?
A. 2
B. 3
C. 1 2
D. 2 3
E. 1 2 3
F. Compilation fails.
G. Au exceptional is thrown at runtime.

Question 4
Given:
31. // some code here
32. try {
33. // some code here
34. } catch (SomeException se) {
35. // some code here
36. } finally {
37. // some code here
38. }
Under which three circumstances will the code on line 37 be executed?
(Choose three.)
A. The instance gets garbage collected.
B. The code on line 33 throws an exception.
C. The code on line 35 throws an exception.
D. The code on line 31 throws an exception.
E. The code on line 33 executes successfully.

Question 5
Given:
10. interface Foo {}
11. class Alpha implements Foo { }
12. class Beta extends Alpha {}
13. class Delta extends Beta {
14. public static void main(String[] args) {
15. Beta x = new Beta();
16. // insert code here
17. }
18. }
Which code, inserted at line 16, will cause a java.lang.ClassCastException?
A. Alpha a = x;
B. Foo f= (Delta)x;
C. Foo f= (Alpha)x;

D. Beta b = (Beta)(Alpha)x;

Question 6

Given:

20. public class CreditCard {
21.
22. private String cardID;
23. private Integer limit;
24. public String ownerName;
25.
26. public void setCardInformation(String cardID,
27. String ownerName,
28. Integer limit) {
29. this.cardID = cardID;
30. this.ownerName = ownerName;
31. this.limit = limit;
32. }
33. }

Which is true?

A. The class is fully encapsulated.
B. The code demonstrates polymorphism.
C. The ownerName variable breaks encapsulation.
D. The cardID and limit variables break polymorphism.
E. The setCardInformation method breaks encapsulation.

Question 7

Assume that country is set for each class.
Given:

10. public class Money {
11. private String country, name;
12. public getCountry() { return country; }
13.} and:
24. class Yen extends Money {
25. public String getCountry() { return super.country; }
26. }
27.
28. class Euro extends Money {
29. public String getCountry(String timeZone) {
30. return super.getCountry();
31. }
32. }

Which two are correct? (Choose two.)

A. Yen returns correct values.
B. Euro returns correct values.
C. An exception is thrown at runtime.
D. Yen and Euro both return correct values.
E. Compilation fails because of an error at line 25.
F. Compilation fails because of an error at line 30.

Question 8

Which Man class properly represents the relationship "Man has a best friend who is a Dog"?

A. class Man extends Dog { }
B. class Man implements Dog { }
C. class Man { private BestFriend dog; }
D. class Man { private Dog bestFriend; }
E. class Man { private Dog<bestFriend> }
F. class Man { private BestFriend<dog> }

Question 9

Given:

13. public class Pass {
14. public static void main(String [1 args) {
15. int x 5;
16. Pass p = new Pass();
17. p.doStuff(x);
18. System.out.print(" main x = "+ x);
19. }
20.
21. void doStuff(int x) {
22. System.out.print(" doStuff x = "+ x++);
23. }
24. }

What is the result?

A. Compilation fails.
B. An exception is thrown at runtime.
C. doStuffx = 6 main x = 6
D. doStuffx = 5 main x = 5
E. doStuffx = 5 main x = 6
F. doStuffx = 6 main x = 5

Question 10

Given:

```
10. package com.sun.scjp;
11. public class Geodetics {
12. public static final double DIAMETER =
12756.32; // kilometers
13. }
```

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; } }
```

Question 11

Given:

```
10. interface Foo { int bar(); }
11. public class Sprite {
12. public int fubar( Foo foo) { return foo.bar(); }
13. public void testFoo() {
14. fubar(
15. // insert code here
16.);
17. }
18. }
```

Which code, inserted at line 15, allows the class Sprite to compile?

A. Foo { public int bar() { return 1; } }
B. new Foo { public int bar() { return 1; } }
C. newFoo() { public int bar(){return 1; } }
D. new class Foo { public int bar() { return 1; } }

Question 12

Given:

```
1. public interface A {
2. String DEFAULT_GREETING = "Hello World";
3. public void method1();
4. }
```

A programmer wants to create an interface called B that has A as its parent. Which interface declaration is correct?

A. public interface B extends A { }
B. public interface B implements A {}
C. public interface B instanceOf A {}
D. public interface B inheritsFrom A { }

Question 13

Given:

```
1. class TestA {
2. public void start() {
System.out.println("TestA"); }
3. }
4. public class TestB extends TestA {
5. public void start() {
System.out.println("TestB"); }
6. public static void main(String[] args) {
7. ((TestA)new TestB()).start();
8. }
9. }
```

What is the result?

A. TestA
B. TestB
C. Compilation fails.
D. An exception is thrown at runtime.

Question 14
Given:

1. interface TestA { String toString(); }
2. public class Test {
3. public static void main(String[] args) {
4. System.out.println(new TestA() {
5. public String toString() { return "test"; }
6. });
7. }
8. }

What is the result?

A. test
B. null
C. An exception is thrown at runtime.
D. Compilation fails because of an error in line 1.
E. Compilation fails because of an error in line 4.
F. Compilation fails because of an error in line 5.

Question 15
Given:
11. public abstract class Shape {
12. int x;
13. int y;
14. public abstract void draw();
15. public void setAnchor(int x, int y) {
16. this.x = x;
17. this.y = y;
18. }
19. }

and a class Circle that extends and fully implements the Shape class.

Which is correct?
A. Shape s = new Shape(); s.setAnchor(10,10); s.draw();
B. Circle c = new Shape(); c.setAnchor(10,10); c.draw();
C. Shape s = new Circle(); s.setAnchor(10,10); s.draw();
D. Shape s = new Circle(); s->setAnchor(10,10); s->draw();
E. Circle c = new Circle(); c.Shape.setAnchor(10,10); c.Shape.draw();

Question 16
Given:

10. abstract public class Employee {
11. protected abstract double getSalesAmount();
12. public double getCommision() {
13. return getSalesAmount() * 0.15; 14. }
15. }
16. class Sales extends Employee {
17. // insert method here
18. }

Which two methods, inserted independently at line 17, correctly complete the Sales class? (Choose two.)

A. double getSalesAmount() { return 1230.45; }
B. public double getSalesAmount() { return 1230.45; }
C. private double getSalesAmount() { return 1230.45; }
D. protected double getSalesAmount() { return 1230.45; }

Question 17
Given:

10. interface Data { public void load(); }
11. abstract class Info { public abstract void load(); }

Which class correctly uses the Data interface and Info class?

A. public class Employee extends Info implements Data
{ public void load()
{ /*do something*/ }
}

B. public class Employee implements Info extends Data
{ public void load() {
/*do something*/ }
}

C. public class Employee extends Info implements Data
{ public void load() {
/*do something */ }
public void Info.load()
{ /*do something*/ }
}

D. public class Employee implements Info extends Data
{ public void Data.load() { /*d something */ }
public void load() { /*do something */ }
}

E. public class Employee implements Info extends Data
{ public void load() { /*do something */ }
public void Info.load(){ /*do something*/ } }

F. public class Employee extends Info implements Data
{ public void Data.load() { /*do something*/ }
public void Info.load() { /*do something*/ } }

Question 18
Given:

11. public abstract class Shape {
12. private int x;
13. private int y;
14. public abstract void draw();
15. public void setAnchor(int x, int y) {
16. this.x = x;
17. this.y = y;
18. }
19. }

Which two classes use the Shape class correctly? (Choose two.)

A. public class Circle implements Shape { private int radius; }
B. public abstract class Circle extends Shape { private int radius; }
C. public class Circle extends Shape { private int radius; public void draw(); }
D. public abstract class Circle implements Shape { private int radius; public void draw(); }
E. public class Circle extends Shape { private int radius; public void draw() {/* code here */} }
F. public abstract class Circle implements Shape { private int radius; public void draw() { / code here */ } }

Question 19
Given:
11. public static void parse(String str) {
12. try {
13. float f= Float.parseFloat(str);
14. } catch (NumberFormatException nfe) {
15. f= 0;
16. }
finally {
17. System.out.println(f);
18. }
19. }
20. public static void main(String[] args) {
21. parse("invalid");
22. }

What is the result?

A. 0.0
B. Compilation fails.
C. A ParseException is thrown by the parse method at runtime.
D. A NumberFormatException is thrown by the parse method at runtime.

Question 19

1. public class Test {
2. int x= 12;
3. public void method(int x) {
4. x+=x;

5. System.out.println(x);
6. }
7. }

Given:
34. Test t = new Test();
35. t.method(5);

What is the output from line 5 of the Test class?
A. 5
B. 10
C. 12
D. 17
E. 24

Question 20
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 21

Which two code fragments correctly create and initialize a static array of int elements? (Choose two.)

A. static final int[] a = { 100,200 };
B. static final int[] a;
static { a=new int[2]; a[0]=100; a[1]=200; }
C. static final int[] a = new int[2] { 100,200 };
D. static final int[] a;
static void init() { a = new int[3]; a[0]=100; a[1]=200; }

Question 22
Given:

11. public static void main(String[] args) {
12. Object obj =new int[] { 1,2,3 };
13. int[] someArray = (int[])obj;
14. for (int i: someArray) System.out.print(i +" ")
15. }

What is the result?

A. 1 2 3
B. Compilation fails because of an error in line 12.
C. Compilation fails because of an error in line 13.
D. Compilation fails because of an error in line 14.
E. A ClassCastException is thrown at runtime.

Question 23
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 24

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 25

```
1. public class A {
2.
3. private int counter = 0;
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.
D. A runtime error occurs when line 25 executes.
E. Compilation fails because of an error on line 28.

Question 26

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 27

Given:

```
10. class One {
11. void foo() {}
12. }
13. class Two extends One {
14. //insert method here
15. }
```

Which three methods, inserted individually at line 14, will correctly complete class Two? (Choose three.)

A. int foo() { /* more code here */ }
B. void foo() { /* more code here */ }
C. public void foo() { /* more code here */ }
D. private void foo() { /* more code here */ }
E. protected void foo() { /* more code here */ }

Question 28

```
1. public interface A {
2. public void doSomething(String thing);
3. }
```

```
1. public class AImpl implements A {
2. 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
8. }
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.

Question 29

```
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 30

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 31

Given:

```
10. class Line {
11. public static class Point { }
12. }
13.
14. class Triangle {
15. // insert code here
16. }
```

Which code, inserted at line 15, creates an instance of the Point class defined in Line?
A. Point p = new Point();
B. Line.Point p = new Line.Point();
C. The Point class cannot be instatiated at line 15.

D. Line 1 = new Line() ; 1.Point p = new 1.Point();

Question 32

Given:

```
10. class Line {
11. public class Point { public int x,y; }
12. public Point getPoint() { return new Point(); }
13. }
14. class Triangle {
15. public Triangle() {
16. // insert code here
17. }
18. }
```

Which code, inserted at line 16, correctly retrieves a local instance of a Point object?

A. Point p = Line.getPoint();
B. Line.Point p = Line.getPoint();
C. Point p = (new Line()).getPoint();
D. Line.Point p = (new Line()).getPoint();

Question 33

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(); }
21. }
```

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 34

```
11. class Person {
12. String name = "No name';
13. public Person(String nm) { name = nm; }
14. }
15.
16. class Employee extends Person {
17. String empID = "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 35

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 36

```
11. public class Bootchy {
12. int bootch;
13. String snootch;
14.
 15. public Bootchy() {
 16. this("snootchy");
17. System.out.print("first ");
 18. }
 19.
 20. public Bootchy(String snootch) {
 21. this(420, "snootchy");
22. System.out.print("second ");
 23. }
24.
 25. public Bootchy(int bootch, String snootch) {
26. this.bootch = bootch;
 27. this.snootch = snootch;
 28. System.out.print("third ");
 29. }
 30.
 31. public static void main(String[] args) {
 32. Bootchy b = new Bootchy();
 33. System.out.print(b.snootch +" " +
b.bootch);
34. }
 35. }
```

What is the result?
A. snootchy 420 third second first
B. snootchy 420 first second third
C. first second third snootchy 420
D. third second first siiootchy 420
E. third first second snootchy 420
F. first second first third snootchy 420