Exam : 310-055

Title : Sun Certified Programmer for the Java 2 Platform, Standard Edition 5.0

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QUESTION 1

```
12.   import java.io.*.;
13.   public class Forest implements Serializable {
14.   private Tree tree = new Tree ( );
15.   public static void main (String [ ] args) {
16.    Forest f = new Forest ( );
17.    try {
18.      FileOutputStream fs  = new FileOutput Stream  ("Forest. Ser");
19.      ObjectOutputStream  OS  = new FileOutputStream (fs)  ;
20.      os.writeObject (f) ;       OS . Close  ( );
21     } catch (Exception ex) { ex.PrintStackTrace ( ); }
22
23.   .
24.   class Tree   { }
```

Given the code in the exhibit.
What is the result?

A. Compilation fails
B. An exception is thrown at runtime.
C. An instance of Forest is serialized.
D. An instance of Forest and an instance of Tree are both serialized.

Answer: B

QUESTION 2

```
 1. import java.io.*;
 2. public class Foo implements Serializable
{
 3.    public int x, y;
 4.    public Foo( int x, int y ) { this.x =
x; this.y = y; }
 5.
 6.    private void writeObject(
ObjectOutputStream s )
 7.          throws IOException {
 8.       s.writeInt(x); s.writeInt(y) ;
 9.    }
10.
11.    private void readObject(
ObjectInputStream s )
12.          throws IOException,
ClassNotFoundException {
13.
14.       // insent code here
15.
16.    }
17. }
```

Which code, inserted ay line 14, will allow this class to correctly serialized and desterilize?

A. S. default ReadObject ();
B. This = s.defaultReadObject ();
C. Y = s.default (); x = s.readInt ();
D. X = s.readlInt; y = s.readInt ();

Answer: D

QUESTION 3
Given the exhibit.

```
11.  String test = "This is a test" ;
12.  String [ ] tokens = test.split ("\s");
13.  System.out.printIn (tokens.lengyh);
```

What is the result?

A. 0
B. 1
C. 4
D. Compilation fails
E. An exception is thrown at runtime

Answer: D

QUESTION 4
Given the exhibit:

```
12.  Date date = new Date ();
13.  df.setLocale (Local.Italy);
14.  String s = df. Format (date);
```

The variable df is an object of type DateFormat that has been initialized in line 11.
What is the result if this code is run on December 14,2000?

A. The value of S is 14 - dic-2004
B. The value of S is Dec 14, 2000
C. An exception is thrown at runtime
D. Compilation fails because of an error in line 13.

Answer: D

QUESTION 5
The doesFileExist method takes an array of directory names representing a path from the root filesystem and a file name. The method returns true if the file exists, falst if does not.
Place the code fragments in position to complete this method.

```
Place here
for ( String dir : directories ) {
    Place here
}
Place here
Place here
}
```

Code Fragments

path = path.getSubdirectory(dir);	return ! file.isNew();	return (file != null);
String path ="";	path = path.getFile(filename);	File path = new File("");
return file.exists[];	return path is file[];	File file = new File(path, filename);
path = new File(path, dir);	File path = new File(File.separator);	path = path + File.separator + dir;

Answer:

Explanation: Pending

QUESTION 6
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.

```
Pi is approximately  Place here
and E is approximately  Place here
```

Values

3	3.141593	true	Math.PI
2	2.718282	false	Math.E

Answer:

Explanation: Pending.

QUESTION 7
When comparing java. Io. BufferedWriter to java.io.FileWriter, which capability exist as a method in only one of the two?

A. closing the stream
B. flushing the stream
C. writing to the stream
D. marking a location in the stream
E. writing a line separator to the stream

Answer: E

QUESTION 8
Given the exhibit:

```
1.    public class Certkiller3    {
2.      public static void main (String [ ] args)   {
3.       // insert code here

5.    System.out.println (s);
6.    }
7.    }
```

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) replace(1,3,). Delete (2,5) insert (1, "24")

Answer: B,E

QUESTION 9
Which three statements concerning the use of the java . io. Realizable interface are true? (choose three)

A. Object from classes that use aggregation cannot be serialized.
B. An object serialized on one JVM can be successfully desterilized on a different JVM.
C. The values in fields with the Volatile modifier will NOT survive serialization and deserialization
D. The values in field with the transient modifier will NOT survive serialization and deserialization
E. It is legal to serialize an object of a type that has a supertype that does NOT implement java .io.Serialization

Answer: B,D,E

QUESTION 10
Given the exhibit:

```
12.          public class Certkiller    {
13.            public static void go (short n)  {Sysem.out.printIn("short");}
14.            public static void go (short n)  {Sysem.out.printIn("SHORT");}
15.            public static void go (Long n)  {Sysem.out.printIn("LONG");}
16.            public static void MAIN (Storing [ ] args)   {
17.               Short  y  =  6;
18.               int  z  =  7;
19.        go (y)
20.        go (z)
21.          }
22.  }
```

What is the result?

A. short Long
B. SHORT LONG
C. Compilation fails
D. An exception is thrown at runtime

Answer: C

QUESTION 11
Given the exhibit:
* D is valid , non-null Dateobject
* df is a valid, non-null DateFormat object set to the current local
What outputs the current ; local's country name and the appropriate version of d's date?

A. Local loc = Local.getLocal ( );
System.out printIn (loc.getDisplayCountry ( )
B. Local loc = Local.getDefault ( );
System.out printIn (loc.getDisplayCountry ( )
+ " " " +df. Format (d));
C. Local loc = Local.getLocal ( );
System.out printIn (loc.getDisplayCountry ( )
+ " " +df. setDateFormat (d));
D. Local loc = Local.getDefault ( );
System.out printIn (loc.getDisplayCountry ( )
+ " " +df.seDateFormat (d));

Answer: B

QUESTION 12
Given the exhibit:

```
1.    public class  Certkiller3  implements Runnable  {
2.      public void run  ()   {
3.       system.out.print  ("running");
4.      }
5.      public static void main (String [ ] args)  {
6.              Thread  t  =  new  Thread (new  Certkiller3    () ) ;
7.          t.run  ();
8.          t.run( ) ;
9.          t.start  ( ) ;
10.     }
11.   }
```

What is the result?

A. Compilation fails.
B. An exception is thrown at runtime
C. The code executes and prints " running"
D. The code executes and prints "runningrunning"
E. The code executes and prints "runningrunninigrunning

Answer: E

QUESTION 13
Exhibit:

```
 1. public class Threads1 {
 2.   int x = 0;
 3.   public class Runner implements Runnable
{
 4.     public void run() {
 5.       int current = 0;
 6.       for(int i = 0; i < 4; i++) {
 7.         current = x;
 8.         System.out.print(current + ", ");
 9.         x = current + 2;
10.       }
11.     }
12.   }
13.
14.   public static void main(String[] args) {
15.     new Threads1().go();
16.   }
17.
18.   public void go() {
19.     Runnable r1 = new Runner();
20.     new Thread(r1).start();
21.     new Thread(r1).start();
22.   }
23.}
```

Which two are possible results? (choose two)

A. 0,2,4,4,6,8,10,6,
B. 0,2,4,6,8,10,2,4,

C. 0,2,4,6,8,10,12,14,
D. 0,0,2,2,4,4,6,6,8,8,10,10,12,12,14,14,
E. 0,2,4,6,8,10,12,14,0,2,4,6,8,10,12,14,

Answer: A,C

QUESTION 14
Given the exhibit:

```
7       void waitForSignal ( )  {
6.          object obj = new Object ( );
7.          synchronized (Thread.currentThread ( ) )  {
8.             obj.wait ( );
9.             obj.notify ( ) ;
10.         }
11.         }
```

Which statement is true?

A. This code may throw an InterruptedException
B. This code may throw an IllegalStateExcepion
C. This code may throw a TimeOutException after ten minutes
D. This code will not compile unless "obj.wait ( ) \" is replaced with " ((Thread) obj) .wait ( )"
E. Reversing the order of obj.wait ( ) and obj. notify ( ) may vcause this method to complete normally

Answer: B

QUESTION 15
Given the exhibit:

```
1.      public class TestOne implements Runnable  {
2.        public static void main (String [ ] args)  throws Exception  {
3.           Thread t  =  new Thread  (new TestOne( ) ) ;
4.           t.start  ( );
5.           System.out.print ("Started")
6.            t.join  ( );
7.      System.out.print ("Complete");
8.      }
9.      public void run  ( )  {
10.       for  (int I = 0; I < 4;  i++)  {
11.          System.out.print ( i );
12.           }
13.       }
14.    }
```

What can be a result?

A. Compilation fails
B. An exception is thrown at runtime
C. The code executes and prints "StartedComplete"
D. The code executes and prints "StartedComplete0123"
E. The code executes and prints "Started0123Complete"

Answer: E

QUESTION 16
Which two code fragments will execute the method doStuff ( ) in a separate thread?
(choose two)

A. new Thread ( ) {
public void run ( ) { doStuff ( ); }
};
B. new Thread ( ) {
public void run ( ) { doStuff ( ); }
};
C. new Thread ( ) {
public void run ( ) { doStuff ( ); }
}; run ( );
D. new Thread ( ) {
public void run ( ) { doStuff ( ); }
}; start ( );
E. new Thread (new Runable ( ) {
public void run ( ) { doStuff ( ); }
}; run ( ) ;
F. new Thread (new Runnable ( ) {
public void run ( ) { doStuff ( ); }
}), start ( );

Answer: D,F

QUESTION 17
Which three will compile and run without exception? (choose three)

A. private synchronized object o;
B. void go ( ) {
synchronized ( ) { /* ocde here */ }
}
C. public synchronized void go ( ) { /* code here */ }
D. private synchronized (this) void go ( ) { /* code here */ }
E. void go ( ) {
synchronized (object.class) { /* code here */ }
}
F. void go ( ) {

synchronized (o) { /* code here */ }
}

Answer: C,E,F

QUESTION 18
Exhibit:

```
1.  class Computation extends Thread {
2.
3.    private int num;
4.    private boolean isComplete;
5.    private int result;
6.
7.    public Computation(int num) { this.num
= num; }
8.
9.    public synchronized void run() {
10.     result = num * 2;
11.     isComplete = true;
12.     notify();
13.   }
14.
15.   public synchronized int getResult() {
16.     while (!isComplete) {
17.       try {
18.         wait();
19.       } catch (InterruptedException e)
{}
20.     }
21.     return result;
22.   }
23.
24.   public static void main(String[] args)
{
25.     Computation[] computations = new
Computation[4];
26.     for (int i = 0; i <
computations.length; i++) {
27.       computations[i] = new
Computation(i);
28.       computations[i].start();
29.     }
30.     for (Computation c : computations)
31.       System.out.print(c.getResult() + "
");
32.   }
33. }
```

What is the result?

A. The code will deadlock
B. The code may run with no output
C. An exception is thrown at runtime
D. The code may run with output " 0 6 "
E. The code may run with output "2 0 6 4"
F. The code may run with output "0 2 4 6"

Answer: F

QUESTION 19
Given the exhibit:

```
      Public class  Certkiller  {
1.       public static void main (String [ ] args) throws Exception  {
2.         Thread.sleep (3000);
3.          System.out.ptintIn ("sleep");
4.       }
5.    }
```

What is the result?

A. Compilation fails
B. An exception is thrown at runtime
C. The code executes normally and prints "sleep"
D. The code executes normally, but nothing is printed.

Answer: C

QUESTION 20
Which two statements are true about has-a and is a relationships? (choose two)

A. Inheritance represents an is -a relationship
B. Inheritance represents a has-a relationship
C. Interfaces must be used when creating a has-a relationship
D. Instance variables can be used when creating a has-a relationship

Answer: A,D

QUESTION 21
Given the exhibit:

```
1.    package certkiller
2.
3.    class Target  {
4.      public String  name  =  "hello"
5.    }
```

What can directly access and change the value of the variable name?

A. any class
B. only the Target class
C. any class in the Certkiller package
D. any class that extends Target

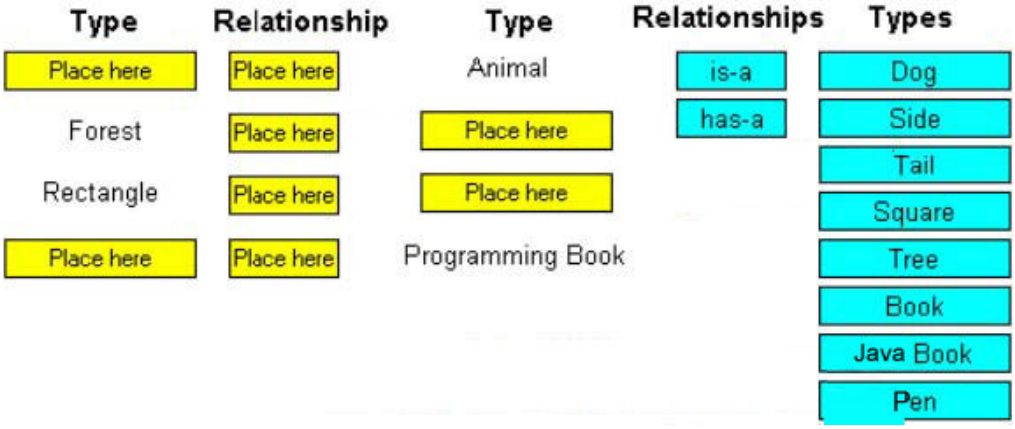
Answer: C

QUESTION 22
Which three statements are true? (choose three)

A. A final method in class x can be abstract if and only if X is abstract
B. A protected method in class x can be overridden by any subclass of x.
C. A private static method can be called only within other static methods in class X.
D. A non-static public final method in class X can be overridden in any subclass of X.
E. A public static method in class X can be called by a subclass of X without explicitly referencing the class x.
F. A method with the same signature as a private final method in class X can be implemented in a subclass of X.

Answer: B,E,F

QUESTION 23
Place the Types in one of the Type columns, and the Relationships in the Relationship column, to define appropriate has-a and is-a relationships.



Answer:

Explanation: Pending.

QUESTION 24
Replace two of the Modifiers that appear in the Single class to make the code compile.
Note: Three modifiers will not be used and four modifiers in the code will remain unchanged.

Code

```
public class Single {
  private static Single instance;
  public static Single getInstance() {
    if (instance == null) instance = create();
    return instance;
  }
  private Single() { }
  protected Single create() { return new Single(); }
}

class SingleSub extends Single {
}
```

Modifiers

final
protected
private
abstract
static

Answer:

Explanation: Pending.

QUESTION 25

Exhibit:

```
1. public class SimpleCalc {
2.   public int value;
3.   public void calculate() { value += 7; }
4. }
```

And:

```
1. public class MultiCalc extends
SimpleCalc{
2.   public void calculate() { value -= 3; }
3.   public void calculate(int multiplier) {
4.     calculate();
5.     super.calculate();
6.     value *= multiplier;
7.   }
8.   public static void main(String[] args)
{
9.     MultiCalc calculator = new
MultiCalc();
10.    calculator.calculate(2);
11.    System.out.println("Value is: " +
calculator.value);
12.  }
13. }
```

What is the result?

A. Value is : 8
B. Compilation fails.
C. Value is : 12
D. Value is ; -12
E. The code runs with no output
F. An exception is thrown at runtime.

Answer: A

QUESTION 26
Given the exhibit:

```
20.    public class  Certkiller  Card    {
21.    .
22.    private String card ID:
23.    private Integr limit;
24.    public String ownerName;
25.    .
26.     public void set CardInformation (String cardID,
27.                                      String ownerName,
28.                                       Integer limit)  {
29.    this.cardID  =  cardID;
30.    this.ownerName  =  ownerName,
31.    this.limit  =  limit;
32.      }
33.    }
```

Which statement 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

Answer: C

QUESTION 27
Given the exhibit:

```
11.   class Animal  {  public String  noise ( )  {  return  " peep" }   }
12.    class Dog extends Animal  {
13.      public String  noise  ( )  {  return  "back";  }
14.      }
15.    class Cat extends Animal   {
16.      public String noise  ( )  {  return  "move";  }
17.    }
.....
30.    Animal animal  =new Dog ( );
31.    Cat  cat  =  (Cat)  animal;
32.    System.out.printIn (Cat. Noise ( ) );
```

What is the result?

A. peep
B. bark
C. meow

D. Compilation fails.
E. An exception is thrown at runtime

Answer: E

QUESTION 28
Exhibit:

```
1.  public class Car {
2.    private int wheelCount;
3.    private String vin;
4.    public Car(String vin) {
5.      this.vin = vin;
6.      this.wheelCount = 4;
7.    }
8.    public String extend() {
9.      return  "zoom "zoom ",
10.   }
11.   public String getInfo() {
12.     return "VIN: " + vin + " wheels: " +
wheelCount;
13.   }
14. }
```

And:

```
1.  public class MeGo extends Car {
2.    public MeGo(String vin) {
3.      this.wheelCount = 3;
4.    }
5.  }
```

What two must the programmer do to oerrect the compilation errors?

A. insert a call to this ( ) in the Car CONSTRUCTOR
B. insert a call to this ( ) in the MeGo constructor
C. insert a call to super ( ) in the MeGo constructor
D. insert a call to super (vin) in the MeGo constructor
E. change the wheel Count variable in CAR TO PROTECTED
F. CHANGE LINE 3 IN THE MeGo class to super wheel Count =3;

Answer: D,E

QUESTION 29
Given the exhibit:

```
10.          interface A { public int gtValue ( ) ; }
11.          class B implements A  {
12.            PUBLIC INT GETvALUE ( ) return 1; }
13.      }
14.      class C extends B  {
15.        // insert code here
16.      }
```

What three code fragments inserted individually at line 15, make use of

polymorphism? (choose three)

A. public void add (C c) { c.getValue ( ); }
B. public void add (B b) { b.getValue ( ); }
C. public void add (A a) { a.getValue ( ); }
D. public void add (A a, B b) { a.getValue ( ); }
E. public void add (C c1 C c2) { c1.getValue ( ); }

Answer: B,C,D

QUESTION 30
Given the exhibit:

```
11.          certkiller  = new  ReallyBigObject ( );
12.    // more code here
13.    certkiller   =  null;
14.    /* insert code here */
```

Which statement should be placed at line 14 to suggest that the virtual machine expend effort toward recycling the memory used by the object Certkiller ?

A. System.gc ( )
B. Runtime. Gc ( )
C. System.freeMemory ( )
D. Runtime.getRuntime ( ) growHeap ( )
E. Runtime.getRuntime ( ) free Memory ( )

Answer: A

QUESTION 31
Exhibit:

```
10. class Foo {
11.  private int x;
12.  public Foo( int x ) { this.x = x; }
13.  public void setX( int x ) { this.x = x;
}
14.  public int getX() { return x; }
15. }
16.
17. public class  submit  {
18.
19.    static Foo fooBar( Foo foo ) {
20.      foo = new Foo( 100 );
21.      return foo;
22.    }
23.
24.    public static void main( String[] args
) {
25.    Foo foo = new Foo( 300 );
26.    System.out.print( foo.getX() + "-" );
27.
28.    Foo fooFoo = fooBar( foo );
29.    System.out.print( foo.getX() + "-" );
30.    System.out.print( fooFoo.getX() + "-"
);
31.
32.    foo = fooBar( fooFoo );
33.    System.out.print( foo.getX() + "-" );
34.    System.out.print( fooFoo.getX() );
35.    }
36. }
```

What is the output of the program shown in the exhibit?

A. 300.100.100.100.100
B. 300.300.100.100.100
C. 300.300.300.100.100
D. 300.300.300.300.100

Answer: B

QUESTION 32
A developer is creating a class Book, that needs to acces class Paper. The Paper class is deployed in a JAR named myLib.jar.
Which three, taken independently, will allow the developer to use the Paper class while compiling the Book class? (choose three)

A. The JAR file is located at $JAVA_HOME/jre/classes/myLib.jar
B. The JAR file is located at $/JAVA_HOME/jre/lib/ext/myLib.jar..
C. The JAR file is located at /foo/myLib.jar and a classpath environment variable is set that includes /foo/myLib.jar/Paper,Class.
D. The JAR file is located at /foo/myLib.jar and a classpath environment variable is set that includes /foo/myLib.jar.
E. The JAR file is located at /foo/myLib.jar and the Book class is compiled using javac -cp /foo/myLib.jar/Paper Book java.
F. The JAR file is located at /foo/myLib.jar and the Book class is compiled using javac -d /foo/myLib.jar Book java.

G. The JAR file is located at /foo/myLib.jar and the Book class is compiled using javac -classpath /foo/myLib.jar Book java

Answer: B,D,G

QUESTION 33
Given the exhibit:

```
11.          class Certkiller  {
12.   Boochy booch;
13.   public Certkiller () { booch = new Boochy (this); }
14.   }
15.
16.   class Boochy {
17.     Certkiller smooch;
18.     public Boochy (Certkiller s) { smooch = s; }
19.   }
And the statements:
21.  PUBLIC STATIC VOID MAIN (string [ ] args) {
22.     Certkiller snoog = new Certkiller ( )
23.      snoog = null;
24.     // more code here
25.     }
```

Which statement is true about the object referenced by snoog, smooch and booch immediately after line 23 executes?

A. None of these objects are eligible for garbage collection
B. Only the object referenced by booch is eligible for garbage collection
C. Only the pbject referenced by snoog is eligible for garbage colletion
D. Only the object referenced by smooch is eligible for garbage collection
E. The objects referenced by smooch and booch are eligible for garbage collection

Answer: E

QUESTION 34
Given the exhibit:

```
12.          public class certkiller5  {
13.
14.      static public void main (String) [ ] yahoo ) {
15.       for (int x = 1; < yahoo.length; x++) {
16.         System.out.print (yahoo [ x ] + "  ");
17.         }
18.      }
19.   }
```

and the command line invocation
java Certkiller 5 a b c
what is the result?

A. a b
B. b c
C. a b c
D. Compilation fails
E. An exception is thrown at runtime

Answer: B

QUESTION 35
Given the exhibit:

```
11.    public static void certkiller  (String str) {
12.    int check  = 4;
13.    if (check = str. Length ( ) ) {
14.      System.out.print (str.charAt (check  -= 1)  + "  " );
15.    }  else  {
16.      System.out.print (str.CharAt (0) + "  ");
17.      }
18.    }
```

and the invocation:

```
13.    CERTKILLER  ( "FOUR" );
14.    certkiller  ("tee");
15.    certkiller  ("to");
```

What is the result?

A. r, t, t
B. r, e, o,
C. Compilation fails
D. An exception is thrown at runtime

Answer: C

QUESTION 36
Given the exhibit:

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

and the command line:
java - Drop.custom = gobstopper Certkiller
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");

Answer: D,E

QUESTION 37
Given classes defined in two different files:

```
1.      PACKAGE UTIL;
2.      public class BitUtils    {
3.        public static void process (byte) [ ] ) {  /* more code here */  }
4.      }
```

```
1.  package app;
2.  public class  CertkillerApp   {
3.    public static void main (String [ ] args)   {
4.       byte [ ] bytes  =  new byte [256];
5.       // insert ode here
6.       }
7.    }
```

What is required at line 5 in class Certkiller App to use the process method of Bit Utils?

A. Process (bytes);
B. BitUtils.process (bytes);
C. Util.BitUtils.process (bytes);
D. Certkiller App cannot use methods in BitUtils
E. Import util.BitUtils.*; process (bytes);

Answer: C

QUESTION 38
Exhibit:

```
 1. public class Item {
 2.    private String desc;
 3.    public String getDescription() { return
desc; }
 4.    public void setDescription(String d) {
desc = 1; }
 5.
 6.    public static void modifyDesc(Item
item, String desc) {
 7.      item = new Item();
 8.      item.setDescription(desc);
 9.    }
10.    public static void main(String[] args)
{
11.      Item it = new Item();
12.      it.setDescription("Gobstopper");
13.      Item it2 = new Item();
14.      it2.setDescription("Fizzylifting");
15.      modifyDesc(it,
"Scrumdiddlyumptious");
16.
System.out.println(it.getDescription());
17.
System.out.println(it2.getDescription());
18.    }
19. }
```

What is the outcome of the code?

A. Compilation fails.
B. Gobstopper
Fizzylifting
C. Gobstopper
Scremdiddlyumptious
D. Scrumdiddlyumptious
Fizzylifting
E. Scrumiddlyumptious
Scrumdiddlyumptious

Answer: B

QUESTION 39
Given classes defined in two different files

```
1.    PACKAGE UTIL;
2.    public class BitUtils  {
3.       private static void process (byte) [ ] b)  { }
4.    }
```

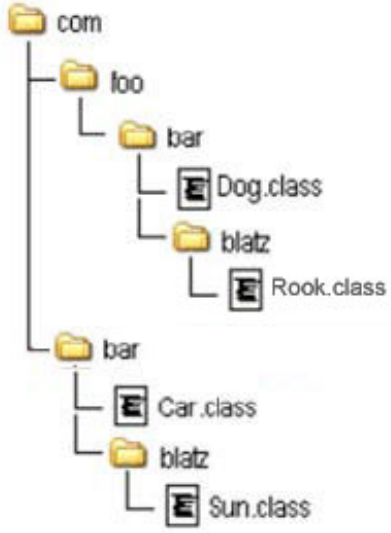
```
1.  package app;
2.  public class CertkillerApplication  {
3.    public static main (String [ ] args)  {
4.       byte [ ] bytes = new byte [ 256];
5.       // insert ode here
6.     }
7.   }
```

What is required at line 5 in class Certkiller Application to use the process method of BitUtils?

A. PROCESS (BYTES);
B. BitUtils.process(bytes);
C. App.BitUtils.process (bytes)
D. Util.BitUtils. process (bytes)
E. Import util.Bitutils.*; process (bytes);
F. Certkiller Application cannot use the process method in BitUtils.

Answer: F

QUESTION 40



The image represents a complete package structure for a set of classes: "com" is the beginning of the fully-qualified package name for all classes.
Give this package structure, insert the code needed to make the Car class compile and runt successfully.
All three placeholds must be filled. If fewer than three statement are needed, use the "// blank" options.

Answer:

Explanation: Pending.

QUESTION 41
Given the exhibit:

```
10.  class Certkiller1 {
11.    public Certkiller1 () { System.out.print ( 1 ); }
12.  }
13.  class Certkiller2 extends Certkiller1 {
14.    public Certkiller2 ( ) { System.out.print (2) ; }
15.  }
16.  class Certkiller3 extends Certkiller2 {
17.    public Certkiller3 ( ) { System.out.print (3); }
18.  }
19.  public class Numbers {
20.    public static void main (String [ ] args ) { new Certkiller3 ( ); }
```

What is the result when this ode executed?

A. 1
B. 3
C. 123
D. 321
E. The code runs with no output

Answer: C

QUESTION 42
Place the code fragments in position to complete the Displayable interface.

```
interface Reloadable {
  public void reload();
}

class Edit {
  public void edit() { /* Edit Here */ }
}

interface Displayable
```

Place here Place here {

Place here

```
}
```

Code Fragments

extends	public void display();	Reloadable
implements	public void display(); / "Display"/}	Edit

Answer:

Explanation: Pending.

QUESTION 43
Given the exhibit:

```
10.    class Certkiller {
11.      public enum Direction { NORTH. SOUTH, EAST, WEST }
12.      }
13.    public class Sprite {
14.       // insert code here
15.    }
```

Which code, inserted at line 14, allows the Sprite class to compile?

A. Direction d = NORTH
B. Certkiller .Direction d = NORTH
C. Direction d = Direction.NORTH
D. Certkiller .Direction d = Certkiller Direction. NORTH

Answer: D

QUESTION 44
Exhibit:

```
10. interface Foo {
11.   int bar();
12. }
13.
14. public class Beta {
15.
16.   class A implements Foo {
17.     public int bar() { return 1; }
18.   }
19.
20.   public int fubar( Foo foo ) { return
foo.bar(); }
21.
22.   public void testFoo() {
23.
24.     class A implements Foo {
25.       public int bar() { return 2; }
26.     }
27.
28.     System.out.println( fubar( new A() )
)
29    }
30
31.   public static void main( String[] argv
) {
32.     new Beta().testFoo();
33.   }
34. }
```

Which three statements are true? (Choose three)

A. Compilation fails
B. The code compiles and the output is 2
C. If lines 16, 17 and 18 were removed, compilation would fail.
D. If lines 24,25, and 26 were removed, compilation would fail.
E. If lines 16,17 and 18 were removed, the code would compile and the output would be 2.
F. If line 24,25 and 26 were removed, the code would compile and the output would be 1.

Answer: B,E,F

QUESTION 45
Add methods to the Beta class to make it compile correctly.

```
class Alpha {
  public void bar( int... x ) { }
  public void bar( int x ) { }
}

public class Beta extends Alpha {

  Place here

  Place here

  Place here

}
```

Methods

- private void bar(int x) { }
- public void bar(int x) { }
- public int bar(String x) { return 1; }
- public Alpha bar(int x) { }
- public void bar(int x, int y) { }
- public int bar(int x) { return x; }

Answer:

Explanation: Pending.

QUESTION 46

```
1. public class Certkiller {
2.    int x = 12;
3.    public void method(int x) {
4.      x+=x;
5       System out.println(x);
6.    }
7. }
```

Given the exhibit:

```
21.    test t = new Certkiller ();
22.    t. method (5);
```

What is the output from line 5 of the Certkiller class?

A. 5
B. 10
C. 12
D. 17
E. 24

Answer: B

QUESTION 47

Given the exhibit:

```
10.          class Certkiller1  {
11.    public Certkiller1 FOO ( ) { RETURN THIS; }
12.     }
13.    CLASS Certkiller2 extends Certkiller1  {
14.      public Certkiller1 foo ( ) { return this;}
15.     }
16.    class Certkiller3 extends Certkiller2  {
17.      // insert method here
18.     }
```

Which two methods, inserted individually, correctly complete the Certkiller 3 class?
(choose two)

A. public void fooo ( ) { }
B. public int foo ( ) {return 3: }
C. public CertKiller2 foo ( ) { return this;}
D. public Certkiller 1 foo ( ) {return this}

Answer: C,D

QUESTION 48
Exhibit:

```
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 snootchy 420
E. thirds first second snootchy 420
F. first second first third snootchy 420

Answer: D

QUESTION 49
Given the exhibit:

```
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. Compiltion 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

Answer: A

QUESTION 50
A Java Bean component has the following field:
11. PRIVATE BOOLEAN ENABLED:
Which two pairs of method declarations follow the JavaBean standard for accessing this fields? (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 void setEnabled (Boolean enabled)
public Boolean getEnabled ( )

Answer: A,C

QUESTION 51
Given the exhibit:

```
10.  class Certkiller  {
11.    static  void  alpha ( )  {  /* more code here  */ }
12.  void beta ( )  {  /* more code here */}
13.  }
```

Which two statements are true? (choose two)

A. Certkiller .beta ( ) is a valid invocation of beta ( )
B. Certkiller .alpha ( ) is a valid invocation of alpha ( )
C. Method beta ( ) can directly call method alpha ( )
D. Method alpha ( ) can directly call method beta ( )

Answer: B,C

QUESTION 52
Given the exhibit:

```
11.          public abstract class shape   {
12.     private  int  x;
13.     private int. y ;
14.     public abstract void draw ( );
15.     public void set Anchor (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 extend 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 */ }
}

Answer: B, E

QUESTION 53
Given the exhibit:

```
11.          static class A   {
12.            void process ( ) throws Exception  {  throw new Exception ( );  }
13.          }
11.   static class B extends A   {
12.     void process  ( )  {   System.out.printIn ( "B  ");  }
13.   }
14.   public static void main  (String [ ]  args  )   }
15.     A   a  =  new  B ( );
16.   a . process ( );
17.   }
```

What is the result

A. B
B. The code exception is thrown at runtime
C. The cod run with no output.
D. Compilation fails because of an error in line 15.
E. Compilation fails because of an error in line 18.
F. Compilation fails because of an error in line 19.

Answer: F

QUESTION 54
Given the exhibit:

```
33. try {
34.    // some code here
35. } catch (NullPointerException e1) {
36.    System.out.print("a");
37. } catch (RuntimeException e2) {
38.    System.out.print("b");
39. } finally {
40.    System.out.print("c");
41. }
```

What is the result if NullPointerException occurs on line 34?

A. c
B. a
C. ab
D. ac
E. bc
F. abc

Answer: D

QUESTION 55
Given the exhibit:

```
10.          public class Certkiller   {
11.     static  int [ ] a;
12.     static  {  a [ 0 ] = 2;   }
13.     public static void main (String [ ] args   )  { }
14.     }
```

Which exception or error will be thrown when a programmer attempts to run this code?

A. java.lang.StackOverflowError
B. java.lang.IllegalStateException
C. java.lang.ExceptionInInitoatializerError
D. java.lang.ArrayIndexOutOfBoundsException

Answer: C

QUESTION 56
Exhibit:

```
1. public class A {
2.   public void method1() {
3.     B b = new B();
4.     b.method2();
5.     // more code here
6.   }
7. }
```

```
1. public class B {
2.   public void method2() {
3.     C c = new C();
4.     c.method3();
5.     // more code here
6.   }
7. }
```

```
1. public class C {
2.   public void method3() {
3.     // more code here
4.   }
5. }
```

Given the exhibit:

```
25.          try   {
26.    A a  =  new  A ( );
27.        a. method1 ( );
28.  }  catch  (Exception  e)  {
29.      system.out.print ("an error occurred");
30.   }
```

Which two statements are truee if a NullPointerException is thrown on line 3 of class C? (choose two)

A. The application will crash.
B. The code on line 29 will be executed
C. The code on line 5 of class A will execute.
D. The code on line 5 of class B will execute.
E. The exception will be propagated back to line 27.

Answer: B,E

QUESTION 57
Given the exhibit:

```
25.          int x = 12;
26.          while (x < 10) {
27.      x--;
28. }
29. System.out.print (x);
```

What is the result?

A. 0
B. 10
C. 12
D. Line 29 will never be reached.

Answer: C

QUESTION 58
Given the exhibit:

```
1.    public class Certkiller 2 {
2.    Integer I;
3.    int x ;
4.    public Certkiller 2 (int y) {
5.       x = I+y;
6.        systeem.out.printIn (x);
7.    }
8.    public static void main (String [ ] args ) {
9.      new Certkiller 2 (new Integer (4) );
10.     }
11.   }
```

What is the result?

A. The value "4" is printed at the command line
B. Compilation fails because of an error in line 5.
C. Compilation fails because of an error in line 9.
D. A NullPOINTEReXCEPTION OCCURS AT RUNTIME.
E. A NumberFormatException occurs at runtime.

F. An IllegalStateException occurs at runtime.

Answer: D

QUESTION 59
Given the exhibit:

```
11.          public static Iterator reverse (List  list)   {
    2.     Collections.reverse (list);
    3.     return list interator  ( );
    4.     }
    5.     public static void main (String [ ]  args )   {
    6.     List  list  =  new ArrayList  ( );
    7.     list. Add (  "1"); list.add ("2"); list.add ("3");
    8.     for (object obj ; reverse  (list))
    9.       system.out.print (obj)  +  ",  " );
    10.    }
```

What is the result?

A. 3, 2, 1,
B. 1, 2, 3,
C. Compilation fails
D. The code runs with no output
E. An exception is thrown at runtime

Answer: C

QUESTION 60
Given the exhibit:

```
11.          public void testIfA ( )   {
12.            IF  (TESTiFb ( " true") )   {
    13.        System.out.printIn ( "Turn");
    14.        }  else  {
    15.          System/out.printIn ("Not true");
    16.         }
    17.        }
    18.        public Boolean testIfB (String  str)   {
    19.          return Boolean.valueof (str);
    20.        }
```

What is the result when method testIfA is invoked?

A. True
B. Not true
C. An exception is thrown at runtime
D. Compilation fails because of an error at line 12.
E. Compilation fails because of an error at line 19.

Answer: A

QUESTION 61
GIVEN THE EXHIBIT:

```
23.  int  z  =  5 ;
24.
25.  public voidd Certkiller 1 (int  x)  {
23.      assert  ( x  >  0 );
24.      switch  (x)  {
25.       case  2   x  =  3;
26.        default;  assert  false;   } }
30..
31.  private void Certkiller2 (int  y )  {  assert  (y  <  o )  }
32.
33.  private void  Certkiller4 ( )  {  assert  ( Certkiller 4() );  }
34.
35.  private Boolean Certkiller 4 ( )  {  z  =  6;  return  false;  }
```

Which statement is true?

A. All of the assert statements are used appropriately.
B. Only the assert statement on line 31 is used appropriately
C. The assert statements on lines 29 and 31 are used appropriately
D. The assert statements on lines 26 and 29 are used appropriately
E. The assert statements on lines 29 and 33 are used appropriately
F. The assert statements on lines 29 ,31and 33 are used appropriately
G. The assert statements on lines 26,29 and 31 are used appropriately

Answer: C

QUESTION 62
GIVEN THE EXHIBIT:

```
11.  public static void main (String [ ]  args )  {
12.  String  str  =  "null";
13.  if  (str  == null)  {
14,  system.out.printIn ("null");
15.  } else (str.length ( )  =  =  0 )  {
16,  system.out.printIn ( "zero" )
17,  } else  {
     18,            system.out.printIn ("some")
12.   }
13.   }
```

What is the result?

A. null

B. zero
C. some
D. Compilation fails
E. An exception is thrown at runtime

Answer: D

QUESTION 63
Given the exhibit:

```
11.        public static void main (String [ ] args ) {
12.        try {
13.          args = null;
14.          aegs [0] = "test";
15.          System.out.print In (args [0];
16.        } catch (Exception ex) {
17.          System.out.printIn ("Exception");
18.        } catch (NullPointerException npe) {
19.          System.out.printIn ("NullPointterExcepion");
20.          }
21.        }
```

What is the result?

A. test
B. Exception
C. Compilation fails
D. NullPointerException

Answer: C

QUESTION 64
Given the exhibit:

```
1.    import java util.*;
2.    .
3.    public class Let terASort {
4.      public static void main (String [ ] args) {
5.      ArrayList <String> strings = new ArrayList <String> ( );
6.       Strings.add ("aAaA");
7.       strings.add ("AaA");
8.       strings.add ("aAa");
9.       strings.add ("AAaa");
10.      Collections.sort(strings);
11.      for (string s : strings) { system.out.print (s + " "); }
12.     }
13.   }
```

What is the result?

A. Compilation fails
B. aAaA aAa AAaa AaA
C. AAaa AaA aAa aAaA
D. AaA AAaa aAaA aAa
E. aAa AaA aAaA AAaa
F. An exception is thrown at runtime

Answer: C

QUESTION 65
Given the exhibit:

```
1.  import java.util. *;
2.  public class WrappedString  {
3.    private String  s;
4.    public  WrappedString (String  s)   { this.s = s;  }
5.    public static void main (String [ ] args)   {
6.      HashSet<Object>  hs  = new  HashSet <Object>  ( );
7.     WrappedString ws1  =  new  WrappedString ("aardvark");
8.     WrappedString ws2  =  new  WrappedString ("aardvark");
9.     String s1  = new  String ("aardvark");
10.    String s2  = new  String ("aardvark");
11.    hs.add (ws1);  hs.add (ws2;  hs.add(s1);  hs.add(s2);
12.   System.out.printIn(hs.size ( ) ) ; } }
```

What is the result?

A. 0
B. 1
C. 2
D. 3
E. 4
F. Compilation fails.
G. An exception is thrown at runtime

Answer: D

QUESTION 66
Given a pre-generics implementation of a method:

```
11.        public static int sum (List list)  {
12.          INT  SUM  = 0;
13.          for (Iterator iter  = list.iterator ( ); iter.hasNext  ( ); )  {
14.            int  I  =  ((Integer) iter.next ( ) ) .intValue ( );
15.            sum  += I;
16.          }
17.            return sum:
18.        }
```

Which three changes must be made to the method sum to use generics? (choose three)

A. remove line 14
B. replace line 14 with "int I = iter.next ( ); "
C. replace line 13 with "for (int I : intList) {"
D. replace line 13 with " for (Iterator iter : intLiswt) "
E. replace the method declaration with "sum (List<int> intList)"
F. replace the method declaration with "sum (List<Integer> intList)"

Answer: A,B,C

QUESTION 67
Given the exhibit:

```
23.    Object  [ ] myObjects  =  {
24.      new Integer (12)
25.      new String ("foo")
26.      new Integer (5)
27.    new Boolean (true)
28.    }
29.    Arrays.sort (myObjects);
30.     for (int  i=0;  i<myObjects.length; i++)  {
31.      System.out.print(myObjects [ i ] . toString ( ) );
32.      Sysem.out.print ( "  " );
33.    }
```

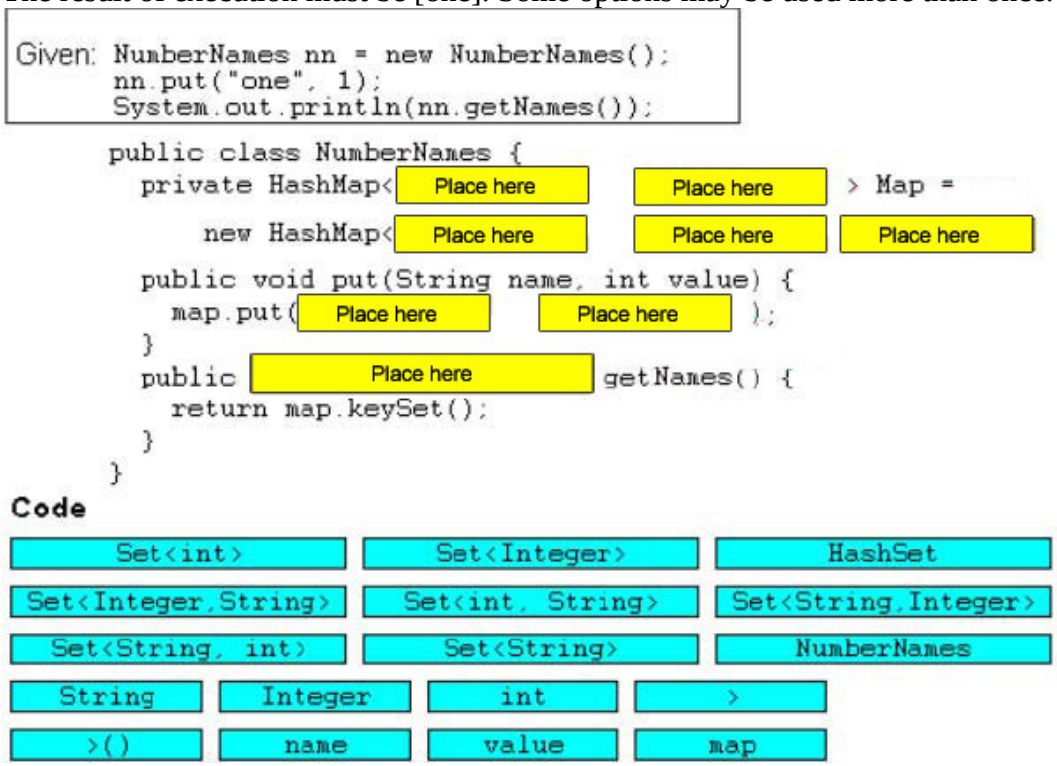
What is the result?

A. Compilation fails due to an error in line 23.
B. Compilation fails due to an error in line 29.
C. A ClassCastExceptation occurs in line 29.
D. A ClassCastExceptation occurs in line 31.
E. The value of all four object prints in natural order.

Answer: C

QUESTION 68
Place the code into position to create a class that maps from Strings to integer

values.
The result of execution must be [one]. Some options may be used more than once.



Answer:

Explanation: Pending.

QUESTION 69
Place a result onto each motho call to indicate what would happen if the method call were inserted at line 9. Note: Results can be used more than once.

Given:

```
1. import java.util.*;
2. class A { }
3. class B extends A { }
4. public class Test {
5.   public static void main(String[] args) {
6.     List<A> listA = new LinkedList<A>();
7.     List<B> listB = new LinkedList<B>();
8.     List<Object> listO = new LinkedList<Object>();
9.     // insert code here
10
11.  public static void m1(List<? extends A> list) { }
12.  public static void m2(List<A> list) { }
13. }
```

Method Calls		Result
m1(listA);	m2(listA);	Does not compile.
m2(listB);	m2(listB);	Compiles and runs without error.
m2(listC);	m2(listC);	An exception is thrown at runtime.

Answer:

Explanation: Pending.

QUESTION 70

Given the exhibit:

```
1.    import java.util.*;
2.    public class PQ  {
3.     public static void main (String [ ] args )  {
4.       PriorityQueue<String> pq  = new PriorityQueue<String> ( );
5.       pq.add("carrot");
6.       pq.add("apple");
7.       pq.add("banana");
8.    Systtem.out.printIn (pq.poll ( ) + "  : "  +pq.peek( ) ) ;
9.     }
10.   }
```

What is the result?

A. apple:apple
B. carrot:apple
C. apple:banana
D. banana:apple
E. carrot:carrot
F. carrot:banana

Answer: C

QUESTION 71
Given :

```
11.        public class key  {
12.          private long  id1;
13.          private long  id2;
14.
15.          // class key methods
16.        }
```

A programmer is developing a class Key, that will be used as a key in a standard java.util.HashMap.
Which two methods should be overridden to assure that key works correctly as a key? (choose two)

A. public int hashCode ( )
B. public Boolean equals (Key k)
C. public int compareTo (object o
D. public Boolean equals (object o)

Answer: A,D

QUESTION 72
Given the exhibit:

```
2.    // insert code here
3.    private N min,max;
4.    public N getMin ( )  { return  min;  }
5.    public N getMax ( )  { return max;  }
6.    public void add  (N added)  {
7.    if (min == null || added.doubleValue ( ) <min.doubleValue ( ) ) 17  min =
      added;
18,   if (max == null || added.doubleValue ( ) <max.doubleValue ( ) ) 19  max =
      added;
20.                }
21.       }
```

Which two, inserted at line 11 will allow the code to compile? (Choose Two)

A. public class MinMax< ? > {
B. public class MinMax < ? extends Number> {
C. public class MinMax <N extends Object> {
D. public class MinMax <N extends Number > {
E. public class MinMax < ? extends Object > {
F. public class MinMax < N extends Integer > {

Answer: D,F

QUESTION 73
Given the exhibit:

enumExample { ONE, TWO, THREE }
Which statement is true?

A. The expressions (ONE = = ONE) and ONE.equals (ONE) are both guaranteed to be true.
B. The expression (ONE < TWO) is guaranteed to be true and ONE.compareTo (TWO) is guaranteed to be less than one.
C. The Example values cannot be used in a raw java.util.HasMap.; instead, the programmer must use a java.util.EnumMap.
D. The Example values can be used in a java.util.SortedSet, but the set will NOT be sorted because enumerated Type do NOT IMPLEMENT JAVA.LANG.Comparable.

Answer: A

QUESTION 74
Given:

```
11. public void genNumbers() {
12.   ArrayList numbers = new ArrayList();
13.   for (int i=0; i<10; i++) {
14.     int value = i * ((int) Math.random());
15.     Integer intObj = new Integer(value);
16.     numbers.add(intObj);
17.   }
18.   System.out print In(numbers);
19. }
```

Which line of code marks the earliest point that an object referenced by intObj becomes a candidate for garbage collection?

A. Line 16
B. Line 17
C. Line 18
D. Line 19
E. The object is NOT a candidate for garbage collection.

Answer: D

QUESTION 75
Given:

```
12. public class Yippee2 {
13.
14.   static public void main(String [] yahoo) {
15.     for(int x = 1; x < yahoo.length; x++) {
16.       System.out print(yahoo[x] + " ");
17.     }
18.   }
19. }
```

andthe command line invocation:
javaYippee2 a b c
What is the result?

A. a b
B. b c
C. a b c
D. Compilation fails.
E. An exception is thrown at runtime.

Answer: B

QUESTION 76
A class games.cards.Poker is correctly defined in the jar file Poker.jar. A user wants to execute the main method of Poker on a UNIX system using the command:
Java games.cards.Poker
What allows the user to do this?

A. put Poker.jar in directory /stuff/java, and set the CLASSPATH to include /stuff/java
B. put Poker.jar in directory /stuff/java, and set the CLASSPATH to include /stuff/java/*.jar
C. put Poker.jar in directory /stuff/java, and set the CLASSPATH to include /stuff/java/Poker.jar
D. put Poker.jar in directory /stuff/java/games/cards, and set the CLASSPATH to include /stuff/java
E. put Poker.jar in directory /stuff/java/games/cards, and set the CLASSPATH to include /stuff/java/*.jar
F. put Poker.jar in directory /stuff/java/games/cards, and set the CLASSPATH to include /stuff/java/Poker.jar

Answer: C

QUESTION 77
Exhibit:

```
10. class Inner {
11.   private int x;
12.   public void setX( int x ) { this.x = x;
}
13.   public int getX() { return x; }
14. }
15.
16. class Outer {
17.   private Inner y;
18.   public void setY( Inner y ) { this.y =
y; }
19    public Inner getY() { return y; }
20
21
22. public class Gamma {
23.   public static void main( String[] args
) {
24.     Outer o = new Outer();
25.     Inner i = new Inner();
26.     int n = 10;
27.     i.setX( n );
28.     o.setY( i );
29.     // insert code here
30.   System.out.println( o.getY().getX() );
31.   }
32. }
```

Which three code fragments, added individually at line 29, produce the output 100? (Choose three.)

A. n = 100;
B. i.setX(100);
C. o.getY().setX(100);
D. I = new Inner(); i.setX(100);
E. 0.setY (i); i = new Inner(); i.setX (100);
F. i = new Inner (); i.setX(100); o.setY(i);

Answer: B, C, F

QUESTION 78
Given a class Repetition:

```
1.  package utils;
2.
3.  public class Repetition {
4.    public static String twice(String s) { return s + s; }
5.  }
```

And given another class Demo:

```
1.  // insert code here
2.
3.  public class Demo {
4.    public static void main(String[] args) {
5.      System.out.println(twice("pizza"));
6.    }
7.  }
```

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;

Answer: F

QUESTION 79
Given:

```
11. public static void test(String str) {
12.   if (str == null | str.length() == 0) {
13.     System.out.println("String is empty");
14.   } else {
15.     System.out.println("String is not empty");
16.   }
17. }
```

And the invocation:

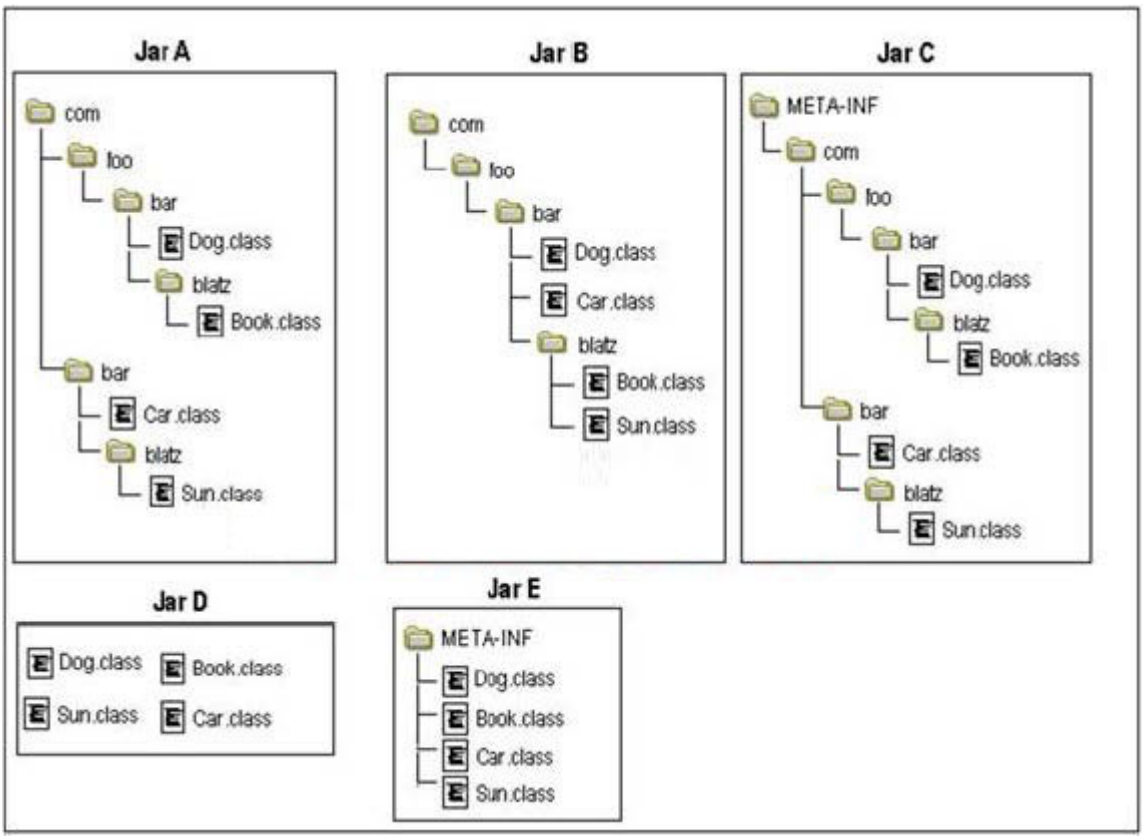
```
31. test(null);
```

What is the result?

A. An exception is thrown at runtime.
B. "String is empty" is printed to output.
C. Compilation fails because of an error in line 12.
D. "String is not empty" is printed to output.

Answer: A

QUESTION 80
Exhibit:



Given the fully-qualified class names:
com.foo.bar.Dog
com.foo.bar.blatz.Book
com.bar.Car
com.bar.blatz.Sun
Which graph represents the correct directory structure for a JAR file from which those classes can be used by the compiler and JVM?

A. Jar A
B. Jar B
C. Jar C
D. Jar D
E. Jar E

Answer: A

QUESTION 81
Given:

```
15. public class Yippee {
16.   public static void main(String [] args) {
17.     for(int x = 1; x < args.length; x++) {
18.       System.out.print(args[x] + " ");
19.     }
20.   }
21. }
```

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

Answer: B

QUESTION 82
Given:

```
13. public class Pass {
14.   public static void main(String [] 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. doStuff x = 6 main x = 6
D. doStuff x = 5 main x = 5
E. doStuff x = 5 main x = 6
F. doStuff x = 6 main x = 5

Answer: D

QUESTION 83
Given:

```
1.  public class GC {
2.    private Object o;
3.    private void doSomethingElse(Object obj) { o = obj; }
4.    public void doSomething() {
5.      Object o = new Object();
6.      doSomethingElse(o);
7.      o = new Object();
8.      doSomethingElse(null);
9.      o = null;
10.   }
11. }
```

When the doSomething method is called, after which line does the Object created in line 5 bbecome available for garbage collection?

A. Line 5
B. Line 6
C. Line 7
D. Line 8
E. Line 9
F. Line 10

Answer: D

QUESTION 84
Given:

```
11. class A {
12.   public void process() { System.out.print("A,"); }}
13. class B extends A {
14.   public void process() throws IOException {
15.     super.process();
16.     System.out.print("B,");
17.     throw new IOException()
18.   }}
19. public static void main(String [] args) {
20.   try { new B().process(); }
21.   catch (IOException e) { System.out.println("Exception"); }}
```

What is the result?

A. Exception
B. A, B, Exception
C. Compilation fails because of an error in line 20.
D. Compilation fails because of an error in line 14.
E. A NullPointerException is thrown at runtime.

Answer: D

QUESTION 85
Given:

```
11. public class Test {
12.   public enum Dogs {collie, harrier, shepherd};
13.   public static void main(String [] args) {
14.     Dogs myDog = Dogs.shepherd;
15.     switch (myDog) {
16.       case collie:
17.         System.out.print("collie ");
18.       case default:
19.         System.out.print("retriever ");
20.       case harrier:
21.         System.out.print("harrier ");
22.     }
23.   }
24. }
```

What is the result?

A. harrier
B. shepherd
C. retriever
D. Compilation fails
E. retriever harrier
F. An exception is thrown at runtime.

Answer: D

QUESTION 86
Given:

```
11. public static Collection get() {
12.   Collection sorted = new LinkedList();
13.   sorted.add("B"); sorted.add("C"); sorted.add("A");
14.   return sorted;
15. }
16. public static void main(String[] args) {
17.   for (Object obj: get()) {
18.     System.out.print(obj + ", ");
19.   }
20. }
```

What is the result?

A. A, B, C
B. B, C, A
C. Compilation fails
D. The code runs with no output
E. An exception is thrown at runtime

Answer: B

QUESTION 87
Given:

```
11. static void test() throws Error {
12.     if (true) throw new AssertionError();
13.     System.out.print("test ");
14. }
15. public static void main(String[] args) {
16.     try { test(); }
17.     catch (Exception ex) { System.out.print("exception "); }
18.     System.out.print("end ");
19. }
```

What is the result?

A. end
B. Compilation fails
C. exception end
D. exception test end
E. A Throwable is thrown by main
F. An Exception is thrown by main

Answer: E

QUESTION 88
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. }
```

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.

Answer: B, C, E

QUESTION 89
Given:

```
11. Float pi = new Float(3.14f);
12. if (pi > 3) {
13.   System.out.print("pi is bigger than 3. ");
14. }
15. else {
16.   System.out.print("pi is not bigger than 3. ");
17. }
18. finally {
19.   System.out.println("Have a nice day.");
20. }
```

What is the result?

A. Compilation fails
B. pi is bigger than 3.
C. An exception occurs at runtime.
D. pi is bigger than 3. Have a nice day.
E. pi is not bigger than 3. Have a nice day.

Answer: A

QUESTION 90
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;

Answer: B

QUESTION 91
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");
}

Answer: D

QUESTION 92
Place the correct Code in the Code Sample to achieve the expected results.
Expected results:
Output: 1 2 4 8 16 32
Code Sample

```
int [] y = { 1, 2, 4, 8, 16, 32 };
System.out.print("Output: ");
Place here
System.out.print(x);
System.out.print(" ");
}
```

Code

for(int x : y) {

for(int x=y[]) {

foreach (y as x) {

foreach (int x : y) {

for(int x=1; x=y[]; x++) {

Answer:

```
int [] y = { 1, 2, 4, 8, 16, 32 };
System.out.print("Output: ");
for(int x : y) {
System.out.print(x);
System.out.print(" ");
}
```

QUESTION 93
Given:

```
 8. public class test {
 9.   public static void main(String [] a) {
10.     assert a.length == 1;
11.   }
12. }
```

Which two will produce an AssertionError? (Choose two.)

A. java test
B. java -ea test
C. java test file1
D. java -ea test file1
E. java -ea test file1 file2
F. java -ea:test test file1

Answer: B, E

QUESTION 94
Given:

```
84. try {
85.    ResourceConnection con = resourceFactory.getConnection();
86.    Results r = con.query("GET INFO FROM CUSTOMER");
87.    info = r.getData();
88.    con.close();
89. } catch (ResourceException re) {
90.    errorLog.write(re.getMessage());
91. }
92. return info;
```

Which statement is true if a ResourceException is thrown on line 86?

A. Line 92 will not execute.
B. The connection will not be retrieved in line 85.
C. The resource connection will not be closed on line 88.
D. The enclosing method will throw an exception to its caller.

Answer: C

QUESTION 95
Assuming that the serializeBanana() and the deserializeBanana() methods will correctly use Java serialization and given:

```
13. import java.io.*;
14. class Food implements Serializable {int good = 3;}
15. class Fruit extends Food {int juice = 5;}
16. public class Banana extends Fruit {
17.   int yellow = 4;
18.   public static void main(String [] args) {
19.     Banana b = new Banana();    Banana b2 = new Banana();
20.     b.serializeBanana(b);  // assume correct serialization
21.     b2 = b.deserializeBanana(); // assume correct
22.     System.out.println("restore "+b2.yellow+ b2.juice+b2.good);
24.   }
25.   // more Banana methods go here
50. }
```

What is the result?

A. restore 400
B. restore 403
C. restore 453
D. Compilation fails.
E. An exception is thrown at runtime.

Answer: C

QUESTION 96
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.

Answer: D

QUESTION 97
Given:

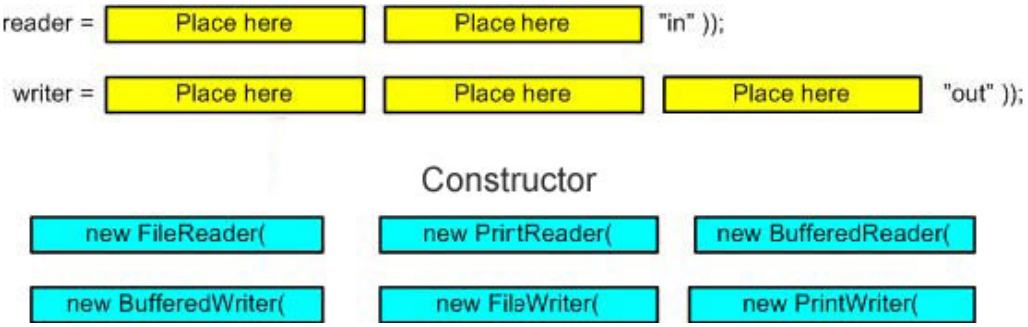
```
11. public class Yikes {
12.
13.   public static void go(Long n) {System.out.println("Long ");}
14.   public static void go(Short n) {System.out.println("Short ");}
15.   public static void go(int n) {System.out.println("int ");}
16.   public static void main(String [] args) {
17.     short y = 6;
18.     long z = 7;
19.     go(y);
20.     go(z);
21.   }
22. }
```

What is the result?

A. int Long
B. Short Long
C. Compilation fails
D. An exception is thrown at runtime.

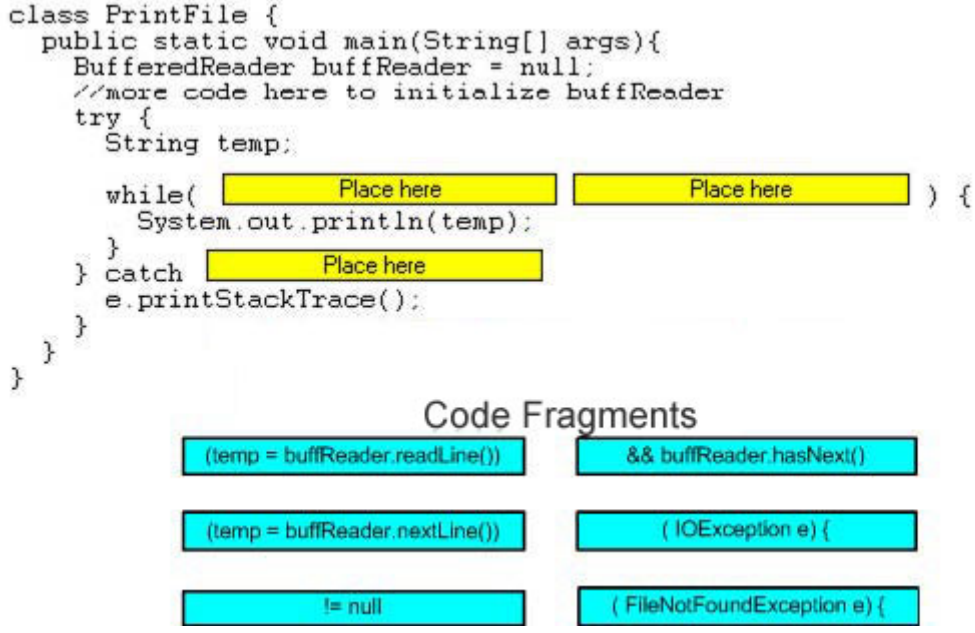
Answer: A

QUESTION 98
Chain these constructors to create objects to read from a file named "in" and to write to a file named "out".



Answer:
Svarsaknas

QUESTION 99
Place the code fragments into position to use a BufferedReader to read in an entire text file.



Answer:
Saknarsvar

QUESTION 100
Given this method in a class:

```
21. public String toString() {
22.   StringBuffer buffer = new StringBuffer();
23.   buffer.append('<');
24.   buffer.append(this.name);
25.   buffer.append('>');
26.   return buffer.toString();
27.  }
```

Which statement 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 poorly. For better performance, the code should be rewritten:
return "<" + this.name + ">";
D. This code will perform well and converting the code to use StringBuilder will not enhance the performance.

Answer: B

QUESTION 101
Given:

```
33. Date d = new Date(0);
34. String ds = "December 15, 2004";
35. // insert code here
36. try {
37.   d = df.parse(ds);
38. }
39. catch(ParseException e) {
40.   System.out.println("Unable to parse " + ds);
41. }
42. // insert code here too
```

What creates the appropriate DateFormat object and adds a day to the Date object?

A. 35. Dateformat df = Dateformat.getDateFormat();
42. d.setTime ((60 * 60 * 24) + d.getTime());
B. 35. Dateformat df = Dateformat.getDateInstance();
42. d.setTime ((1000 * 60 * 60 * 24) + d.getTime());
C. 35. Dateformat df = Dateformat.getDateFormat();
42. d.setLocalTime ((1000 * 60 * 60 * 24) + d.getLocalTime());
D. 35. Dateformat df = Dateformat.getDateInstance();
42. d.setLocalTime ((60 * 60 * 24) + d.getLocalTime());

Answer: B

QUESTION 102
Given:

```
12.  NumberFormat nf = NumberFormat.getInstance();
13.  nf.setMaximumFractionDigits(4);
14.  nf.setMinimumFractionDigits(2);
15.  String a = nf.format(3.1415926);
16.  String b = nf.format(2);
```

Which two statements are true about the result if the locale is Locale.US? (Choose two.)

A. The value of b is 2.
B. The value of a is 3.14.
C. The value of b is 2.00.
D. The value of a is 3.141.
E. The value of a is 3.1415.
F. The value of a is 3.1416.
G. The value of b is 2.0000.

Answer: C, F

QUESTION 103
Place the correct description of the compiler output on the code fragment to be inserted at line 4 and 5. The same compiler output may be used more than once.

```
1. import java.util.*;
2. public class X {
3.    public static void main(String[] args) {
4.          // insert code here
5.          // insert code here
6.    }
7.    public static void foo(List<Object> list) {
8.    } }
```

Code

```
ArrayList<String> x1 = new ArrayList<String>();
foo(x1);
```

```
ArrayList<Object> x2 = new ArrayList<String>();
foo(x2);
```

```
ArrayList<Object> x3 = new ArrayList<Object>();
foo(x3);
```

```
ArrayList x4 = new ArrayList();
foo(x4);
```

Compiler Output

Compilation succeeds.

Compilation fails due to an error in the first statement.

Compilation of the first statement succeeds, but compilation fails due to an error in the second statement

Answer:
Svarsaknas

QUESTION 104
Given:

```
1. import java.util.*;
2. public class Old {
3.    public static Object get0(List list) {
4.      return list .get (0)
5.    .
6. }
```

Which three will compile successfully? (Choose three.)

A. Object o = Old.get0(new LinkedList());
B. Object o = Old.get0(new LinkedList<?>());
C. String s = Old.get0(new LinkedList<String>());
D. Object o = Old.get0(new LinkedList<Object>());

E. String s = (String)Old.get0(new LinkedList<String>());

Answer: A, D, E

QUESTION 105
Exhibit:

```
 1. import java.util.*;
 2. public class TestSet {
 3.   enum Example { ONE, TWO, THREE }
 4.   public static void main(String[] args)
{
 5.     Collection coll = new ArrayList();
 6.     coll.add(Example.THREE);
 7.     coll.add(Example.THREE);
 8.     coll.add(Example.THREE);
 9.     coll.add(Example.TWO);
10.     coll.add(Example.TWO);
11.     coll.add(Example.ONE);
12.     Set set = new HashSet (coll);
13.   }
14. }
```

Which statement is true about the set variable on line 12?

A. The set variable contains all six elements from the coll collection, and the order is guaranteed to be preserved.
B. The set variable contains only three elements from the coll collection, and the order is guaranteed to be preserved.
C. The set variable contains all six elements from the coll collection, but the order is NOT guaranteed to be preserved.
D. The set variable contains only three elements from the coll collection, but the order is NOT guaranteed to be preserved.

Answer: D

QUESTION 106
Given:

```
11. public class Person {
12.   private String name, comment;
13.   private int age;
14.   public Person(String n, int a, String c) {
15.     name = n; age = a; comment = c;
16.   }
17.   public boolean equals(Object o) {
18.     if (! (o instanceof Person)) return false;
19.     Person p = (Person)o;
20.     return age == p.age && name.equals(p.name);
21.   }
22. }
```

What is the appropriated definition of the hashCode method in class Person?

A. return super.hashCode();
B. return super.hashCode() + age * 7;

C. return super.hashCode() + comment.hashCode() / 2;
D. return super.hashCode() + comment.hashCode() / 2 - age * 3;

Answer: B

QUESTION 107
Given:

```
1. public class Person {
2.   private String name;
3.   public Person(String name) { this.name = name; }
4.   public boolean equals(Person p) {
5.     return p.name.equals(this.name);
6.   }
7. }
```

Which statement is true?

A. The equals method does NOT properly override the Object.equals method.
B. Compilation fails because the private attribute p.name cannot be accessed in line 5.
C. To work correctly with hash-based data structures, this class must also implement the hashCode method.
D. When adding Person objects to java.util. Set collection, the equals method in line 4 will prevent duplicates.

Answer: A

QUESTION 108
Given:

```
1. import java.util.*;
2. public class Example {
3.   public static void main(String[] args) {
4.     // insert code here
5.     set.add(new Integer(2));
6.     set.add(new Integer(1));
7.     System.out.println(set);
8.   }
9. }
```

Which code, inserted at line 4, guarantees that this program will output [1, 2]?

A. Set set = new TreeSet();
B. Set set = new HashSet();
C. Set set = new SortedSet();
D. List set = new SortedList();
E. Set set = new LinkedHashSet();

Answer: A

QUESTION 109
Given:

```
34. HashMap props = new HashMap();
35. props.put("key45", "some value");
36. props.put("key12", "some other value");
37. props.put("key39", "yet another value");
38. Set s = props.keySet();
39. // insert code here
```

What, inserted at line 39, will sort the keys in the props HashMap?

A. Array.sort(s);
B. s = new TreeSet(s);
C. Collections.sort(s);
D. s =new SortedSet(s);

Answer: B

QUESTION 110
Place code into the class so that it compiles and generates the output answer=42.
Note: Code options may be used more than once.

Class

```
public class [Place here] {
  private [Place here] object;
  public [Place here] ([Place here] object) {
    this.object = object;
  }
  public [Place here] getObject() {
    return object;
  }
  public static void main( String[] argv ) {
    Gen<String> str = new Gen<String>("answer");
    Gen<Integer> intg = new Gen<Integer>(42);
    System.out.println(str.getObject() + "=" +
        intg.getObject());
  }
}
```

Code Option

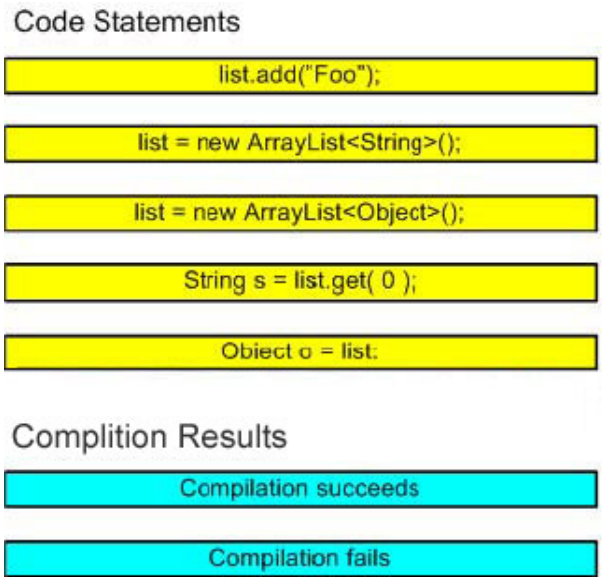
- Gen <T>
- Gen <?>
- Gen
- ?
- T

Answer:
Saknar svar

QUESTION 111
Given:

```
public void takeList(List<? extends String> list) {
   // insert code here
}
```

Place the Compilation Results on each code statement to indicate whether or not that code will compile if inserted into the takeList() method.



Answer:
Saknarsvar

QUESTION 112
Which two code fragments will execute the method doStuff() in a separate thread?
(Choose two.)

A. new Thread() {
public void run() { doStuff() ;}
};
B. new Thread() {
public void start() { doStuff() ;}
};
C. new Thread() {
public void start() { doStuff() ;}
}.run();
D. new Thread() {
public void run() { doStuff(); }
}.start();
E. new Thread(new runnable() {
public void run() { doStuff(); }
}).run();
F. new Thread(new runnable() {
public void run() { doStuff(); }
}).start();

Answer: D, F

QUESTION 113
Given:

```
1.  public class Threads2 implements Runnable {
2.
3.    public void run() {
4.      System.out.println("run.");
5.      throw new RuntimeException("Problem");
6.    }
7.    public static void main(String[] args) {
8.      Thread t = new Thread(new Threads2());
9.      t.start();
10.     System.out.println("End of method.");
11.   }
12. }
```

Which to can be results? (Choose two.)

A. java.lang.RuntimeException: Problem
B. run.
java.lang.RuntimeException: Problem
C. End of method.
java.lang.RuntimeException: Problem
D. End of method.
run.
java.lang.RuntimeException: Problem
E. run.
java.lang.RuntimeException: Problem
End of method

Answer: D, E

QUESTION 114
Given:

```
public class NamedCounter {
  private final String name;
  private int count;
  public NamedCounter(String name) { this.name = name; }
  public String getName() { return name; }
  public void increment() { count++; }
  public int getCount() { return count; }
  public void reset() { count = 0; }
}
```

Which three changes should be made to adapt this class to be used safely by multiple threads? (Choose three.)

A. declare reset() using the synchronized keyword
B. declare getName() using the synchronized keyword
C. declare getCount() using the synchronized keyword
D. declare the constructor using the synchronized keyword
E. declare increment() using the synchronized keyword

Answer: A, C, E

QUESTION 115
Given:

```
1. public class TestSeven extends Thread {
2.  private static int x;
3.  public synchronized void doThings() {
4.    int current = x;
5.    current++;
6.    x = current;
7.  }
8.  public void run() {
9.      doThings();
10. }
11.}
```

Which statement is true?

A. Compilation fails
B. An exception is thrown at runtime.
C. Synchronizing the run() method would make the class thread-safe.
D. The data in variable "x" are protected from concurrent access problems.
E. Declaring the doThings() method as static would make the class thread-safe.
F. Wrapping the statements within doThings() in a synchronized(new Object()) { } block would make the class thread-safe.

Answer: E

QUESTION 116
Given:

```
7.  void waitForSignal() {
8.    Object obj = new Object();
9.    synchronized (Thread.currentThread()) {
10.     obj.wait();
11.     obj.notify();
12.   }
13. }
```

What statement is true?

A. This code may throw an InterruptedException.
B. This code may throw an IllegalStateException.
C. This code may throw a TimeoutException after ten minutes.
D. This code will not compile unless "obj.wait()" is replaced with "((Thread) obj).wait()".
E. A call to notify() or notifyAll() from another thread may cause this method to complete normally.

Answer: B

QUESTION 117
Given:

```
10. class Foo {
11.   static void alpha() { /* more code here */ }
12.   void beta() { /* more code here */ }
13. }
```

Which two statements are true? (Choose two.)

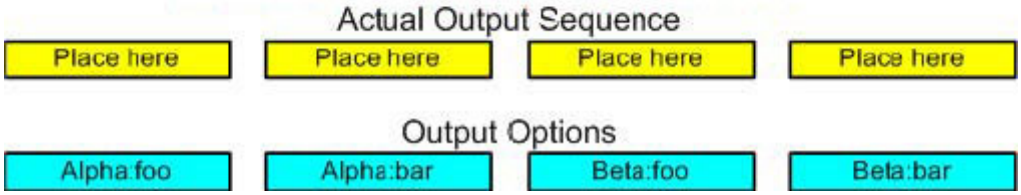
A. Foo.beta() is a valid invocation of beta().
B. Foo.alpha() is a valid invocation of alpha().
C. Method beta() can directly call method alpha().
D. Method alpha() can directly call method beta().

Answer: B, C

QUESTION 118
Place the Output Options in the Actual Output Sequence to indicate the output from this code:

```
class Alpha {
  public void foo( String... args )
    { System.out.print("Alpha:foo "); }
  public void bar( String a )
    { System.out.print("Alpha:bar "); }
}

public class Beta extends Alpha {
  public void foo( String a )
    { System.out.print("Beta:foo "); }
  public void bar( String a )
    { System.out.print("Beta:bar "); }
  public static void main( String[] argv ) {
    Alpha a = new Beta();
    Beta  b = (Beta)a;
    a.foo( "test" ); b.foo( "test" );
    a.bar( "test" ); b.bar( "test" );
  }
}
```



Answer:
Svarsaknas

QUESTION 119
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.

Answer: B

QUESTION 120
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. import static com.sun.scjp;
public class TerraCarta {
public double halfway() { return DIAMETER/2.0;}}

Answer: A, C

QUESTION 121
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();

Answer: B

QUESTION 122
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 statement 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.

Answer: D

QUESTION 123
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.print1n(z);
B. for(int z : x) System.out.print1n(z);
C. while(x.hashNext()) System.out.print1n(x.next())
D. for(int i=0; i < x.length; i++) System.out.println(x[i]);

Answer: B, D

QUESTION 124
Exhibit:

```
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. }
```

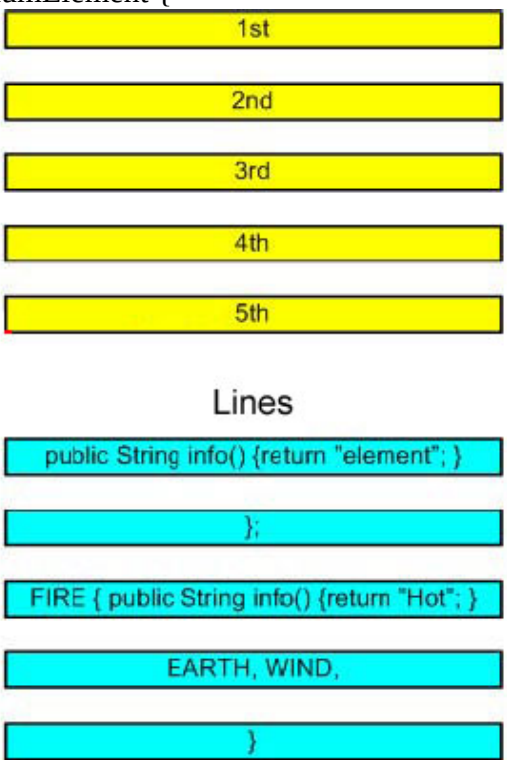
```
1. public class C extends B {
2.    public AImpl doit() {
3.       // more code here
4.    }
5.
6.    public Object execute() {
7.       // more code here
8.    }
9. }
```

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.

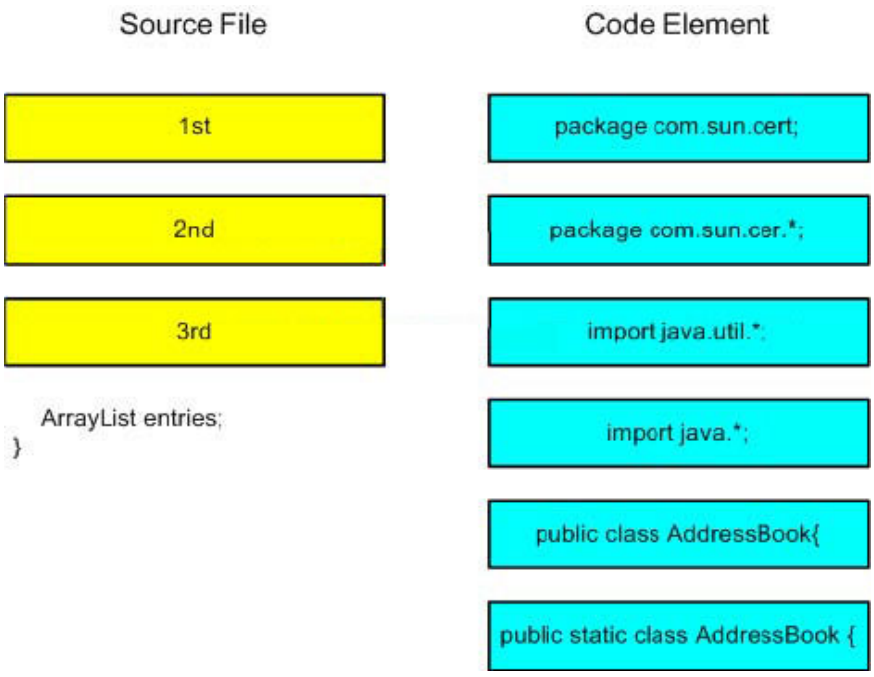
Answer: C

QUESTION 125
Place the lines in the correct order to complete the enum.
enumElement {



Answer:
Sakanarsvar

QUESTION 126
Place the code elements in order so that the resulting Java source file will compile correctly, resulting in a class called com.sun.cert.AddressBook.



Answer:
Saknarsvar

QUESTION 127
Which two classes correctly implement both the java.lang.Runnable and the java.lang.Clonable interfaces? (Choose two.)

A. public class Session
implements Runnable, Clonable {
public void run ();
public Object clone();
}
B. public class Session
extends Runnable, Clonable {
public void run() {/*do something*/}
public Object clone() {/*make a copy*/}
}
C. public class Session
implements Runnable, Clonable {
public void run() {/*do something*/}
public Object clone() {/*make a copy*/}
}
D. public abstract class Session
implements Runnable, Clonable {
public void run() {/*do something*/}
public Object clone() {/*make a copy*/}
}

E. public class Session
implements Runnable, implements Clonable {
public void run() {/*do something*/}
public Object clone() {/*make a copy*/}
}

Answer: C, D

QUESTION 128
Given:

```
1. class ClassA {
2.   public int numberOfInstances;
3.   protected ClassA(int numberOfInstances) {
4.     this number of Insurances = numberOfInstances;
5.   }
6. }
7. public class ExtendedA extends ClassA {
8.   private ExtendedA(int numberOfInstances) {
9.     super(numberOfInstances);
10.  }
11.  public static void main(String[] args) {
12.    ExtendedA ext = new ExtendedA(420);
13.    System.out.print(ext.numberOfInstances);
14.  }
15. }
```

Which statement is true?

A. 420 is the output
B. An exception is thrown at runtime.
C. All constructors must be declared public.
D. Constructors CANNOT use the private modifier.
E. Constructors CANNOT use the protected modifier.

Answer: A

QUESTION 129
Given:

```
1. public class Base {
2.   public static final String FOO = "foo";
3.   public static void main(String[] args) {
4.     Base b = new Base();
5.     Sub s = new Sub();
6.     System.out.print(Base.FOO);
7.     System.out.print(Sub.FOO);
8.     System.out.print(b.FOO);
9.     System.out.print(s.FOO);
10.    System.out.print(((Base)s).FOO);
11. } }
12. class Sub extends Base {public static final String FOO="bar";}
```

What is the result?

A. foofoofoofoofoo
B. foobarfoobarbar
C. foobarfoofoofoo
D. foobarfoobarfoo
E. barbarbarbarbar
F. foofoofoobarbar
G. foofoofoobarfoo

Answer: D

QUESTION 130
Which two statements are true about has-a and is-a relationships? (Choose two.)

A. Inheritance represents an is-a relationship.
B. Inheritance represents an has-a relationship.
C. Interfaces must be use when creating a has-a relationship.
D. Instance variables can be used when creating a has-a relationship.

Answer: A, D

QUESTION 131
Given:

```
1. package geometry;
2. public class Hypotenuse {
3.   public InnerTriangle it = new InnerTriangle();
4.   class InnerTriangle {
5.     public int base;
6.     public int height
7.
8. }
```

Which statement is true about the class of an object that can reference the variable base?

A. It can be any class.
B. No class has access to base.
C. The class must belong to the geometry package.
D. The class must be a subclass of the class Hypotenuse.

Answer: C

QUESTION 132
Given:

```
class A {
  String name = "A";
  String getName() {
    return name;
  }
  String greeting(){
    return "class A";
  }
}
class B extends A {
  String name = "B";
  String greeting() {
    return "class B";
  }
}
public class Client {
  public static void main( String[] args ) {
    A a = new A();
    A b = new B();
    System.out.println(a.greeting() + " has name " + a.getName());
    System.out.println(b.greeting() + " has name " + b.getName());
  }
}
```

Place the names "A" and "B" in the following output.

Answer:
Saknarsvar

QUESTION 133
Given:

```
1.  interface A { public void aMethod(); }
2.  interface B { public void bMethod(); }
3.  interface C extends A,B { public void cMethod(); }
4.  class D implements B {
5.    public void bMethod(){}
6.  }
7.  class E extends D implements C {
8.    public void aMethod(){}
9.    public void bMethod(){}
10.   public void aMethod(){}
11. }
```

What is the result?

A. Compilation fails because of an error in line 3.
B. Compilation fails because of an error in line 7.
C. Compilation fails because of an error in line 9.
D. If you define D e = new E(), then e.bMethod() invokes the version of bMethod() defined in line 5.
E. If you define D e = (D)(new E()), then e.bMethod() invokes the version of bMethod()

defined in line 5.
F. If you define D e = (D)(new E()), then e.bMethod() invokes the version of bMethod() defined in line 9.

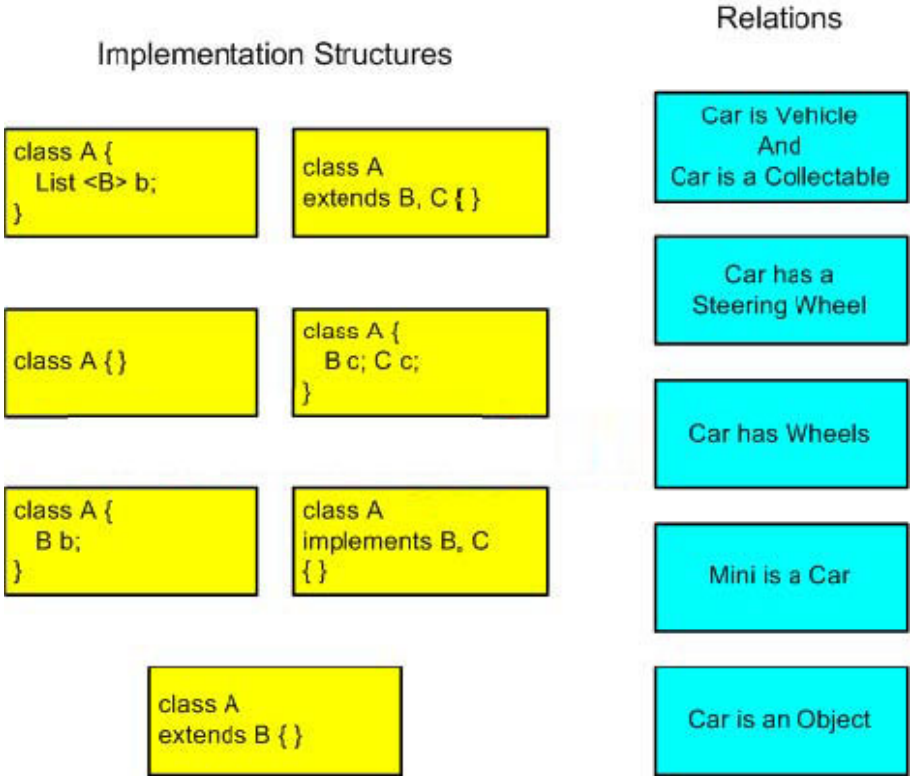
Answer: F

QUESTION 134
Which two statements are true? (Choose two.)

A. An encapsulation, public class promotes re-use.
B. Classes that share the same interface are always tightly encapsulated.
C. An encapsulated class allows subclasses to overload methods, but does NOT allow overriding methods.
D. An encapsulated class allows programmer to change an implementation without affecting outside code.

Answer: A, D

QUESTION 135
Place the Relations on their corresponding Implementation Structures.
Note: Not all Implementation Structres will be used.



Answer:
Saknarsvar

QUESTION 136
Given:

```
10: public class Hello {
11:   String title;
12:   int value;
13:   public Hello() {
14:     title += " World";
15:   }
16:   public Hello(int value) {
17:     this.value = value;
18:     title = "Hello";
19:     Hello();
20:   }
21: }
```

And:

```
30: Hello c = new Hello(5);
31: System.out.println(c.title);
```

What is the result?

A. Hello
B. Hello World
C. Compilation fails.
D. Hello World 5
E. The code runs with no output.
F. An exception is thrown at runtime.

Answer: C

QUESTION 137
Given:

```
1.  class Super {
2.    private int a;
3.    protected Super(int a) { this.a = a; }
4.  }
...
11. class Sub extends Super {
12.   public Sub(int a) { super(a); }
13.   public Sub() { this.a = 5; }
14. }
```

Which two, independently, will allow Sub to compile? (Choose two.)

A. Change line 2 to:
public int a;
B. Change line 2 to:
protected int a;
C. Change line 13 to:
public Sub() {this(5);}
D. Change line 13 to:
public Sub() {super(5);}

E. Change line 13 to:
public Sub() {super(a);}

Answer: C, D

QUESTION 138
Given:

```
11.  class Converter {
12.    public static void main(String[] args) {
13.      Integer i = args[0];
14.      int j = 12;
15.      System.gut .printIn("It is ; + (j==i) + " that j==i.");
16.    }
17.  }
```

What is the result when the programmer attempts to compile the code and run it with the command java Converter 12?

A. It is true that j= =i.
B. It is false that J= =i.
C. An exception is thrown at runtime.
D. Compilation fails because of an error in line 13.

Answer: D

QUESTION 139
Given:

```
1. public class TestString1 {
2.   public static void main(String[] args) {
3.     String str = "420";
4.     str += 42;
5.     System.out.print(str);
6.   }
7. }
```

What is the output?

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

Answer: D

QUESTION 140
Assuming that the serializeBanana2() and the deserializeBanana2() methods will correctly use Java serialization and given:

```
13. import java.io.*;
14. class Food {Food() { System.out.print("1"); } }
15. class Fruit extends Food implements Serializable {
16.    Fruit() { System.out.print("2"); } }
17. public class Banana2 extends Fruit {   int size = 42;
18.   public static void main(String [] args) {
19.     Banana2 b = new Banana2();
20.     b.serializeBanana2(b);  // assume correct serialization
21.     b = b.deserializeBanana2(b);  // assume correct
22.     System.out.println(" restored " + b.size + " ");  }
23.   // more Banana2 methods
24. }
```

What is the result?

A. Compilation fails
B. 1 restored 42
C. 12 restored 42
D. 121 restored 42
E. 1212 restored 42
F. An exception is thrown at runtime

Answer: D

QUESTION 141
Given:

```
11. String test = "a1b2c3";
12. String[] tokens = test.split("\\d");
13. for(String s: tokens) System.out.print(s + " ");
```

What is the result?

A. a b c
B. 1 2 3
C. a1b2c3
D. a1 b2 c3
E. Compilation fails
F. The code runs with no output.
G. An exception is thrown at runtime.

Answer: A

QUESTION 142
Given:

```
12.  String csv = "Sue,5,true,3";
13.  Scanner scanner = new Scanner( csv );
14.  scanner.useDelimiter(",");
15.  int age - scanner.nextInt();
```

What is the result?

A. Compilation fails
B. After line 15, the value of age is 5.
C. After line 15, the value of age is 3.
D. An exception is thrown at runtime.

Answer: D

QUESTION 143
Given a valid DateFormat object named df, and

```
16. Date d = new Date(0L);
17. String ds = "December 15, 2004";

18.  // insert code here
```

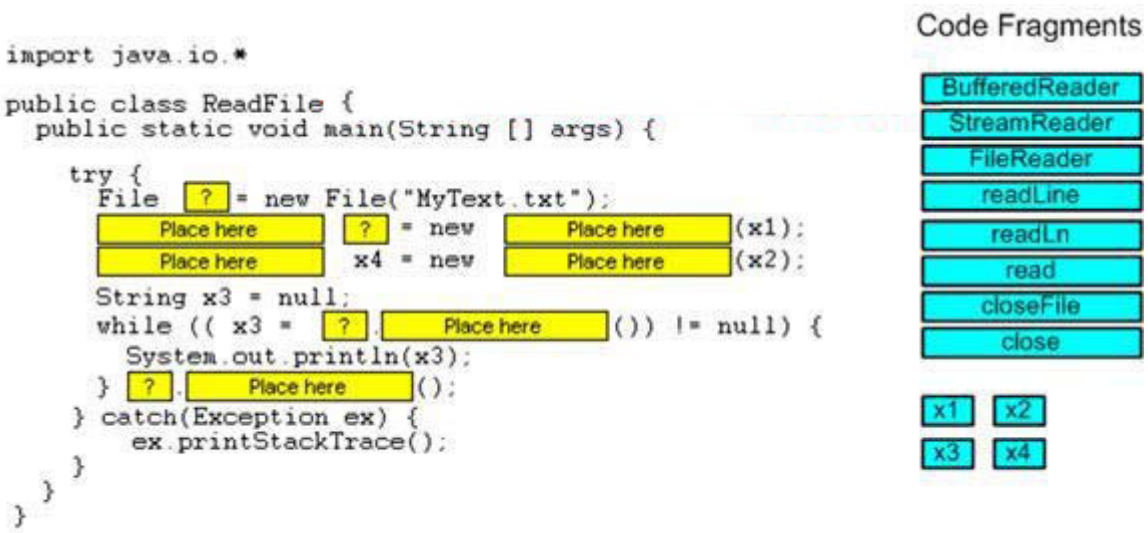
What updates d's value with the date represented by ds?

A. 18. d = df.parse(ds);
B. 18. d = df.getDate(ds);
C. 18. try {
19. d = df.parse(ds);
20. } catch(ParseException e) { };
D. 18. try {
19. d = df.getDate(ds);
20. } catch(ParseException e) { };

A. A
B. B
C. C
D. D

Answer: C

QUESTION 144
Place the Fragments into the program, so that the program will get lines from a text file, display them, and then close all the resources.



Answer:

Explanation: Pending.

QUESTION 145
Given:

```
1.  public class Target {
2.    private int i = 0;
3.    public int addOne(){
4.      return ++i;
5.    }
6.  }
```

And:

```
1.  public class Client {
2.    public static void main(String[] args){
3.      System.out.println(new Target().addOne());
4.    }
5.  }
```

Which changes can you make to Target without affecting Client?

A. Line 4 of class Target can be changed to retur i++;
B. Line 2 of class Target can be changed to private int i =1;
C. Line 3 of class Target can be changed to private int addOne(){
D. Line 2 of class Target can be changed to private integer i = ();

Answer: D

QUESTION 146
Given:

```
1.  class SuperClass {
2.    public A getA() {
3.      return new A();
4.    }
5.  }
6.  class SubClass extends SuperClass {
7.    public B getA(){
8.      return new B();
9.    }
10. }
```

Which statement is true?

A. Compilation will succeed if A extends B.
B. Compilation will succeed if B extends A.
C. Compilation will always fail because of an error in line7.
D. Compilation will always fail because of an error in line8.

Answer: B

QUESTION 147
Given:

```
1.  class Pizza {
2.    java.util.ArrayList toppings;
3.    public final void addTopping(String topping) {
4.      toppings.add(topping);
5.    }
6.  }
7.  public class Pepperonl.Pizza extends Pizza {
8.    public void addTopping(String topping) {
9.      System.out.println("Cannot add Toppings");
10.   }
11.   public static void main(String[] args) {
12.     Pizza pizza = new PepperoniPizza();
13.     pizza.addTopping("Mushrooms");
14.   }
15. }
```

And:

```
10. public class Pizza {
11.    ArrayList toppings;
12.
13.    public final void addTopping(String
topping) {
14.       toppings.add(topping);
15.    }
16.
17.    public void removeTopping(String
topping) {
18.       toppings.remove(topping);
19.    }
20. }
30. class PepperoniPizza extends Pizza {
31.   public void addTopping(String topping) {
32.      System.out.println("Cannot add
Toppings");
33.   }
34.
35.   public void removeTopping(String
topping) {
36.      System.out.println("Cannot remove
Pepperoni");
37.   }
38.}
50. Pizza pizza = new PepperoniPizza();
51. pizza.addTopping("Mushrooms");
52. pizza.removeTopping("Pepperoni");
```

What is the result?

A. Compilation fails.
B. Cannot add Toppings
C. The code runs with no output.
D. A NullPointerException is thrown in Line 4.

Answer: A

QUESTION 148
Insert six modifiers into the code such that it meets all of these requirements:

1. It must be possible to create instances of Alpha and Beta from outside the packages in which they are defined.
2. When an object of type Alpha (or any potential subclass of Alpha) has been created, the instance variable alpha may never be changed.
3. The value of the instance variable alpha must always be "A" for objects of type Alpha.

Code

```
package alpha;
Place here class Alpha {
  Place here String alpha;
  Place here Alpha() { this("A"); }
  Place here Alpha(String a) { alpha = a; }
}

package beta;
Place here class Beta extends alpha.Alpha {
  Place here Beta(String a) { super(a); }
}
```

Modifiers

private

protected

public

Answer:
Saknarsvar

QUESTION 149
Given:

```
10. interface A { void x(); }
11. class B implements A { public void x() {} public void y() {} }
12. class C extends B { public void x() {} }
```

And:

```
20. 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.

Answer: F

QUESTION 150
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 message1");
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)

Answer: C

QUESTION 151
Exhibit:

```
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.

Answer:

Explanation: Pending.

QUESTION 152
Given:

```
11. public class Ball{
12.   public enum Color { RED, GREEN, BLUE };
13.   public void foo(){
14.     // insert code here
15.     { System.out printIn(c); }
16.   }
17. }
```

Which code inserted at line 14 causes the foo method to print RED, GREEN, and BLUE?

A. for(Color c : Color.values())
B. for(Color c= RED; c<=BLUE; c++)
C. for(Color c ; c.hasNext() ; c.next() }
D. for(Color c : Color[0]; c <=Color[2]; c++)
E. for(Color c : Color[0]; c <=Color.BLUE; c++)

Answer: A

QUESTION 153
Exhibit:

```
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.println(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 in line 28.

Answer: A

QUESTION 154
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*/}

Answer: B, C, E

QUESTION 155
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 {}

Answer: A

QUESTION 156
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.setAncohor(10,10);
c.draw();
C. Shape s =new Circle();
s.setAnchor(10,10);
s.draw();
D. Shape s =new Circle();
s->setAncohor(10,10);
s->draw();
E. Shape s =new Circle();
s.Shape.setAnchor(10,10);
s.shape.draw();

Answer: C

QUESTION 157
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() {/*do 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*/}
}
```

Answer: A

QUESTION 158
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; }

Answer: A, B

QUESTION 159
A UNIX user named Bob wants to replace his chess program with a new one, but he is not sure where the old one is installed. Bob is currently able to run a Java chess program starting from his home directory /home/bob using the command:
Java -classpath /test:/home/bob/downloads/*.jar games.Chess
Bob's CLASSPATH is set (at login time) to:
/usr/lib:/home/bob/classes:/opt/java/lib:/opt/java/lib/*.jar
What is a possible location for the Chess.class file?

A. /test/Chess.class
B. /home/bob/Chess.class
C. /test/games/Chess.class
D. /usr/lib/games/Chess.class
E. /home/bob/games/Chess.class
F. Inside jarfile /opt/java/lib/Games.jar (with a correct manifest)
G. Inside jarfile /home/bob/downloads/Games.jar (with a correct manifest)

Answer: C

QUESTION 160
Given:

```
11. interface DeclareStuff {
12.   public static final int EASY = 3;
13.   void doStuff(int t); }
14. public class TestDeclare implements DeclareStuff {
15.   public static void main(String [] args) {
16.     int x = 5;
17.     new TestDeclare().doStuff(++x);
18.   }
19.   void doStuff(int s) {
20.     s += EASY + ++s;
21.     System.out.println("s " + s);
22.   }
23. }
```

What is the result?

A. s 14
B. s 16
C. s 10
D. Compilation fails
E. An exception is thrown at runtime.

Answer: D

QUESTION 161
Given:

```
11. String[] elements = { "for", "tea", "too" };
12. String first = (elements.length > 0) ? elements[0] : null;
```

What is the result?

A. Compilation fails.
B. An exception is thrown at runtime.
C. The variable first is set to null.
D. The variable first is set to elements[0].

Answer: D

QUESTION 162
Given:

```
1. package com.company.application;
2.
3. public class MainClass {
4.   public static void main(String[] args) {}
5. }
```

And MainClass exists in the /apps/com/company/application directory. Assume the CLASSPATH environment variable is set to "." (current directory).
Which two java commands entered at the command line will run MainClass?

(Choose two.)

A. java MainClass if run from the /apps directory
B. java com.company.application.MainClass if run from the /apps directory
C. java -classpath /apps com.company.application.MainClass if run from any directory
D. java -classpath . Mainclass if run from the /apps/com/company/application directory
E. java -classpath /apps/com/company/application:. MainClass if run from the /apps directory
F. java com.company.application.MainClass if run from the /apps/com/company/application directory

Answer: B, C

QUESTION 163
Given:

```
11. public class ItemTest {
12.   private final int id;
13.   public ItemTest(int id) { this.id = id; }
14.   public void updateId(int newId) { id = newId; }
15.
16.   public static void main(String[] args) {
17.     ItemTest fa = new ItemTest(42);
18.     fa.updateId(69);
19.     System.out.println(fa.id);
20.   }
21. }
```

What is the result?

A. Compilation fails.
B. An exception is thrown at runtime.
C. The attribute id in the Item object remains unchanged.
D. The attribute id in the Item object is modified to the new value.
E. A new Item object is created with the preferred value in the id attribute.

Answer: A

QUESTION 164
A programmer has an algorithm that requires a java.util.List that provides an efficient implementation of add(0, object), but does NOT need to support quick random access.
What supports these requirements?

A. java.util.Queue
B. java.util.ArrayList
C. java.util.LinearList
D. java.util.LinkedList

Answer: D

QUESTION 165
Which two statements are true about the hashCode method? (Choose two.)

A. The hashCode method for a given class can be used to test for object equality and object inequality for that class.
B. The hashCode method is used by the java.util.SortedSet collection class to order the elements within that set.
C. The hashCode method for a given class can be used to test for object inequality, but NOT object equality for that class.
D. The only important characteristic of the values returned by a hashCode method is that the distribution of valus must follow a Gaussian distribution.
E. The hashCode method is used by the java.util.HashSet collection class to group the elements within that set into hash buckets for swift retrieval.

Answer: C, E

QUESTION 166
Given:

```
1. import java.util.*;
2. public class TestGenericConversion {
3.   public static void main(String[] args) {
4.     List list = new LinkedList();
5.     list.add("one");
6.     list.add("two");
7.     System.out.print(((String)list.get(0)).length());
8.   }
9. }
```

Refactor this class to use generics without changing the code's behavior.

```
1. import java.util.*;
2. public class TestGenericConversion {
3.   public static void main(String[] args) {
4.     Place here
5.     list.add("one");
6.     list.add("two");
7.     Place here
8.   }
9. }
```

Code

- List list = new LinkedList();
- List<String> list = new LinkedList<String>();
- List<String> list = new LinkedList();
- List list = new LinkedList<String>();
- System.out.print(list.get(0).length());
- System.out.print(list.get<String>(0).length());
- System.out.print(<String>list.get(0).length());
- System.out.print(((List<String>)list.get(0)).length());

Answer:
Svarsaknas

QUESTION 167
Given the class definitions:

```
class Animal { }
class Dog extends Animal { }
```

and the code:

```
public void go() {
  ArrayList<Dog> aList = new ArrayList<Dog>();
  takeList(aList);
}
// insert defination of the takeList() method here
```

Place the correct Compilation Result on each takeList() method definition to indicate whether or not the go() method would compile given that definition.

takeList() Method Definition

- `public void takeList(ArrayList list) { }`
- `public void takeList(ArrayList<Animal> list) { }`
- `public void takeList(ArrayList<? extends Animal> list) { }`
- `public void takeList(ArrayList<?> list) { }`
- `public void takeList(ArrayList<Object> list) { }`

Compilation Result

- Compilation succeeds.
- Compilation fails.

Answer:
Saknarsvar

QUESTION 168
Place the code in the appropriate place such that this program will always output [1, 2].

```
import java.util.*;

public class MyInt [Place here] [Place here] {
    public static void main(String[] args) {
      ArrayList<MyInt> list = new ArrayList<MyInt>();
      list.add(new MyInt(2));
      list.add(new MyInt(1));
      Collections.sort(list);
      System.out.println(list);
    }
    private int i;
    public MyInt(int i) { this.i = i; }
    public String toString() { return Integer.toString(i); }

    [Place here] int [Place here] {
      MyInt i2 = (MyInt)o;

      return [Place here] ;
    }
}
```

Code

implements	extends	Sortable	Object	Comparable
protected	public	i - i2.i	i	i2.i - i
compare(MyInt o, MyInt i2)		compare(Object o, Object i2)		
sort(Object o)		sort(MyInt o)		
compareTo(MyInt o)		compareTo(Object o)		

Answer:
Saknarsvar

QUESTION 169
Given:

```
1. public class Drink implements Comparable {
2.   public String name;
3.   public int compareTo(Object o) {
4.     return 0;
5.
6. }
```

and:

```
20. Drink one = new Drink();
21. Drink two = new Drink();
22. one.name= "Coffee";
23. two.name= "Tea";
23. TreeSet set = new TreeSet();
24. set.add(one);
25. set.add(two);
```

A programmer iterates over the TreeSet and prints the name of each Drink object.
What is the result?

A. Tea

B. Coffe
C. Coffe
Tea
D. Compilation fails.
E. The code runs with no output
F. An exception is thrown at runtime

Answer: A

QUESTION 170
Exhibit:

SomeException:

```
1. public class SomeException {
2. }
```

Class A:

```
1. public class A {
2.    public void doSomething() { }
3. }
```

Class B:

```
1. public class B extends A {
2.    public void doSomething() throws
SomeException { }
3. }
```

Which statement is true about the two classes?

A. Compilation of both classes will fail.
B. Compilation of both classes will succeed.
C. Compilation of class A will fail. Compilation of class B will succeed.
D. Compilation of class B will fail. Compilation of class A will succeed.

Answer: D

QUESTION 171
Given:

```
10. public class ClassA {
11.    public void count(int i) {
12.       count(++i);
13.    }
14. }
```

and:

```
20. ClassA a = new ClassA();
21. a.count(3);
```

Which exception or error should be thrown by the virtual machine?

A. StackOverflowError
B. NullPointerException
C. NumberFormatException
D. IllegalArgumentException
E. ExceptionInInitializerError

Answer: A

QUESTION 172
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

Answer: E

QUESTION 173
Given:

```
11. public static void main(String[] args) {
12.   Integer i = new Integer(1) + new Integer(2);
13.   switch(i) {
14.     case 3: System.out.println("three"); break;
15.     default: System.out.println("other"); break;
16.   }
17. }
```

What is the result?

A. three
B. other
C. An exception is thrown at runtime.
D. Compilation fails because of an error on line 12.
E. Compilation fails because of an error on line 13.
F. Compilation fails because of an error on line 15.

Answer: A

QUESTION 174
Place the code elements into the class so that the code compiles and prints "Run. Run. Dolt." in exactly that order. Note that there may be more than one correct solution.

```
public class TesTwo extends Thread {
 public static void main (String[] a) throws Exception {
    TesTwo t = new TesTwo();
    t.start();
    [ Place here ]
    [ Place here ]
    [ Place here ]
  }
  public void run() {
    System.out.print("Run. ");
  }
  public void doIt() {
    System.out.print("do ");
  }
}
```

Code Elements

t.start();	t.join();	t.pause(10);	run();
t.run();	t.doIt();	doIt();	

Answer:
Saknarsvar

QUESTION 175
Given:

```
1. public class TestFive {
2.   private int x;
3.   public void foo() {
4.      int current = x;
5.      x = current + 1;
6.   }
7.   public void go() {
8.     for(int i = 0; i < 5; i++) {
9.        new Thread() {
10.          public void run() {
11.            foo();
12.            System.out.print(x + ", ");
13.       }  }.start();
14. } } }
```

Which two changes, taken together, would generate the output 1, 2, 3, 4, 5, ? (Choose two.)

A. move the line 12 print statement into the foo() method
B. change line 7 to public synchronized void go() {

C. change the variable declaration on line 2 to private volatile int x;
D. wrap the code inside the foo() method with a synchronized(this) block
E. wrap the loop code inside the go() method with a synchronized block synchronized(this) { // for loop code here }

Answer: A, D

QUESTION 176
Place the code elements in position so that the Flags2 class will compile and make appropriate use of the wait/notify mechanism.
Note: You may reuse code elements.

```
public class Flags2 {
   private boolean isReady = false;

   public [Place here] void produce() {
      isReady = true;
      [Place here];
   }
   public [Place here] void consume() {
      while (! isReady) {
        try {
          [Place here];
        } catch (Exception ex) { }
      }
      isReady = [Place here];
    }
}
```

Code Elements

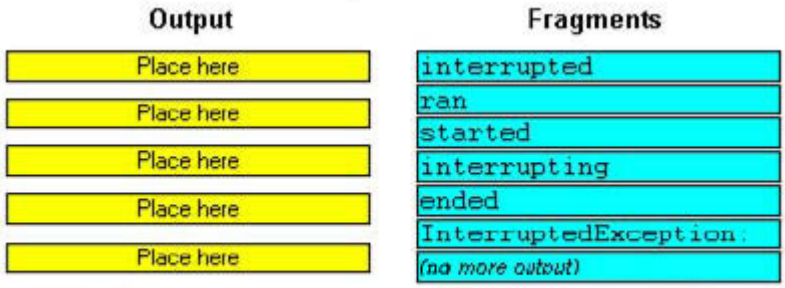
synchronized	true	false	wait()
volatile	synchronized()	notifyAll()	synchronize

Answer:
Saknar svar

QUESTION 177
Given:

```
10.  Runnable r = new Runnable() {
11.    public void run() {
12.      try {
13.        Thread.sleep(1000);
14.      } catch (InterruptedException e) {
15.        System.out.println("interrupted");
16.      }
17.      System.out.println("ran");
18.    }
19.  };
20.  Thread t = new Thread(r);
21.  t.start();
22.  System.out.println("started");
23.  t.sleep(2000);
24.  System.out.println("interrupting");
25.  t.interrupt();
26.  System.out.println("ended");
```

Assume that sleep(n) executes in exactly n milliseconds, and all other code execute in an insignificant amount of time.
Place the fragments in the output area to show the result of running this code.



Answer:
Saknarsvar

QUESTION 178
Given:

```
1. public class Threads5 {
2.   public static void main (String[] args) {
3.     new Thread(new Runnable() {
4.       public void run() {
5.         System.out.print("bar");
6.       }}).start();
7.   }
8. }
```

What is the result?

A. Compilation fails.
B. An exception is throw at runtime
C. The code executes normally and prints "bar".
D. The code executes normally, but nothing prints.

Answer: C

QUESTION 179
Given:
foo and bar are public references available to many other threads. foo refers to a Thread and bar is an Object. The thread foo is currently executing bar.wait(). From another thread, what provides the most reliable way to ensure that foo will stop executing wait()?

A. foo.notify();
B. bar.notify();
C. foo.notiyAll();
D. Thread.notify();
E. bar.notifyAll();
F. Object.notify();

Answer: E

QUESTION 180
Given:

```
1.  public class Threads4 {
2.    public static void main (String[] args) {
3.      new Threads4().go();
4.    }
5.    public void go() {
6.      Runnable r = new Runnable() {
7.        public void run() {
8.          System.out.print("foo");
9.        }
10.     };
11.     Thread t = new Thread(r);
12.     t.start();
13.     t.start();
14.   }
15. }
```

What is the result?

A. Compilation fails.
B. An exception is thrown at runtime.
C. The code executes normally and prints "foo".
D. The code executes normally, but nothing is printed

Answer: B