書名：SCJP 6.0 認證教戰手冊　作者：黃彬華

完全擬真試題 1-100（共 244 題）

第1題

Given:

```
35.     String #name = "Jane Doe";
36.     int $age = 24;
37.     Double _height = 123.5;
38.     double ~temp = 37.5;
```

Which two statements are true? (Choose two.)

A. Line 35 will not compile.

B. Line 36 will not compile.

C. Line 37 will not compile.

D. Line 38 will not compile.

答案：AD

參考：2-4 Java 程式內容簡介

第2題

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.

答案：D

參考：3-3 文字串接符號

第3題

Given:

```
1.     public class Test{
2.        public static void main(String[] args){
3.           int x = 5;
```

```
4.              boolean b1 = true;
5.              boolean b2 = false;
6.
7.              if((x==4) && !b2)
8.                  System.out.print("1 ");
9.                  System.out.print("2 ");
10.             if((b2=true) && b1)
11.                 System.out.print("3 ");
12.         }
13.     }
```

What is the result?

A.　2

B.　3

C.　1 2

D.　2 3

E.　1 2 3

F.　Compilation fails.

G.　An exception is thrown at runtime.

答案：D

參考：4-1 條件控制

第4題

Given:

```
22.     public void go(){
23.         String o = "";
24.         z:
25.         for(int x=0; x<3; x++){
26.             for(int y=0; y<2; y++){
27.                 if(x == 1) break;
28.                 if(x==2 && y==1) break z;
29.                 o = o + x + y;
30.             }
31.         }
32.         System.out.println(o);
33.     }
```

What is the result when the go() method is invoked?

A.　00

B.　0001

C.　000120

D.　00012021

E.　Compilation fails.

F.　An exception is thrown at runtime.

答案：C

參考：4-3 特殊流程的處理

第5題

Given:

```
10.     int x = 0;
11.     int y = 10;
12.     do{
13.             y--;
14.             ++x;
15.     }while(x < 5);
16.     System.out.print(x + "," + y);
```

What is the result?

A.   5,6

B.   5,5

C.   6,5

D.   6,6

答案：B

參考：4-2 迴圈控制

第6題

Given:

```
1.      public class Breaker{
2.              static String o = "";
3.              public static void main(String[] args){
4.                      z:
5.                      o = o + 2;
6.                      for(int x=3; x<8; x++){
7.                              if(x == 4) break;
8.                              if(x == 6) break z;
9.                              o = o + x;
10.                     }
11.                     System.out.println(o);
12.             }
13.     }
```

What is the result?

A.   23

B.   234

C.   235

D.   2345

E.   2357

F.   23457

G.   Compilation fails.

答案：G

參考：4-3 特殊流程的處理

第7題

Given:

```
1.    public class Breaker2{
2.        static String o = "";
3.        public static void main(String[] args){
4.            z:
5.            for(int x=2; x<7; x++){
6.                if(x == 3) continue;
7.                if(x == 5) break z;
8.                o = o + x;
9.            }
10.           System.out.println(o);
11.       }
12.   }
```

What is the result?

A.   2

B.   24

C.   234

D.   246

E.   2346

F.   Compilation fails.

答案：B

參考：4-3 特殊流程的處理

第8題

Given:

```
1.    public class Spock{
2.        public static void main(String[] args){
3.            Long tail = 2000L;
4.            Long distance = 1999L;
5.            Long story = 1000L;
6.            if((tail>distance) ^ ((story*2)==tail))
7.                System.out.print("1");
8.            if((distance+1 != tail) ^ ((story*2)==distance))
9.                System.out.print("2");
10.       }
11.   }
```

What is the result?

A.   1

B.   2

C.   12

D.   Compilation fails.

E.   No output is produced.

F.   An exception is thrown at runtime.

答案：E

參考：4-1 條件控制

第9題

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].

答案：D

參考：4-1 條件控制、5-2 1 維陣列介紹

第10題

Given:

```
1.     import java.util.*;
2.     public class Quest{
3.         public static void main(String[] args){
4.             String[] colors =
5.                 {"blue","red","green","yellow","orange"};
6.             Arrays.sort(colors);
7.             int s2 = Arrays.binarySearch(colors, "orange");
8.             int s3 = Arrays.binarySearch(colors, "violet");
9.             System.out.print(s2 + "" + s3);
10.         }
11.    }
```

What is the result?

A.   2-1

B.   2-4

C.   2-5

D.   3-1

E.   3-4

F.   3-5

G.   Compilation fails.

H.   An exception is thrown at runtime.

答案：C

參考：5-4 1 維陣列的排序與搜尋

第11題

Given:

```
1.     class Alligator{
2.         public static void main(String[] args){
3.             int[]x[] = {{1,2},{3,4,5},{6,7,8,9}};
```

```
4.                 int[][]y = x;
5.                 System.out.print(y[2][1]);
6.         }
7.     }
```

What is the result?

A.   2

B.   3

C.   4

D.   6

E.   7

F.   Compilation fails.

答案：E

參考：5-6 2 維陣列的宣告與存取

第12題

Drag and Drop（拖曳題）

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;}
```

答案：

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

     public int bar(String x){return 1;}

     public void bar(int x, int y){}

}
```

參考：6-5 繼承

第13題

Given:

```
1.    public class Barn{
2.        public static void main(String[] args){
```

6

```
3.              new Barn.go("hi", 1);
4.              new Barn.go("hi", "world", 2);
5.          }
6.      public void go(String... y, int x){
7.              System.out.print(y[y.length-1] + " ");
8.          }
9.      }
```

What is the result?

A.   hi hi

B.   hi world

C.   world world

D.   Compilation fails.

E.   An exception is thrown at runtime.

答案：D

參考：6-2 Java 方法

第14題

Given:

```
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.     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.

答案：D

參考：6-5 繼承

第15題

Given:

```
11.     class Mud{
```

```
12.            //insert code here
13.                System.out.println("hi");
14.            }
15.      }
```

And the following five fragments:

public static void main(String...a){

public static void main(String.* a){

public static void main(String... a){

public static void main(String[]... a){

public static void main(String...[] a){

How many of the code fragments, inserted independently at line 12, compile?

A.   0

B.   1

C.   2

D.   3

E.   4

F.   5

答案：D

參考：6-2 Java 方法

第16題

Given:

```
5.      class Atom{
6.          Atom(){System.out.print("atom ");}
7.      }
8.      class Rock extends Atom{
9.          Rock(String type){System.out.print(type);}
10.     }
11.     public class Mountain extends Rock{
12.         Mountain(){
13.             super("granite ");
14.             new Rock("granite ");
15.         }
16.         public static void main(String[] a){new Mountain();}
17.     }
```

What is the result?

A.   Compilation fails.

B.   atom granite

C.   granite granite

D.   atom granite granite

E.   An exception is thrown at runtime.

F.   atom granite atom granite

答案：F

參考：6-5 繼承

第17題

Given:

```
1.    public class Blip{
2.        protected int blipvert(int x){return 0;}
3.    }
4.    class Vert extends Blip{
5.        //insert code here
6.    }
```

Which five methods, inserted independently at line 5, will compile? (Choose five.)

A.   public int blipvert(int x){return 0;}

B.   private int blipvert(int x){return 0;}

C.   private int blipvert(long x){return 0;}

D.   protected long blipvert(int x){return 0;}

E.   protected int blipvert(long x){return 0;}

F.   protected long blipvert(long x){return 0;}

G.   protected long blipvert(int x, int y){return 0;}

答案：ACEFG

參考：6-5 繼承

第18題

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);}

答案：CD

參考：6-5 繼承

第19題

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

A.　　class Man extends Dog{}

B.　　class Man implements Dog{}

C.　　class Man{private BestFriend dog;}

D.　　class Man{private Dog bestFriend;}

E.　　class Man{private Dog<bestFriend>;}

F.　　class Man{private BestFriend<dog>;}

答案：D

參考：6-5 繼承

第20題

A team of programmers is reviewing a proposed API for a new utility class. After some discussion, they realize that they can reduce the number of methods in the API without losing any functionality. If they implement the new design, which two OO principles will they be promoting?

A.　　Looser coupling

B.　　Tighter coupling

C.　　Lower cohesion

D.　　Higher cohesion

E.　　Weaker encapsulation

F.　　Stronger encapsulation

答案：AD

參考：第 6 章 物件導向基本觀念

第21題

Given:

```
1.      class Batman{
2.          int squares = 81;
3.          public static void main(String[] args){
4.              new Batman().go();
5.          }
6.          void go(){
7.              incr(++squares);
8.              System.out.println(squares);
9.          }
10.         void incr(int squares){squares += 10;}
11.     }
```

What is the result?

A.　81

B.　82

C.　91

D.　92

E.　Compilation fails.

F.　An exception is thrown at runtime.

答案：B

參考：6-2 Java 方法

第22題

Given:

```
1.     class Pass{
2.          public static void main(String[] args){
3.               int x = 5;
4.               Pass p = new Pass();
5.               p.doStuff(x);
6.               System.out.print(" main x = " + x);
7.          }
8.          void doStuff(int x){
9.               System.out.println(" doStuff x = " + x++);
10.          }
11.     }
```

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

答案：D

參考：6-2 Java 方法

第23題

A company has a business application that provides its users with many different reports: receivables reports, payables reports, revenue projects, and so on. The company has just purchased some new, state-of-the-art, wireless printers, and a programmer has been assigned the task of enhancing all of the reports to use not only the company's old printers, but the new wireless printers as well.

When the programmer starts looking into the application, the programmer discovers that because of the design of the application, it is necessary to make changes to each report to support the new printers.

Which two design concepts most likely explain the situation? (Choose two.)

A.　Inheritance

B.　　Low cohesion

C.　　Tight coupling

D.　　High cohesion

E.　　Loose coupling

F.　　Object immutablility

答案：BC

參考：第 6 章 物件導向基本觀念

第24題

A company that makes Computer Assisted Design(CAD) software has, within its application some utility classes that are used to perform 3D rendering tasks. The company's chief scientist has just improved the performance of one of the utility classes' key rendering algorithms, and has assigned a programmer to replace the old algorithm with the new algorithm. When the programmer begins researching the utility classes, she is happy to discover that the algorithm to be replaced exists in only one class. The programmer reviews that class's API, and replaces the old algorithm with the new algorithm, being careful that her changes adhere strictly to the class's API. Once testing has begun, the programmer discovers that other classes that use the class she changed are no longer working properly.

What design flaw is most likely the cause of there new bugs?

A.　　Inheritance

B.　　Tight coupling

C.　　Low cohesion

D.　　High cohesion

E.　　Loose coupling

F.　　Object immutablility

答案：B

參考：第 6 章 物件導向基本觀念

第25題

Given:

```
1.      class ClassA{
2.          public int numberOfInstances;
3.          protected ClassA(int numberOfInstances){
4.              this.numberOfInstances = numberOfInstances;
5.          }
6.      }
7.      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.      }
```

What is the result?

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.

答案：A

參考：6-5 繼承

第26題

Given:

```
10.      interface Jumper{public void jump();}
...
20.      class Animal{}
...
30.      class Dog extends Animal{
31.          Tail tail;
32.      }
...
40.      class Beagle extends Dog implements Jumper{
41.          public void jump(){}
42.      }
...
50.      class Cat implements Jumper{
51.          public void jump(){}
52.      }
```

Which three are true? (Choose three.)

A.　　Cat is-a Animal

B.　　Cat is-a Jumper

C.　　Dog is-a Animal

D.　　Dog is-a Jumper

E.　　Cat has-a Animal

F.　　Beagle has-a Tail

G.　　Beagle has-a Jumper

答案：BCF

參考：6-5 繼承

第27題

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 */}

答案：BCE

參考：6-5 繼承

第28題

Given:

```
1.      class X{
2.          X(){System.out.print(1);}
3.          X(int x){
4.              this();
5.              System.out.print(2);
6.          }
7.      }
8.      public class Y extends X{
9.          Y(){
10.             super(6);
11.             System.out.print(3);
12.         }
13.         Y(int y){
14.             this();
15.             System.out.println(4);
16.         }
17.         public static void main(String[] a){new Y(5);}
18.     }
```

What is the result?

A.　　13

B.　　134

C.　　1234

D.　　2134

E.　　2143

F.　　4321

答案：C

參考：6-5 繼承

第29題

Given:

```
1.     public class A{
2.          public void doit(){
3.          }
4.          public String doit(){
5.               return "a";
6.          }
7.          public double doit(int x){
8.               return 1.0;
9.          }
10.    }
```

What is the result?

A.   An exception is thrown at runtime.

B.   Compilation fails because of an error in line 7.

C.   Compilation fails because of an error in line 4.

D.   Compilation succeeds and no runtime errors with class A occur.

答案：C

參考：6-5 繼承

第30題

Given:

```
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.

答案：A

參考：6-5 繼承

第31題

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.    }
13.    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

答案：D

參考：6-5 繼承、8-1 變數種類與其生命期

第32題

Given:

```
1.    class Mammal{}
2.
3.    class Raccoon extends Mammal
4.         Mammal m = new Mammal();
5.    }
6.
7.    class BabyRaccoon extends Mammal{}
```

Which four statments are true? (Choose four.)

A.   Raccoon is-a Mammal.

B.   Raccoon has-a Mammal.

C.   BabyRaccoon is-a Mammal.

D.   BabyRaccoon is-a Raccoon.

E.   BabyRaccoon has-a Mammal.

F.　　BabyRaccoon is-a BabyRaccoon.

答案：ABCF

參考：6-5 繼承

第33題

Given:

```
2.    public class Hi{
3.        void m1(){}
4.        protected void m2(){}
5.    }
6.    class Lois extends Hi{
7.        //insert code here
8.    }
```

Which four code fragments, inserted independently at line 7, will compile? (Choose four.)

A.　　public void m1(){}

B.　　protected void m1(){}

C.　　private void m1(){}

D.　　void m2(){}

E.　　pubic void m2(){}

F.　　protected void m2(){}

G.　　private void m2(){}

答案：ABEF

參考：6-5 繼承

第34題

Which four statements are true? (Choose four.)

A.　　Has-a relationships should never be encapsulated.

B.　　Has-a relationships should be implemented using inheritance.

C.　　Has-a relationships can be implemented using instance variables.

D.　　Is-a relationships can be implemented using the extends keyword.

E.　　Is-a relationships can be implemented using the implements keyword.

F.　　The relationship between Movie and Actress is an example of an is-a relationship.

G.　　An array or a collection can be used to implement a one-to-many has-a relationship.

答案：CDEG

參考：6-5 繼承

第35題

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.print(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.

答案：C

參考：6-5 繼承

第36題

Given:
public class Doubler{
　public static int doubleMe(Holder h){
　　return h.getAmount() * 2;
　}
}
and:
public class Holder {
　int amount = 10;
　public void doubleAmount(){amount = Doubler.doubleMe(this);}
　public in getAmount(){return amount;}
　//more code here
}

Place the code framgmets in position to reduce the coupling between Doubler and Holder.

public class Doubler{
　public static int doubleMe(Place here h){
　　return Place here * 2;
　}
}

public class Holder {
　int amount = 10;
　public void doubleAmount(){amount = Doubler.doubleMe(Place here);}

```
    public in getAmount(){return amount;}
    //more code here
}
```

<div align="center">

Code Fragments

void	Holder	int	Doubler
h.getAmount()	h	this	amount

</div>

答案：

```
public class Doubler{
    public static int doubleMe( int h){
        return h * 2;
    }
}

public class Holder{
    int amount = 10;
    public void doubleAmount(){amount = Doubler.doubleMe( amount );}
    public int getAmount(){return amount;}
    //more code here
}
```

參考：6-2 Java 方法

第37題

Given:

```
21.    abstract class C1{
22.        public C1(){System.out.print(1);}
23.    }
24.    class C2 extends C1{
25.        public C2(){System.out.print(2);}
26.    }
27.    class C3 extends C2{
28.        public C3(){System.out.print(3);}
29.    }
30.    public class Ctest{
31.        public static void main(String[] a){new C3();}
32.    }
```

What is the result?

A.   3

B.   23

C.   32

D.   123

E.   321

F.   Compilation fails.

G.   An exception is thrown at runtime.

答案：D

參考：6-5 繼承

第38題

Given:

```
1.    class One{
2.          public One foo(){return this;}
3.    }
4.    class Two extends One{
5.          public One foo(){return this;}
6.    }
7.    class Three extends Two{
8.          //insert method here
9.    }
```

Which two methods, inserted individually, correctly complete the Three class? (Choose two.)

A.   public void foo(){}

B.   public int foo(){return 3;}

C.   public Two foo(){return this;}

D.   public One foo(){return this;}

E.   public Object foo(){return this;}

答案：CD

參考：6-5 繼承

第39題

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.    }
```

Which four statments are true? (Choose four.)

A.   Compilation fails.

B.   An exception is thrown at runtime.

C.   The attribute id in the ItemTest object remains unchanged.

D.   The attribute id in the ItemTest object is modified to the new value.

E.   A new ItemTest object is created with the preferred value in the id attribute.

答案：A

參考：6-5 繼承

第40題

Given:

```
1.     class Foo{
2.            private int x;
3.            public Foo(int x){this.x = x;}
4.            public void setX(int x){this.x = x;}
5.            public int getX(){return x;}
6.     }
7.
8.     public class Gamma{
9.            static Foo fooBar(Foo foo){
10.                  foo = new Foo(100);
11.                  return foo;
12.           }
13.           public static void main(String[] args){
14.                  Foo foo = new Foo(300);
15.                  System.out.print(foo.getX() + "-");
16.
17.                  Foo fooFoo = fooBar(foo);
18.                  System.out.print(foo.getX() + "-");
19.                  System.out.print(fooFoo.getX() + "-");
20.
21.                  foo = fooBar(fooFoo);
22.                  System.out.print(foo.getX() + "-");
23.                  System.out.print(fooFoo.getX());
24.           }
25.    }
```

What is the output?

A.   300-100-100-100-100

B.   300-300-100-100-100

C.   300-300-300-100-100

D.   300-300-300-300-100

答案：B

參考：6-2 Java 方法、8-2 方法種類與呼叫方式

第41題

Given:

```
1.     public class KungFu{
2.            public static void main(String[] args){
3.                   Integer x = 400;
4.                   Integer y = x;
5.                   x++;
6.                   StringBuilder sb1 = new StringBuilder("123");
7.                   StringBuilder sb2 = sb1;
8.                   sb1.append("5");
9.                   System.out.println((x == y) + " " + (sb1 == sb2));
10.           }
11.    }
```

What is the result?

A.　true true

B.　false true

C.　true false

D.　false false

E.　Compilation fails.

F.　An exception is thrown at runtime.

答案：B

參考：6-2 Java 方法、11-2 文字類型

第42題

```
1.    class A{
2.        public String doit(int x, int y){
3.            return "a";
4.        }
5.
6.        public String doit(int... vals){
7.            return "b";
8.        }
9.    }
```

Given:

```
25.   A a = new A();
26.   System.out.println(a.doit(4, 5));
```

What is the result?

A.　Line 26 prints "a" to System.out.

B.　Line 26 prints "b" to System.out.

C.　An exception is thrown at runtime.

D.　Compilation of class A will fail due to an error in line 6.

答案：A

參考：6-2 Java 方法

第43題

Given:

```
1.    class Plant{
2.        private String name;
3.        public Plant(String name){this.name = name;}
4.        public String getName(){return name;}
5.    }
6.    public class Tree extends Plant{
7.        public void growFruit(){}
8.        public void dropLeaves(){}
9.    }
```

What 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.

答案：D

參考：6-5 繼承

第44題

Given:

```
1.     class Employee{
2.          String name; double baseSalary;
3.          public Employee(String name, double baseSalary){
4.               this.name = name;
5.               this.baseSalary = baseSalary;
6.          }
7.     }
8.     public class SalesPerson extends Employee{
9.          double commission;
10.         public SalesPerson(String name,
11.              double baseSalary, double commission){
12.              //insert code here
13.         }
14.    }
```

Which two code fragments, inserted independently at line 12, will compile? (Choose two.)

A.　　super(name, baseSalary);

B.　　this.commission = commission;

C.　　super();

　　　this.commission = commission;

D.　　this.commission = commission;

　　　super();

E.　　super(name, baseSalary);

　　　this.commission = commission;

F.　　this.commission = commission;

　　　super(name, baseSalary);

G.　　super(name, baseSalary, commission);

答案：AE

參考：6-5 繼承

第45題

Given that:

Gadget has-a Sprocket and

Gadget has-a Spring and

Gadget is-a Widget and

Widget has-a Sprocket

Which two code fragments represent these relationships? (Choose two.)

A.　　class Widget{Sprocket s;}

　　　class Gadget extends Widget{Spring s;}

B.　　class Widget{}

　　　class Gadget extends Widget{Spring s1; Sprocket s2;}

C.　　class Widget{Sprocket s1; Spring s2;}

　　　class Gadget extends Widget{}

D.　　class Gadget{Spring s;}

　　　class Widget extends Gadget{Sprocket s;}

E.　　class Gadget{}

　　　class Widget extends Gadget{Sprocket s1; Spring s2;}

F.　　class Gadget{Spring s1; Sprocket s2;}

　　　class Widget extends Gadget{}

答案：AC

參考：6-5 繼承

第46題

Given:

```
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.     }
```

And:

```
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.     }
```

And:

```
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.

答案：A

參考：6-5 繼承

第47題

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:

Type	Relationship	Type		Relationship	Types
Place here	Place here	Animal		is-a	Dog
Forest	Place here	Place here		has-a	Side
Rectangle	Place here	Place here			Tail
Place here	Place here	Programming Book			Square
					Tree
					Book
					Java Book
					Pen

答案：

Type	Relationship	Type
Dog	is-a	Animal
Forest	has-a	Tree
Rectangle	has-a	Side
Java Book	is-a	Programming Book

參考：6-5 繼承

第48題

Given:

```
1.    public class Venus{
2.        public static void main(String[] args){
3.            int[] x = {1, 2, 3};
4.            int y[] = {4, 5, 6};
5.            new Venus().go(x, y);
6.        }
7.        void go(int[]... z){
8.            for(int[] a : z)
9.                System.out.print(a[0]);
```

10.　　　}
11.　}

What is the result?

A.　1

B.　12

C.　14

D.　123

E.　Compilation fails.

F.　An exception is thrown at runtime.

答案：C

參考：5-1 陣列基本概念、6-2 Java 方法

第49題

Place code framgmets into position so the output is: The quantity is 420

Place here update(int quantity, int adjust){
 	
　Place here
 	
}
public void callUpdate(){
　int quant = 100;
　Place here
　System.out.println("The quantity is " + quant);
}

Code Fragments
public int　　quantity = quantity + adjust;　　update(quant, 320); public void　　quant = update(quant, 320); quantity = quantity + adjust; return quantity;

答案：

public int update(int quantity, int adjust){
 	
　quantity = quantity + adjust;
　return quantity;
 	
}
public void callUpdate(){
　int quant = 100;
　quant = update(quant, 320);
　System.out.println("The quantity is " + quant);
}

參考：6-2 Java 方法

26

第50題

Given:

```
1.      public abstract class Shape{
2.              private int x;
3.              private int y;
4.              public abstract void draw();
5.              public void setAnchor(int x, int y){
6.                      this.x = x;
7.                      this.y = y;
8.              }
9.      }
```

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

A.   public class Circle implements Shape{

    private in radius;

    }

B.   public abstract class Circle extends Shape{

    private in radius;

    }

C.   public class Circle extends Shape{

    private in radius;

    public void draw();

    }

D.   public abstract class Circle implements Shape{

    private in radius;

    public void draw();

    }

E.   public class Circle extends Shape{

    private in radius;

    public void draw(){/* code here */}

    }

F.   public abstract class Circle implements Shape{

    private in radius;

    public void draw(){/* code here */}

    }

答案：BE

參考：6-5 繼承、7-6 介面

第51題

Given:

```
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?

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.

答案：C

參考：6-5 繼承、7-6 介面

第52題

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(){/* Diaplay */} | Edit |

答案：

interface Displayable

               extends Reloadable{

   public void display();

}

參考：6-5 繼承、7-6 介面

第53題

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	Modifiers

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);}
}
	private
	
	protected
	
	public

答案：

package alpha;

public class Alpha{

   private String alpha;

   public Alpha(){this("A");}

   protected Alpha(String a){alpha = a;}

}

package beta;

public class Beta extends alpha.Alpha{

   public Beta(String a){super(a);}

```
            }
```

參考：6-5 繼承、7-3 存取修飾詞的使用

第54題

Given:

```
    1.      package test;
    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 test package

D.   any class that extends Target

答案：C

參考：7-3 存取修飾詞的使用

第55題

Given:

```
    11.     abstract class Vehicle{public int speed(){return 0;}}
    12.     class Car extends Vehicle{public int speed(){return 60;}}
    13.     class RaceCar extends Car{public int speed(){return 150;}}
    ...
    21.     RaceCar racer = new RaceCar();
    22.     Car car = new RaceCar();
    23.     Vehicle vehicle = new RaceCar();
    24.     System.out.println(racer.speed() + ", " + car.speed()
    25.         + ", " + vehicle.speed());
```

What is the result?

A.   0, 0, 0

B.   150, 60, 0

C.   Compilation fails.

D.   150, 150, 150

E.   An exception is thrown at runtime.

答案：D

參考：7-9 多型

第56題

Given:

```
    5.      class Building{ }
    6.      public class Barn extends Building{
    7.          public static void main(String[] args){
```

```
8.              Building build1 = new Building();
9.              Barn barn1 = new Barn();
10.             Barn barn2 = (Barn)build1;
11.             Object obj1 = (Object)build1;
12.             String str1 = (String)build1;
13.             Building build2 = (Building)barn1;
14.         }
15.     }
```

Which is true?

A.   if line 10 is removed, the compilation succeeds.

B.   if line 11 is removed, the compilation succeeds.

C.   if line 12 is removed, the compilation succeeds.

D.   if line 13 is removed, the compilation succeeds.

E.   More than one line must be removed for compilation to succeed.

答案：C

參考：7-8 物件的轉型

第57題

Given:

```
21.   class Money{
22.         private String country = "Canada";
23.         public String getC(){return country;}
24.   }
25.   class Yen extends Money{
26.         public String getC(){return super.country;}
27.   }
28.   public class Euro extends Money{
29.         public String getC(){return super.getC();}
30.         public static void main(String[] args){
31.               System.out.print(new Yen().getC() + " " + new Euro().getC());
32.         }
33.   }
```

What is the result?

A.   Canada

B.   null Canada

C.   Canada null

D.   Canada Canada

E.   Compilation fails due to an error on line 26.

F.   Compilation fails due to an error on line 29.

答案：E

參考：7-3 存取修飾詞的使用

第58題

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;

答案：B

參考：7-8 物件的轉型

第59題

Given the following directory structure:
bigProject
|--source
| |--Utils.java
|
|--classes
|

And the following command line invocation:

javac – d classes source/Utils.java

Assume the current directory is bigProject, what it the result?

A.　　If the compile is successful, Utils.class is added to the source directory.

B.　　The compiler returns an invalid flag error.

C.　　If the compile is successful, Utils.class is added to the classes directory.

D.　　If the compile is successful, Utils.class is added to the bigProject directory.

答案：C

參考：7-2 編譯 Java 專案套件

第60題

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

答案：BC

參考：7-2 編譯 Java 專案套件

第61題

Given two files, GrizzlyBear.java and Salmon.java:

```
1.   package animals.mammals;
2.
3.   public class GrizzlyBear extends Bear{
4.      void hunt() {
5.         Salmon s = findSalmon();
6.         s.consume();
7.      }
8.   }
1.   package animals.fish;
2.
3.   public class Salmon extends Fish {
4.      public void consume() { /* do stuff */ }
5.   }
```

If both classes are in the correct directories for their packages, and the Mammal class

correctly defines the findSalmon() method, which change allows this code to compile?

A.　add import animals. mammals.*; at line 2 in Salmon.java

B.　add import animals.fish.*; at line 2 in GrizzlyBearjava

C.　add import animals.fish.Salmon.*; at line 2 in GrizzlyBear.java

D.　add import animals. mammals.GrizzlyBear*; at line 2 in Salmon.java

答案：B

參考：7-1 Java 套件

第62題

Given:

```
31.   class Foo{
32.      public int a = 3;
33.      public void addFive(){ a += 5; System.out.print("f "); }
34.   }
35.   class Bar extends Foo{
36.      public int a = 8;
37.      public void addFive(){this.a += 5; System.out.print("b ");}
38.   }
```

Invoked with:

```
Foo f = new Bar();
f.addFive();
System.out.println(f. a);
```

What is the result?

A.　b 3

B.　b 8

C.　b 13

D.　f 3

E.　f 8

F.　f 13

G.　Compilation fails,

H.　An exception is thrown at runtime.

答案：A

參考：7-9 多型

第63題

Given:

```
11.    class ClassA{}
12.    class ClassB extends ClassA{}
13.    class ClassC extends ClassA{}
```

and:

```
21.    ClassA p0 = new ClassA();
22.    ClassB p1 = new ClassB();
23.    ClassC p2 = new ClassC();
24.    ClassA p3 = new ClassB();
25.    ClassA p4 = new ClassC();
```

Which three are valid? (Choose three.)

A.　p0 = p1;

B.　p1 = p2,

C.　p2 = p4;

D.　p2 = (ClassC)p1;

E.　p1 = (ClassB)p3;

F.　p2 = (ClassC)p4;

答案：AEF

參考：7-9 多型

第64題

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 Names	Names
class Place here has name Place here	A B
class Place here has name Place here	

答案：

class A has name A
class B has name A

參考：7-9 多型

第65題

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	Modifiers

`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 {`
`}`
	final
	
	protected
	
	private
	
	abstract
	
	static

答案：

1.	class Single{
2.	private static Single instance;

```
3.          public static Single getInstance(){
4.                  if(instance == null) instance = create();
5.                  return instance;
6.          }
7.      protected Single(){}
8.      static Single create(){return new Single();}
9.  }
10. class SingleSub extends Single{
11. }
```

參考：7-3 存取修飾詞的使用、8-2 方法種類與呼叫方式

第66題

Given:

```
5.    class Thingy{ Meter m = new Meter(); }
6.    class Component {void go() { System.out.print("c");}}
7.    class Meter extends Component {void go() { System.out.print("m"); }}
8.
9.    class DeluxeThingy extends Thingy {
10.     public static void main(String[] args) {
11.         DeluxeThingy dt = new DeluxeThingy();
12.         dt.m.go();
13.         Thingy t = new DeluxeThingy();
14.         t.m.go();
15.     }
16.   }
```

Which two are true? (Choose two.)

A.   The output is mm.

B.   The output is mc.

C.   Component is-a Meter.

D.   Component has-a Meter.

E.   DeluxeThingy is-a Component.

F.   DeluxeThingy has-a Component.

答案：AF

參考：6-5 繼承、7-9 多型

第67題

Given:

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

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

A.　double getSalesAmount() { return 1230.45; }

B.　public double getSalesAmount() { return 1230.45; }

C.　private double getSalesAmount() { return 1230.45; }

D.　protected double getSalesAmount() { return 1230.45; }

答案：BD

參考：6-5 繼承、7-5 抽象類別

第68題

Given the following six method names:

addListener

addMouseListener

setMouseListener

deleteMouseListener

removeMouseListener

registerMouseListener

How many of these method names follow JavaBean Listener naming rules?

A.　1

B.　2

C.　3

D.　4

E.　5

答案：B

參考：7-4 封裝

第69題

Given

```
11.    public interface Status {
12.      /* insert code here */ int MY_VALUE = 10;
13.    }
```
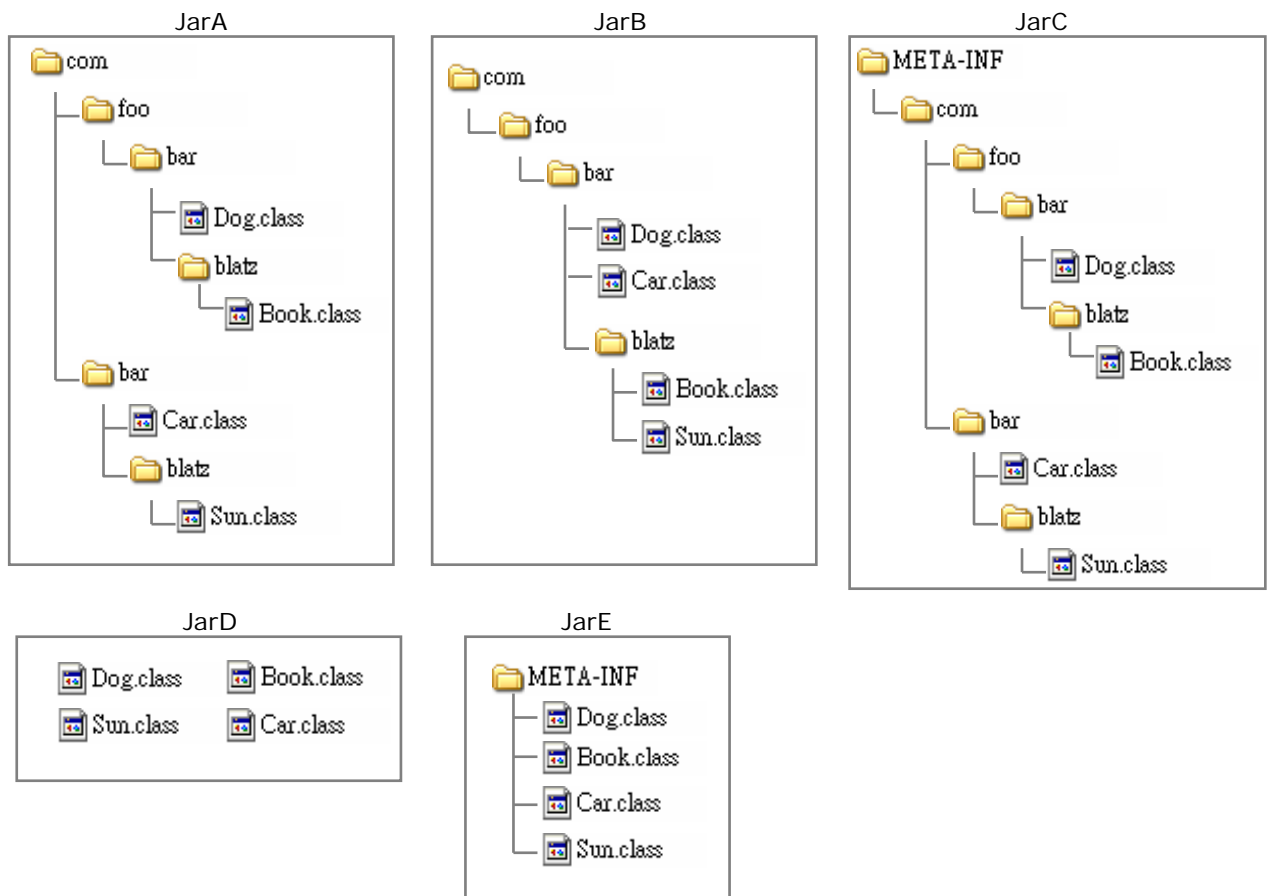
Which three are valid on line 12? (Choose three.)

A.　final

B.　static

C.　native

D.　public

E.　private

F.　abstract

C.　protected

答案：ABD

參考：7-6 介面

第70題

JarA	JarB	JarC

JarD	JarE

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

答案：A

參考：7-1 Java 套件

第71題

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 cMethod(){ }
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.

答案：F

參考：7-9 多型

第72題

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.

答案：C

參考：7-3 存取修飾詞的使用

第73題

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 */ }
    }
```

答案：A

參考：7-5 抽象類別、7-6 介面

第74題

Which two classes correctly implement both the java.lang.Runnable and the java.lang.Cloneable interfaces?

(Choose two.)

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

答案：CD

參考：7-6 介面

第75題

Given:

```
11.    public interface A{ public void m1(); }
13.    class B implements A{ }
14.    class C implements A{ public void m1(){}}
15.    class D implements A{ public void m1(int x){}}
16.    abstract class E implements A {}
17.    abstract class F implements A { public void m1(){} }
18.    abstract class G implements A { public void m1(int x){} }
```

What is the result?

A.　Compilation succeeds.

B.　Exactly one class does NOT compile.

C.　Exactly two classes do NOT compile.

D.　Exactly four classes do NOT compile.

E.　Exactly three classes do NOT compile.

答案：C

參考：7-6 介面

第76題

Given:

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

What is the result?

A.　TestA

B.　TestB

C.　Compilation fails.

D.　An exception is thrown at runtime.

答案：B

參考：7-9 多型

第77題

Given:

```
11.    public static void main(String[] args) {
```

```
12.     Object obj = new int{1, 2, 3};
13.     int[] someArray = (int[])obj;
14.     for (int i: someArray) System.out.print(i + " ");
15.   }
```

What is the result?

A.   1 2 3

B.   Compilation fails because of an error in line 12.

C.   Compilation fails because of an error in line 13.

D.   Compilation fails because of an error in line 14.

E.   A ClassCastException is thrown at runtime.

答案：A

參考：7-8 物件的轉型

第78題

A developer is creating a class Book, that needs to access 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

答案：BDG

參考：7-2 編譯 Java 專案套件

第79題

Given classes defined in two different files:

```
1.   package packageA;
2.   public class Message{
3.       String getText(){return "text";}
4.   }
```

And:

```
1.   package packageB;
2.   public class XMLMessage extends packageA.Message{
```

```
3.    String getText(){return "<msg>text</msg>";}
4.    public static void main(String[] args) {
5.        System.out.println(new XMLMessage().getText());
6.    }
7. }
```

What is the result of executing XMLMessage.main?

A.　text

B.　Compilation fails.

C.　<msg>text</msg>

D.　An exception is thrown at runtime.

答案：C

參考：6-5 繼承、7-3 存取修飾詞的使用

第80題

Given:

```
3.    interface Fish{}
4.    class Perch implements Fish{}
5.    class Walleye extends Perch{}
6.    class Bluegill{}
7.    public class Fisherman {
8.        public static void main(String[] args) {
9.            Fish f = new Walleye();
10.           Walleye w = new Walleye()
11.           Bluegill b = new Bluegill();
12.           if(f instanceof Perch) System.out.print("f-p ");
13.           if(w instanceof Fish) System.out.print("w-f ");
14.           if(b instanceof Fish) System.out.print("b-f ");
15.       }
16. }
```

What is the result?

A.　w-f

B.　f-p w-f

C.　w-f b-f

D.　f-p w-f b-f

E.　Compilation fails.

F.　An exception is thrown at runtime.

答案：B

參考：7-8 物件的轉型

解析：

第81題

Given:

```
1.    interface DoStuff2{
2.        float getRange(int low, int high);}
```

3.
4.　interface DoMore {
5.　　float getAvg(int a, int b, int c);}
6.
7.　abstract class DoAbstract implements DoStuff2, DoMore{}
8.
9.　class DoStuff implements DoStuff2{
10.　　public float getRange(int x, int y){return 3.14f;}}
11.
12. interface DoAll extends DoMore{
13.　　float getAvg(int a, int b, int c, int d);}

What is the result?

A.　The file will compile without error.

B.　Compilation fails. Only line 7 contains an error.

C.　Compilation fails. Only line 12 contains an error.

D.　Compilation fails. Only line 13 contains an error.

E.　Compilation fails. Only lines 7 and 12 contain errors.

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

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

答案：A

參考：7-5 抽象類別、7-6 介面

第82題

Given:
11.　public interface A111{
12.　　String s = "yo";
13.　　public void method1();
14.　}
17.　interface B{}
20.　interface C extends A111, B{
21.　　public void method1();
22.　　public void method1(int x);
23.　}

What is the result?

A.　Compilation succeeds.

B.　Compilation fails due to multiple errors.

C.　Compilation fails due to an error only on line 20.

D.　Compilation fails due to an error only on line 21.

E.　Compilation fails due to an error only on line 22.

F.　Compilation fails due to an error only on line 12.

答案：A

參考：7-6 介面

第83題

Given:

```
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 lines 24, 25 and 26 were removed, the code would compile and the output would be 1.

答案：BEF

參考：7-6 介面、8-5 內部類別

第84題

Given:

```
11.    class Alpha{
12.      public void foo(){System.out.print("Afoo ");}
13.    }
14.    public class Beta extends Alpha{
15.      public void foo(){System.out.print("Bfoo ");}
16.      public static void main(String[] args){
17.         Alpha a = new Beta();
18.         Beta b = (Beta)a;
19.         a.foo();
```

```
20.        b.foo();
21.    }
22.  }
```

What is the result?

A.　Afoo Afoo

B.　Afoo Bfoo

C.　Bfoo Afoo

D.　Bfoo Bfoo

E.　Compilation fails.

F.　An exception is thrown at runtime.

答案：D

參考：7-9 多型

第85題

Given:

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

What is the result?

A.　peep

B.　bark

C.　meow

D.　Compilation fails.

E.　An exception is thrown at runtime.

答案：E

參考：7-8 物件的轉型

第86題

Given:

```
10.   abstract class A{
11.     abstract void a1();
12.     void a2(){}
13.   }
14.   class B extends A{
15.     void a1(){}
16.     void a2(){}
```

17. }
18. class C extends B{void c1(){}}

and:

A x = new B(); C y = new C(); A z = new C();

What are four valid examples of polymorphic method calls? (Choose four.)

A. x.a2();

B. z.a2();

C. z.c1();

D. z.a1();

E. y.c1();

F. x.a1();

答案：ABDF

參考：7-9 多型

第87題

A team of programmers is involved in reviewing a proposed design for a new utility class, After some discussion, they realize that the current design allows other classes to access methods in the utility class that should be accessible only to methods within the utility class itself. What design issue has the team discovered?

A. Tight coupling

B. Low cohesion

C. High cohesion

D. Loose coupling

E. Weak encapsulation

F. Strong encapsulation

答案：E

參考：7-4 封裝

第88題

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.

G. A protected method in class X can be overridden by a subclass of X only if the subclass is in the same

package as X.

答案：BEF

參考：6-5 繼承、7-3 存取修飾詞的使用、8-2 方法種類與呼叫方式

第89題

Given:

```
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 drive(){
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 correct the compilation errors? (Choose two.)

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 wheelCount variable in Car to protected

F.   change line 3 in the MeGo class to super.wheelCount = 3;

答案：DE

參考：6-5 繼承、7-3 存取修飾詞的使用

第90題

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.

答案：D

參考：7-6 介面

第91題

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?

H. put Poker.jar in directory /stuff/java, and set the CLASSPATH to include /stuff/java

I. put Poker.jar in directory /stuff/java, and set the CLASSPATH to include /stuff/java/*.jar

J. Put Poker.jar in directory /stuff/java, and set the CLASSPATH to include /stuff/java/Poker.jar

K. put Poker.jar in directory /stuff/java/games/cards, and set the CLASSPATH to include /stuff/java

L. put Poker.jar in directory /stuff/java/games/cards, and set the CLASSPATH to include /stuff/java/*.jar

M. put Poker.jar in directory /stuff/java/games/cards, and set the CLASSPATH to include
    /stuff/java/Poker.jar

答案：C

參考：7-2 編譯 Java 專案套件

第92題

Given a correctly compiled class whose source code is:

```
1.  package com.sun.sjcp;
2.  public class Commander {
3.    public static void main(String[] args) {
4.      // more code here
5.    }
6.  }
```

Assume that the class file is located in /foo/com/sun/sjcp/, the current directory is /foo/, and that the classpath contains "." (current directory).

Which command line correctly runs Commander?

A. java Commander

B. java com.sun.sjcp.Commander

C. java com/sun/sjcp/Commander

D. java -cp com.sun.sjcp Commander

E. java -cp com/sun/sjcp Commander

答案：B

參考：7-2 編譯 Java 專案套件

第93題

Given:

```
10.   class Nav{
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. Nav.Direction d = NORTH;

C. Direction d = Direction.NORTH;

D. Nav.Direction d = Nav.Direction.NORTH;

答案：D

參考：8-5 內部類別、8-6 Java 列舉類型

第94題

Given:

```
11.   public class Rainbow {
12.     public enum MyColor {
13.       RED(0xff0000), GREEN(0x00ff00), BLUE(0x0000ff);
14.       private final int rgb;
15.       MyColor(int rgb){this.rgb = rgb;}
16.       public int getRGB(){return rgb;}
17.     }
18.     public static void main(String[] args){
19.       //insert code here
20.     }
21.   }
```

Which code fragment inserted at line 19, allows the Rainbow class to compile?

A. MyColor skyColor = BLUE;

B. MyColor treeColor = MyColor.GREEN;

C. if(RED.getRGB() < BLUE.getRGB()){}

D. Compilation fails due to other error(s) in the code.

E. MyColor purple = new MyColor(0xff00ff);

F.　MyColor purple = MyColor.BLUE + MyColor.RED;

答案：B

參考：8-5 內部類別、8-6 Java 列舉類型

第95題

Given:

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

What is the result?

A.　test

B.　null

C.　An exception is thrown at runtime.

D.　Compilation fails because of an error in line 1.

E.　Compilation fails because of an error in line 4.

F.　Compilation fails because of an error in line 5.

答案：A

參考：8-5 內部類別

第96題

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;

答案：F

參考：8-3 類別成員的匯入

第97題

Which statement is true?

A.　A class's finalize() method CANNOT be invoked explicitly.

B.　super.finalize() is called implicitly by any overriding finalize() method.

C.　The finalize() method for a given object is called no more than once by the garbage collector.

D.　The order in which finalize() is called on two objects is based on the order in which the two objects became finalizable.

答案：C

參考：8-7 資源回收機制

第98題

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

答案：B

參考：8-4 main()方法的參數傳遞與系統屬性設定

第99題

Given:

```
3.    interface Animal{void makeNoise();}
4.    class Horse implements Animal{
5.        Long weight = 1200L;
6.        public void makeNoise(){System.out.println("whinny");}
7.    }
8.    public class lcelandic extends Horse{
9.        public void makeNoise(){System.out.println("vinny");}
10.       public static void main(String[] args) {
11.          Icelandic i1 = new lcelandic();
12.          Icelandic i2 = new lcelandic();
13.          Icelandic i3 = new lcelandic();
14.          i3 = i1; i1 = i2; i2 = null; i3 = i1;
15.       }
16.   }
```

When line 14 is reached, how many objects are eligible for the garbage collector?

A. 0

B. 1

C. 2

D. 3

E. 4

F. 6

答案：C

參考：8-7 資源回收機制

第100題

Given:

```
10.   public class SuperCalc{
11.       protected static int multiply(int a, int b){return a * b;}
12.   }
```

and:

```
20.   public class SubCalc extends SuperCalc{
21.       public static int multiply(int a, int b){
22.           int c = super.multiply(a, b);
23.           return c;
24.       }
25.   }
```

and:

```
30. SubCalc sc = new SubCalc();
31. System.out.println(sc.multiply(3, 4));
```

32. System.out.println(SubCalc.multiply(2, 2));

What is the result?

A. 12

4

B. The code runs with no output.

C. An exception is thrown at runtime.

D. Compilation fails because of an error in line 21.

E. Compilation fails because of an error in line 22.

F. Compilation fails because of an error in line 31.

答案：E

參考：8-2 方法種類與呼叫方式