Examen de Certificación I

1. Which are true? (Choose all that apply.)
   A. "X extends Y" is correct if and only if X is a class and Y is an interface.
   B. "X extends Y" is correct if and only if X is an interface and Y is a class.
   C. "X extends Y" is correct if X and Y are either both classes or both interfaces.
   D. "X extends Y" is correct for all combinations of X and Y being classes and/or interfaces.

2.
```
class Rocket {
      private void blastOff() {
            System.out.print("bang ");
      }
      }
      public class Shuttle extends Rocket {
            public static void main(String[] args) {
                  new Shuttle().go();
            }
            void go() {
            blastOff(); // Rocket.blastOff(); // line A
            }
            private void blastOff() { System.out.print("sh-bang
            ");
            }

      }
```

   Which are true? (Choose all that apply.)
   A. As the code stands, the output is bang
   B. As the code stands, the output is sh-bang
   C. As the code stands, compilation fails.
   D. If line A is uncommented, the output is bang bang
   E. If line A is uncommented, the output is sh-bang bang
   F. If line A is uncommented, compilation fails

3. Given that the for loop's syntax is correct, and given:
```
import static java.lang.System.*;
class _ {
static public void main(String[] __A_V_) {
String $ = "";
for(int x=0; ++x < __A_V_.length; ) // for loop
$ += __A_V_[x];
out.println($);
}}
```
   And the command line:java _ - A .
   What is the result?
   A.-A
   B.A.
   C.-A.
   D._A.
   E._-A.
   F. Compilation fails G. An exception is thrown at runtime

4. Given:

```
public class Frodo extends Hobbit
      public static void main(String[] args) {
      int myGold = 7;
      System.out.println(countGold(myGold, 6));
      }
      }
class Hobbit {
int countGold(int x, int y) { return x + y; }//line 11
}
```

What is the result?

A.13

B. Compilation fails due to multiple errors

C. Compilation fails due to an error on line 6

D. Compilation fails due to an error on line 7

E. Compilation fails due to an error on line 11

5. Which options are valid on the javac command without considering module options?
(Choose all that apply.)

A. -c
B. -C
C. -cp
D. -CP
E. -d
F. -f
G. -p

6. Suppose we have the following class in the file /my/directory/named/A/Bird.java.
Which of the answer options replaces INSERT CODE HERE when added independently if we
compile from /my/directory? (Choose all that apply.)
INSERT CODE HERE
public class Bird { }

A. package my.directory.named.a;
B. package my.directory.named.A;
C. package named.a;
D. package named.A;
E. package a;
F. package A;

7. Which answer options represent the order in which the following statements can be assembled into a program that will compile successfully? (Choose all that apply.)
   X: class Rabbit {}
   Y: import java.util.*;
   Z: package animals;
   A. X, Y, Z
   B. Y, Z, X
   C. Z, Y, X
   D. Y, X
   E. Z, X
   F. X, Z

8. Which are valid ways to specify the classpath when compiling? (Choose all that apply.)
   A. -cp
   B. -classpath
   C. --classpath
   D. -class-path
   E. --class-path

9. Given that the Integer class is in the java.lang package, and given:

```
1. // insert code here
2. class StatTest {
3. public static void main(String[] args) {
4. System.out.println(Integer.MAX_VALUE);
5. }
6. }
```

   Which, inserted independently at line 1, compiles? (Choose all that apply.)
   A.import static java.lang;
   B.import static java.lang.Integer;
   C.import static java.lang.Integer.*;
   D.static import java.lang.Integer.*;
   E.import static java.lang.Integer.MAX_VALUE;
   F. None of the above statements are valid import syntax

10. Given:

```
4. class Announce {
5. public static void main(String[] args) {
6. for(int __x = 0; __x < 3; __x++) ;
7. int #lb = 7;
8. long [] x [5];
9. Boolean []ba[];
10. }
11. }
```

   What is the result? (Choose all that apply.)
   A. Compilation succeeds
   B. Compilation fails with an error on line 6
   C. Compilation fails with an error on line 7
   D. Compilation fails with an error on line 8
   E. Compilation fails with an error on line 9