

Multiple Choice Questions (10 points)

Answer all of the following questions. READ EACH QUESTION CAREFULLY. Fill the correct bubble on your scantron sheet. Each correct answer is worth 1 point. Each question has EXACTLY one correct answer.

1. Consider the following program:

```
import myLibrary.*;

public class ShowSomeClass
{
    // code for the class...
}
```

What is the name of the java file containing this program?

- A. `myLibrary.java`
 - B. `ShowSomeClass.java`
 - C. `ShowSomeClass`
 - D. `ShowSomeClass.class`
 - E. Any file name with the java suffix will do
2. Which of the following is TRUE?
- A. In java, an instance field declared **public** generates a compilation error.
 - B. `int` is the name of a class available in the package `java.lang`
 - C. Instance variable names may only contain letters and digits.
 - D. A class has always a constructor (possibly automatically supplied by the java compiler).
 - E. The more comments in a program, the faster the program runs.
3. Consider the following code snippet

```
String river = new String("Columbia");
System.out.println(river.length());
```

What is printed?

- A. 6
- B. 7
- C. 8
- D. Columbia
- E. river

4. A constructor
- A. must have the same name as the class it is declared within.
 - B. is used to create objects.
 - C. may be declared **private**
 - D. A and B
 - E.** A, B and C
5. Which of the following may be part of a class definition?
- A. instance variables
 - B. instance methods
 - C. constructors
 - D.** all of the above
 - E. none of the above
6. What is different between a Java applet and a Java application?
- A. An application can in general be trusted whereas an applet can't.
 - B. An applet must be executed in a browser environment.
 - C. An applet is not able to access the files of the computer it runs on
 - D.** (A), (B) and (C).
 - E. None of the above

7. Consider

```
public class MyClass{
    public MyClass(){/*code*/}
    // more code...
}
```

To instantiate MyClass, you would write?

- A.** `MyClass mc = new MyClass();`
 - B. `MyClass mc = MyClass();`
 - C. `MyClass mc = MyClass;`
 - D. `MyClass mc = new MyClass;`
 - E. It can't be done. The constructor of MyClass should be defined as `public void MyClass(){/*code*/}`
8. What is byte code in the context of Java?
- A.** The type of code generated by a Java compiler
 - B. The type of code generated by a Java Virtual Machine
 - C. It is another name for a Java source file
 - D. It is the code written within the instance methods of a class.
 - E. It is another name for comments written within a program.

9. What is garbage collection in the context of Java?
- A. The operating system periodically deletes all of the java files available on the system.
 - B. Any package imported in a program and not used is automatically deleted.
 - C. When all references to an object are gone, the memory used by the object is automatically reclaimed.
 - D. The JVM checks the output of any Java program and deletes anything that doesn't make sense.
 - E. Janitors working for Sun Microsystems are required to throw away any Microsoft documentation found in the employees' offices.
10. You read the following statement in a Java program that compiles and executes.

```
submarine.dive(depth);
```

What can you say for sure?

- A. **depth** must be an **int**
- B. **dive** must be a method.
- C. **dive** must be the name of an instance field.
- D. **submarine** must be the name of a class
- E. **submarine** must be a method.