Metropolitan State University, St. Paul, MN
ICS 372 Object-Oriented Design and Implementation
Quiz 2 Solution

1. A `catch` block has to be associated with

   (a) a `try` block ✓

   (b) another `catch` block

   (c) both (a) and (b)

   (d) neither (a) nor (b)

2. A `throws` clause is declared as part of

   (a) a class header

   (b) an interface header

   (c) a method header ✓

   (d) a `try` block

3. Suppose class `D` extends class `B`. Assume that within `B` a method with the header `public void m1()` is declared. This method may be called from any instance method in class `D`.

   (a) True ✓

   (b) False

4. Suppose class `D` extends class `B`. Assume that within `B` a method with the header `public void m1(B b1, int a)` is declared. Which of the following is an override of method `m1` in class `D`?

   (a) `public void m1()`

   (b) `public boolean m1(B b1, int a)`

   (c) `public void m1(B b1, int a)` ✓

   (d) None of the above

5. Suppose `m1()` is overridden in class `C`. Which of the following is a call to the overridden method from the overriding method?

   (a) `m1();`

   (b) `this.m1();`

   (c) `super();`

   (d) `super.m1();` ✓

6. Suppose `D` is a subclass of `B`. Assume that `B` has a single constructor and it is of the form `public B(int a)` . Then `D`

   (a) need not declare a constructor

(b) must (necessarily) have a constructor of the form `D(int a)` with an appropriate access specifier.

(c) should have a constructor that has the call `super(<int argument>)` in it. ✓

(d) Both (b) and (c)

7. Which of the following is true of the override of the `equals()` method in a class `C`?

   (a) It has a parameter of type `C`

   (b) It has a parameter of type `Object` ✓

   (c) It has no parameters

   (d) None of the above

8. Suppose `c1` is created as an instance of class `C`. Which of the following is true of the override of the `equals()` method in a class `C`?

   (a) `c1.equals(c1)` should return `true`

   (b) `c1.equals(null)` should return `false`

   (c) Both (a) and (b) ✓

   (d) Neither (a) nor (b)

9. If `c1.equals(c2)` returns `true` and `c2.equals(c3)` returns `true`, then `c1.equals(c3)` should return true.

   (a) True ✓

   (b) False

10. `c1.hashCode()` should be equal to `c2.hashCode()`

    (a) if and only if `c1.equals(c2)` returns `true`

    (b) if `c1.equals(c2)` returns `true` ✓

    (c) if `c1.equals(c2)` returns `false`

    (d) only if `c1.equals(c2)` returns `true`