1. When an "is a" relationship exists between objects, it means that the specialized object has:

|  |  |
| --- | --- |
| a. | some of the characteristics of the general class, but not all, plus additional characteristics. |
| b. | some of the characteristics of the general object, but not all. |
| c. | none of the characteristics of the general object. |
| d. | all the characteristics of the general object, plus additional characteristics. |

ANS: D

2. If ClassA extends ClassB, then:

|  |  |
| --- | --- |
| a. | public and private members of ClassB are public and private, respectively, in ClassA |
| b. | public members in ClassB are public in ClassA, but private members in ClassB cannot be directly accessed in ClassA |
| c. | neither public or private members in ClassB can be directly accessed in ClassA |
| d. | private members in ClassB are changed to protected members in ClassA |

ANS: B

3. What is wrong with the following code?

public class ClassB extends ClassA

{

public ClassB()

{

int init = 10;

super(40);

}

}

|  |  |
| --- | --- |
| a. | Nothing is wrong with the code. |
| b. | The method super is not defined. |
| c. | The call to the method super must be the first statement in the constructor. |
| d. | No values may be passed to super. |

ANS: C

4. If a subclass constructor does not explicitly call a superclass constructor:

|  |  |
| --- | --- |
| a. | it must include the code necessary to initialize the superclass fields. |
| b. | the superclass fields will be set to the default values for their data types. |
| c. | Java will automatically call the superclass's default or no-arg constructor immediately after the code in the subclass's constructor executes. |
| d. | Java will automatically call the superclass's default or no-arg constructor just before the code in the subclass's constructor executes. |

ANS: D

5. Replacing inadequate superclass methods with more suitable subclass methods is known as what?

|  |  |
| --- | --- |
| a. | Method upgrading |
| b. | Tactical inheritance |
| c. | Method overriding |
| d. | Method overloading |

ANS: C

6. Look at the following code. The method in line \_\_\_\_\_\_\_ will override the method in line \_\_\_\_\_\_\_.

Line 1 public class ClassA

Line 2 {

Line 3 public ClassA() {}

Line 4 public int method1(int a){}

Line 5 public double method2(int b){}

Line 6 }

Line 7 public ClassB extends ClassA

Line 8 {

Line 9 public ClassB(){}

Line 10 public int method1(int b, int c){}

Line 11 public double method2(double c){}

Line 12 }

|  |  |
| --- | --- |
| a. | 10, 4 |
| b. | 11, 5 |
| c. | Both a and b |
| d. | None of the above |

ANS: D

7. When a subclass overloads a superclass method:

|  |  |
| --- | --- |
| a. | Both methods may be called with a subclass object |
| b. | Only the subclass method may be called with a subclass object |
| c. | Only the superclass method may be called with a subclass object |
| d. | Neither method may be called with a subclass object |

ANS: A

8. When a method is declared with the \_\_\_\_\_\_\_\_\_\_\_\_ modifier, it cannot be overridden in a subclass.

|  |  |
| --- | --- |
| a. | extends |
| b. | final |
| c. | super |
| d. | public |

ANS: B

9. A protected member of a class may be directly accessed by:

|  |  |
| --- | --- |
| a. | methods of the same class |
| b. | methods of a subclass |
| c. | methods in the same package |
| d. | All of the above. |

ANS: D

10. If two methods have the same name but different signatures, they are:

|  |  |
| --- | --- |
| a. | overridden |
| b. | overloaded |
| c. | superclass methods |
| d. | subclass methods |

ANS: B