**PG-DMC - JAVA Lab Exam Date: 17/10/2016**

**Time: 30mins**

**Total marks: 30**

Each question comprises of 2 marks

1. Which are true? (Choose all that apply.)
2. "X extends Y" is correct if and only if X is a class and Y is an interface.
3. "X extends Y" is correct if and only if X is an interface and Y is a class.
4. **"X extends Y" is correct if X and Y are either both classes or both interfaces.**
5. "X extends Y" is correct for all combinations of X and Y being classes and/or interfaces.
6. Given the code, which are true? (Choose all that apply.)

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 "); }

}

* 1. As the code stands, the output is bang and if line A is uncommented, the output is bang bang
  2. **As the code stands, the output is sh-bang and if line A is uncommented, compilation fails**
  3. As the code stands, compilation fails and if line A is uncommented, the output is sh-bang bang
  4. **As** the code stands, the output is sh-bang and if line A is uncommented, the output is sh-bang bang

1. When finally block gets executed?
2. **Always when try block get executed, no matter exception occured or not.**
3. Always when a method get executed, no matter exception occured or not.
4. Always when a try block get executed, if exception do not occur.
5. Only when exception occurs in try block code.
6. Which is a correct implementing class for the interface class? (Choose all that apply.)

public abstract interface Frobnicate { public void twiddle(String s); }

* 1. public abstract class Frob implements Frobnicate {

public abstract void twiddle(String s) { }

* 1. **public abstract class Frob implements Frobnicate { }**
  2. public class Frob extends Frobnicate {

public void twiddle(Integer i) { }}

* 1. public class Frob implements Frobnicate {

public void twiddle(Integer i) { }}

1. Given the code, predict the output

public class Locomotive {

Locomotive() { main("hi"); }

public static void main(String[] args) {

System.out.print("2 ");}

public static void main(String args) {

System.out.print("3 " + args);}}

* 1. **2 will be included in the output**
  2. 3 will be included in the output
  3. hi will be included in the output
  4. Compilation fails
  5. An exception is thrown at runtime

1. What is function overriding?
   1. [If a subclass uses a method that is already provided by its parent class, it is known as Method Overriding.](javascript:void(0);)
   2. [**If a subclass provides a specific implementation of a method that is already provided by its parent class, it is known as Method Overriding.**](javascript:void(0);)
   3. [Both of the above.](javascript:void(0);)
   4. [None of the above.](javascript:void(0);)
2. Which of the following is a marker interface?
   1. [**Serializable**](javascript:void(0);)
   2. [Comparable](javascript:void(0);)
   3. [Runnable](javascript:void(0);)
   4. [none of the above.](javascript:void(0);)
3. Which of the following is true about private access modifier?
   1. **Variables, methods and constructors which are declared private can be accessed only by the members of the same class.**
   2. Variables, methods and constructors which are declared private can be accessed by any class lying in same package.
   3. Variables, methods and constructors which are declared private in the superclass can be accessed only by its child class.
   4. None of the above.
4. What is function overloading?
   1. **Methods with same name but different parameters.**
   2. Methods with same name but different return types.
   3. Methods with same name, same parameter types but different parameter names.
   4. None of the above.
5. Which of the following is not a keyword in java?
   1. static
   2. **Boolean**
   3. void
   4. private
6. What is NullPointerException?
   1. **A NullPointerException is thrown when calling the instance method of a null object or modifying/accessing field of a null object.**
   2. A NullPointerException is thrown when object is set as null.
   3. A NullPointerException is thrown when object property is set as null.
   4. None of the above.
7. What of the following is the default value of a local variable?
   1. null
   2. 0
   3. Depends upon the type of variable
   4. **Not assigned**
8. What is currentThread()?
   1. **It is a Thread public static method used to obtain a reference to the current thread.**
   2. It is a thread's instance method used to get thread count.
   3. It is a object's public static method used obtain a reference to the current thread.
   4. [It is a object's instance method used to get thread count.](javascript:void(0);)
9. Which of the following code is used to delete a HTTP Session object in servlets?
   1. [**session.invalidate()**](javascript:void(0);)
   2. [response.deleteSession()](javascript:void(0);)
   3. [request.deleteSession()](javascript:void(0);)
   4. [None of the above.](javascript:void(0);)
10. What is the result of code given below:

import java.util.\*;

public class Sequence {

public static void main(String[] args) {

ArrayList<String> myList = new ArrayList<String>();

myList.add("apple");

myList.add("carrot");

myList.add("banana");

myList.add(1, "plum");

System.out.print(myList);}}

1. [apple, banana, carrot, plum]
2. [apple, plum, carrot, banana]
3. **[apple, plum, banana, carrot]**
4. [plum, banana, carrot, apple]
5. [plum, apple, carrot, banana]
6. [banana, plum, carrot, apple]
7. Compilation fails