**Question 1**

What is the output for the following code?

**public** **class** Outer {

**private** **int** a = 7;

**class** Inner {

**public** **void** displayValue() {

System.*out*.println("Value of a is " + a);

}

}

}

**public** **class** TestSet {

**public** **static** **void** main(String[] args) **throws** Exception {

Outer mo = **new** Outer();

Outer.Inner inner = mo.**new** Inner();

inner.displayValue();

}

}

**Question 2**

What is the result of attempting to compile and run the following code?

**public** **class** B {

**public** String getCountryName() {

**return** "USA";

}

**public** StringBuffer getCountryName() {

StringBuffer sb = **new** StringBuffer();

sb.append("UK");

**return** sb;

}

**public** **static** **void** main(String[] args) {

B b = **new** B();

System.*out*.println(b.getCountryName().toString());

}

}

**Question 3**

What is the result of attempting to compile and run the following code?

**public** **class** A {

**public** String getName() **throws** ArrayIndexOutOfBoundsException {

**return** "Name-A";

}

}

**public** **class** C **extends** A {

**public** String getName() **throws** Exception {

**return** "Name-C";

}

}

**public** **class** Test {

**public** **static** **void** main(String[] args) {

A a = **new** C();

a.getName();

}

}

**Question 4**

What is the result of attempting to compile and run the following code?

**public** **class** A {

}

**public** **class** B **implements** Serializable {

A a = **new** A();

**public** **static** **void** main(String[] args){

B b = **new** B();

**try**{

FileOutputStream fs = **new** FileOutputStream("b.ser");

ObjectOutputStream os = **new** ObjectOutputStream(fs);

os.writeObject(b);

os.close();

}**catch**(Exception e){

e.printStackTrace();

}

}

}

**Question 5**

What is the result of attempting to compile and run the following code?

public class B extends Thread {

public static void main(String argv[]) {

B b = new B();

b.run();

}

public void start() {

for (int i = 0; i < 10; i++) {

System.*out*.println("Value of i = " + i);

}

}

}

**Question 6**

What modifiers are allowed for variables in an Interface?

**Question 7**

What is a local, member and class variable?

**Question 8**

Can an anonymous class be declared as implementing an interface and extending a class?

**Question 9**

What is a Marker Interface? Give an example?

**Question 10**

What are the ways in which you can instantiate a thread?

**Question 11**

What JSP lifecycle methods can I override?

**Question 12**

How can I implement a thread-safe JSP page?

**Question 13**

Is there a way to reference the "this" variable within a JSP page?

**Question 14**

What are the implicit objects in a JSP?

**Question 15**

How can I enable session tracking for JSP pages if the browser has disabled cookies?

**Question 16**

Write an algorithm to illustrate Merge Sort?

**Question 17**

Write an algorithm to find the number of occurrences of an element in a given array?

**Question 18**

Write an algorithm to find whether the given string is a palindrome?

**Question 19**

Write the iterative linear algorithm to get the Fibonacci series?

**Question 20**

Write a recursive function to find the position of the element in an array using binary search?