**Question 1**

What is the output for the following code?

**public** **class** TestSet **extends** Thread {

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

TestSet b = **new** TestSet();

b.start();

}

**public** **void** run() {

System.*out*.println("Running");

}

}

**Question 2**

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

**public** **interface** TestInf {

**int** *i* = 10;

}

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

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

TestInf.*i* = 12;

System.*out*.println(TestInf.*i*);

}

}

**Question 3**

What is the result of executing the following code, using the parameters 0 and 3 (a=0, b=3)?

**public** **void** divide(**int** a, **int** b) {

**try** {

**int** c = a / b;

} **catch** (Exception e) {

System.*out*.print("Exception ");

} **finally** {

System.*out*.println("Finally");

}

**Question 4**

What are synchronized methods and synchronized statements?

**Question 5**

What is the output for the following code running in the same JVM?

**public** **class** A **implements** Serializable {

**transient** **int** a = 7;

**static** **int** *b* = 9;

}

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

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

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

**try** {

ObjectOutputStream os = **new** ObjectOutputStream(

**new** FileOutputStream("test.ser"));

os.writeObject(a);

os.close();

System.*out*.print(+ +a.*b* + " ");

ObjectInputStream is = **new** ObjectInputStream(**new** FileInputStream(

"test.ser"));

A s2 = (A) is.readObject();

is.close();

System.*out*.println(s2.a + " " + s2.*b*);

} **catch** (Exception x) {

x.printStackTrace();

}

}

}

**Question 6**

Can an abstract method have the static qualifier?

**Question 7**

What is early binding and late binding?

**Question 8**

Can you call one constructor from another if a class has multiple constructors?

**Question 9**

What's the difference between the methods sleep() and wait()?

**Question 10**

You are planning to do an indexed search in a list of objects. Which of the two Java collections should you use: ArrayList or LinkedList?

**Question 11**

How do I include static files within a JSP page?

**Question 12**

What is the page directive that is used to prevent a JSP page from automatically creating a session?

**Question 13**

What is the difference between ServletContext and PageContext?

**Question 14**

What is the difference in using request.getRequestDispatcher() and context.getRequestDispatcher()?

**Question 15**

What is the difference between ServletContext and ServletConfig?

**Question 16**

Explain bubble sort with code snippet and what is its complexity?

**Question 17**

Write an algorithm to find the factorial of a given number?

**Question 18**

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

**Question 19**

Write the iterative linear algorithm to get the Fibonacci series?

**Question 20**

Write an algorithm to illustrate Merge Sort?