**Question 1**

Given **the following code**. How many elements the testSet will contain and in which order?

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

**enum** vals {

*ONE*, *TWO*, *THREE*

};

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

Collection coll = **new** ArrayList();

coll.add(vals.*THREE*);

coll.add(vals.*THREE*);

coll.add(vals.*THREE*);

coll.add(vals.*TWO*);

coll.add(vals.*TWO*);

coll.add(vals.*ONE*);

Set testSet = **new** HashSet(coll);

}

}

**Question 2**

A monitor called mon has 5 threads in its waiting pool; all these waiting threads have the same priority. One of the threads is thread1. How can you notify thread1 so that it alone moves from Waiting state to Ready State?

**Question 3**

What is the output of this code fragment?int x=3;

int y =10;

System.out.println(y%x);

**Question 4**

The constructor for the Math class is private, so it cannot be instantiated. True/False?

**Question 5**

Whether the following code will be executed? If it is executed, **what will be the output of the code?**

**public** **class** Threads3 **implements** Runnable {

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

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

}

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

Thread t = **new** Thread(**new** Threads3());

t.run();

t.run();

t.start();

}

}

**Question 6**

What modifiers may be used with an inner class that is a member of an outer class?

**Question 7**

What is the difference between the Boolean & operator and the && operator?

**Question 8**

If a method is declared as protected, where may the method be accessed?

**Question 9**

When is the finally clause of a try-catch-finally statement executed?

**Question 10**

What modifiers are allowed for methods in an Interface?

**Question 11**

What is the difference between <jsp:include page = ... > and <%@ include file = ... >?

**Question 12**

What is the difference between <jsp:forward page = ... > and response.sendRedirect(url) ?

**Question 13**

What are all the different scope values for the <jsp:useBean> tag?

**Question 14**

How you will handle the runtime exception in your jsp page?

**Question 15**

Outline the major difference between the session and cookie?

**Question 16**

Explain Quick Sort with code snippet & its complexity?

**Question 17**

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

**Question 18**

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

**Question 19**

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

**Question 20**

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