**Question 1**

Give the names of any two searching algorithms

**Question 2**

**What is a self Referential structure?**

**Question 3**

What is a postorder traversal of a binary tree?

**Question 4**

Consider the following string:

String hannah = "Did Hannah see bees? Hannah did.";

1. What is the value displayed by the expression hannah.length()?
2. What is the value returned by the method call hannah.charAt(12)?
3. Write an expression that refers to the letter b in the string referred to by hannah. hannah.charAt(15).

**Question 5**

What is the result of trying to compile and run the following code.

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

double d = 10.0 / -0;

if(d == Double.POSITIVE\_INFINITY)

System.out.println("Positive infinity");

else

System.out.println("Negative infinity");

}

**Question 6**

Is this legal? Why?

long longArr[];

int intArr[] = { 7 ,8 , 9};

longArr = intArr;

**Question 7**

What is the value of d that will be printed out.

public class Test {

public final static void main(String[] args)

{

double d = - 22.22222;

System.out.println(Math.ceil(d));

}

}

**Question 8**

How do you create a database connection?

**Question 9**

What is an *iterator* and why are iterators necessary for generic programming?

**Question 10**

What is the output of the following code?

String s1 = **new** String("Test");

String s2 = "Test";

**if** (s1==s2)

System.out.println("Same");

**if** (s1.equals(s2))

System.out.println("Equals");

**Question 11**

When executed, whether or not this code will perform 10 iterations and ends? Why?

**int** x=0;

**int** y=0;

**while**(**true**){

**if** ((++x==10) && (++y==10))

**return**;

}

**Question 12**

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

public class Test1{

public static void main(String[] args)

{

Integer int1 = new Integer(10);

Vector vec1 = new Vector();

LinkedList list = new LinkedList();

vec1.add(int1);

list.add(int1);

if(vec1.equals(list))

System.out.println("equal");

else

System.out.println("not equal");

}

}

**Question 13**

What will happen if you try to compile and run this code.

class Rectangle{

public int area(int length , int width) {

return length \* width;

}

}

class Square extends Rectangle{}

class Test{

public static void main(String args[]) {

Square r = new Square();

System.out.println(r.area(5 , 4));

}

}

**Question 14**

What is the result of attempting to compile and run this ?

interface ITest{

public void setVal();

}

public class Test {

private String a;

void aMethod(){

final String b;

ITest it = new ITest() {

public void setVal(){

a = "Hello";

b = " World";

}

};

it.setVal();

System.out.println(a + b);

}

public static void main(String[] args) {

Test t = new Test();

t.aMethod();

}

}

**Question 15**

Whether the following statement is correct? Why?

IOException can be thrown without the need to declare it in the method header.

**Question 16**

If you want a servlet to take the same action for both GET and POST request, what should you do?

**Question 17**

**How to track a user session in Servlets? Write the code that can be used to create session object in the Servlet.**

**Question 18**

What is a benefit of using JavaBeans to separate business logic from presentation markup within the JSP environment?

**Question 19**

How do I include static files within a JSP page?

**Question 20**

How do you pass control from one JSP page to another?