**Question 1**

Give two names of typical data structure. What are the three operations on a *stack?*

**Question 2**

**What are differences between tree and graph?**

**Question 3**

Explaining what is meant by parsing a computer program.

**Question 4**

How long is the string returned by the following expression? What is the string?

"Was it a car or a cat I saw?".substring(9, 15)

**Question 5**

What is the result that will be printed out ?

void aMethod()

{

float f = (1 / 4) \* 10;

int i = Math.round(f);

System.out.println(i);

}

**Question 6**

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

public static void main(String[] args){

double d = 10 / 0;

if (d == Double.POSITIVE\_INFINITY)

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

else

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

}

**Question 7**

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

public class Test {

public static void main(String[] args)

{

Float f = new Float(32D);

System.out.println(f);

}

}

**Question 8**

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

public class Test {

public static void main(String[] args){

Integer i = new Integer(256);

System.out.println(i.byteValue());

}

}

**Question 9**

What is an Object's Hash Code in Java?

**Question 10**

Can ClassCastException be thrown without the need to declare it in the method header? Why?

**Question 11**

What is the output of the following code?

**class** Parent{

**private** **void** f(){

System.out.println("Parent.f()");

}

**public** **void** g(){

System.out.println("Parent.g()");

f();

}

}

**public** **class** Child **extends** Parent{

**public** **void** f(){

System.out.println("Child.f()");

}

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

Parent p = **new** Child();

p.g();

}

}

**Question 12**

What will this print out ?

public class Test {

public static void main(String[] args){

Integer a = new Integer(8);

Integer b = new Integer(4);

Integer c = new Integer(4);

Vector vec = new Vector();

Iterator itr;

vec.add(a);

vec.add(b);

vec.add(c);

itr = vec.iterator();

while (itr.hasNext()) {

ystem.out.println("" + itr.next());

}

}

}

**Question 13**

What is the result of compiling and running this program?

class Mammal{

void eat(Mammal m){

System.out.println("Mammal eats food");

}

}

class Cattle extends Mammal{

void eat(Cattle c){

System.out.println("Cattle eats hay");

}

}

class Horse extends Cattle{

void eat(Horse h){

System.out.println("Horse eats hay");

}

}

public class Test{

public static void main(String[] args){

Mammal h = new Horse();

Cattle c = new Horse();

c.eat(h);

}

}

**Question 14**

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

class Base{

String s = "Base";

String show(){

return s;

}

}

class Derived extends Base{

String s = "Derived";

}

public class Test {

void print(Base b){

System.out.println(b.show());

}

void print(Derived d){

System.out.println(d.show());

}

public static void main(String[] args){

Test t = new Test();

Base b = new Derived();

t.print(b);

}

}

**Question 15**

How do you call a Stored Procedure from JDBC?

**Question 16**

When a servlet accepts a call from a client, it receives two objects. What are they?

**Question 17**

**How you can destroy the session in Servlet? Write the Java code that can be used to** destroy the session.

**Question 18**

Why use RequestDispatcher to forward a request to another resource, instead of using a sendRedirect?

**Question 19**

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

**Question 20**

What is the difference between ServletContext and PageContext?