1. Consider an array L[5…30], where each element L[i], 5<=i<=30 is of 4 bytes and the address of L[5] is 1000. What is the address of L[12]? Ans. 1028
2. What will be the output of the following code snippet?

public class FindLargestSmallestNumber {

public static void main(String[] args) {

int numbers[] = new int[]{37,47,57,58,31,67,69,98,43,22};

int smallest = numbers[0];

int largetst = numbers[0];

for(int i=1; i< numbers.length; i++)

{

if(numbers[i] > largetst)

largetst = numbers[i];

else if (numbers[i] < smallest)

smallest = numbers[i];

}

System.out.println("Largest Number is : " + largetst);

System.out.println("Smallest Number is : " + smallest);

}

}

Largest number is: 98

Smallest number is: 22

3. Which of the following statements about garbage collection in Java are true?

A. Garbage collection can be enforced using System.gc().

B. Garbage collection cannot be forced but we can request the JVM using System.gc().

C. The time when garbage collection will be done by JVM cannot be predicted.

D. The time when JVM performs garbage collection is deterministic.

Both B and C

4. Considering the following code snippet, which of the following implementations of printList is faster?

Note: Ignore minor optimizations

public class AClass

{

void printList1(LinkedList<Integer> r)

{

for(int i=0;i<r.size();i++)

{

System.out.println(r.get(i));

}

}

void printList2(LinkedList<Integer> r)

{

Iterator<Integer> it=r.iterator();

while(it.hasNext())

{

System.out.println(it.next());

}

}

void printList3(LinkedList<Integer> r)

{

for(int i:r)

{

System.out.println(i);

}

}

}

o/p:- printList3

5. What will be the output of the following code snippet?

byte k = 37, y = 2;

int l= 37 % 2;

System.out.println(l);

o/p:- 1

6. Which of the given objects are eligible for Garbage collection after line 26 of the following code snippet?

class Test {

TestThis testthis;

public Test(){

testthis = new TestThis(this);

}

class TestThis {

Test test1;

public TestThis(Test aThis) {

test1 = aThis;

}

}

public static void main (String[] args){

Test test2 = new Test();

test2 = null; // line 26

}

}

o/p:- testthis and test1

7. What will be the output of the following code snippet?

class q4{

public static void main(String as[]){

boolean bool =true;

if(bool=false){

System.out.println("a");

}else if(bool){

System.out.println("b");

}else if(!bool){

System.out.println("c");

}else{

System.out.println("d");

}

}

}

o/p:-c

8. What will be the output of the following code snippet?

class q15{

public static void main(String as[]){

final char ch ='A';

switch(65){

case ch:

System.out.println("65");

case 66:

System.out.println("66");

}

}

}

o/p:- 65

9. Which of the following statements about Type 4 driver is false?

Type 4 drivers cannot be used with Netscape.

10. What will be the output of the following code snippet?

public class qq26{

final static String str ;

public static void main(String as[]){

String str ="ABC";

System.out.println(qq26.str);

}

static{

String str ="Hi";

str ="XYZ";

}

}

o/p:Compilation error

11. What will be the output of the following code snippet?

public class qq17{

static String s ="Instance";

public static void method(String s){

s+="Add";

}

public static void main(String as[]){

qq17 j =new qq17();

s = "New Instance";

String s ="Local";

method(s);

System.out.println(s);

System.out.println(j.s);

}

}

o/p:- Local New Instance

12. What will be the output of the following code snippet?

class qq25{

public static void main(String as[]){

String str1 ="XYZ";

System.out.println(str1.equals(new Student()));

}

}

class Student{};

o/p: False

13. Given are the columns in the EMP table. You have written the following query to retrieve all employees who have not been assigned to any department yet. Which of the following statements about the query is true?

EMP table columns:

LAST\_NAME VARCHAR2 (25)

SALARY NUMBER (6, 2)

DEPARTMENT\_ID NUMBER (6)

Query:

1 SELECT LAST\_NAME, SALARY, DEPARTMENT\_ID FROM EMP WHERE DEPARTMENT\_ID = NULL;

o/p:-

The SQL statement will display the desired results

14. Which method of JDBC API would you use to define the Out parameter before calling a stored procedure using CallableStatement?

registerOutParameter

15. What will be the output of the following code snippet?

class MyThread extends Thread{

public void run(){

System.out.println(Thread.currentThread().getName());

System.out.println(Thread.currentThread().isDaemon());

}

public static void main(String[] args){

MyThread t1=new MyThread();

MyThread t2=new MyThread();

t1.start();

t1.setDaemon(true);

t2.start();

}

}

Throws an IllegalThreadStateException

16. What will be the output of the following code snippet?

public class Test extends Thread{

public void start(){

System.out.println("Start Method");

}

public void run() {

System.out.println("Run method");

}

static public void main(String[] args) {

Test t1 = new Test();

Test t2 = new Test();

t1.run();

t2.run();

}

}

Run method would get printed twice on the console

17. Which of the following access modifiers provides narrow access scope (assuming that 'private' provides the narrowest scope) ? Protected

18. What will be the output of the following statement?

CREATE PROCEDURE pr\_temp (@val1 INT = NULL, @val2 INT = 13)

AS

BEGIN

SELECT @val1, @val2

END

EXEC pr\_temp 11, 12

o/p:- 11,12

19. Which of the following methods are present in the Thread class?

A. notify()

B. run()

C. terminate()

D. start()

E. wait()

B and D

20. Which of the given statements about the following code snippet is correct?

interface DemoInterface{

}

public class DemoImplementation implements DemoInterface{

public static void main(String args[])

{

System.out.println(new DemoImplementation().toString());

}

}

The given code will compile and run successfully.

21. What will be the output of the following code snippet?

import java.io.IOException;

class Test{

public static void main(String[] args) {

Test t = new Test();

int i = t.check();

System.out.println(i);

}

int check(){

try{

throw new IOException();

return 1;//line 13

}catch(Exception e){

System.out.println("catch block");// line 15

}finally{

System.out.println("finally returning");

}

}

}

compilation error at line 13

22. The Result Table can be achieved by using which of the following queries?

Consider the following Tables.

Customers Table

Orders Table

SELECT Customers.CustomerName, Orders.OrderID

FROM Customers INNER JOIN Orders ON Customers.CustomerID =Orders.CustomerID ORDER BY Customers.CustomerName;

22. Consider a database design with the tables whose schema is given.

EMP(empno INTEGER,ename STRING,esal REAL)

WORKS(empno INTEGER,deptid INTEGER)

DEPT(deptid INTEGER,bugdet REAL)

Which of the following queries is more efficient?

A. Select empno from works where deptid = '100' OR deptid = '101' ;

B. Select empno from works where deptid IN (100,101);

Only B

23. Check all options that apply.

Which of the following commands will you use to insert values in a table?

INSERT INTO [table\_name] VALUES (value1, value2, value3,...)

24. What will be the output of the following code snippet?

import java.util.ArrayList;

import java.util.Collections;

import java.util.List;

class Test{

public static void main(String[] args) {

List l = new ArrayList();

l.add("20");

l.add("8");

l.add("5");

Collections.sort(l);

for(int i=0;i<l.size();i++)

System.out.println(l.get(i));

}

}

o/p: 20 5 8

25. Which of the following options would you use to achieve abstraction in Java? Interface

26. What diagram would be most suitable to achieve the following :

> To model flow of control by time sequence.

> To model flow of control by structural organizations.

> For forward engineering.

> For reverse engineering.

o/p:- Interaction Diagrams

27. What should be the output of the following code?

var foo = {

bar: function()

{

return this.baz;

}, baz: 1

};

(

function()

{

return typeof arguments[0]();

}

)

(foo.bar);

o/p:- number

28. How can you run setUp() and tearDown() code at once for all of your tests?

You can add a @BeforeClass annotation to a method to be run before all the tests in a class, and a @AfterClass annotation to a method to be run after all the tests in a class

29. You can add a @BeforeClass annotation

to a method to be run before all the tests in

a class, and a @AfterClass annotation to a

method to be run after all the tests in a

class

30. Why are Generics used in Java? Assuring type safety

31. There are two HTML elements "ele1" and "ele2", where "ele2" is contained inside "ele1". Two events are attached to the elements as

follows:

function ele1click(){

alert("Element 1 Clicked");

}

function ele2click(){

alert("Element 2 Clicked");

}

ele2.addEventListener('click',ele2click,false);

ele1.addEventListener('click',ele1click,true);

What will be the output of the code when Element 2 is clicked?

Element 1 Clicked

Element 2 Clicked

32. Which of the following options is the correct JUnit test case when exception is thrown?

@Test(expected=IndexOutOfBoundsException.class)

public void testIndexOutOfBoundsException() {

ArrayList emptyList = new ArrayList();

Object o = emptyList.get(0);

}

33. What type of driver is net-protocol driver and uses a middleware to translate a request for database server? Type-3

34. What will be the result of the given below HTML code when styled using a index.css file?

<!DOCTYPE html>

<html>

<head>

<title>Styling Submit Buttons</title>

<link rel="stylesheet" type="text/css" href="index.css"/>

</head>

<body>

<form>

<input type="submit" value="Register" id="submit"/>

</form>

</body>

</html>

The CSS file index.css is as given below:

input {

font-size: 120%;

color: black;

background-color: grey;

border: 1px solid grey;

border-radius: 5px;

padding: 5px 10px 5px 10px;

background-repeat: no-repeat;

background-position: 8px 9px;

display: block;

margin-bottom: 10px;

}

input:hover {

color: red;

border: 1px solid black;

background-color: red;

background: -moz-linear-gradient(top, #a8cfce, #beeae9);

background: linear-gradient(top, #a8cfce, #beeae9);

}

The following will create one button with name Register. The button will have grey background and black text. On hovering the mouse over the button the text color changes to red, the background color changes to blue and a black underline over the button can also be seen.

35. What is erroneous in the given source code of a HTML page?

<html>

<head>

<script type="text/javascript">

function chngeColor(color){

document.getElementbyId('x').style.color=color;

}

</script>

</head>

<body>

<p>Mouse over the three colored table cells, and the text will change color:</p>

<table width="100%">

<tr>

<td bgcolor="red" onmouseover="changeColor('red')"> </td>

<td bgcolor="blue" onmouseover="changeColor('blue')"> </td>

<td bgcolor="green" onmouseover="changeColor('green')"> </td>

</tr>

</table>

<form>

<input id="x" type="text" value="Mouse over the colors" size="20">

</form>

</body>

</html>

function chngeColor(color)

document.getElementbyId('x').style.color=color;

36. For a structured document, which of the following options defines a standard set of objects?

Core DOM

37. Which of the following EL expressions are valid?

Note: There can be more than one correct answer.

${pageContext.request.pathInfo}

${pageContext.request.queryString}

38. Which of the following methods would you use to find the maximum number of connections that a specific driver can obtain?

DatabaseMetaData.getMaxConnections

39. As per Java servlets concepts, within the web-app element of deployment descriptor, which of the following options represents the correct code fragment ?

<error-page>

<exception-type> mypackage.MyException</exception-type>

<location> /error.jsp</location> </error-page>

40. A JSP has custom tags and you want to attach a Validator for a Tag Library during the page translation phase. Which of the following elements should be used in the Tag Library descriptor for a particular tag?

Validator



