

1. Consider the following Java Code (Assume that Employee is a valid Java class)

```
public class ApplicationTester
{
    public static void main(String[] args)
    {
        Employee emp1 = newEmployee();
        Employee emp2 = newEmployee();
        Employee emp3 = newEmployee();
        Employee emp4 = emp1;
        emp1=emp3;
        emp4=null;
        emp2=emp4; //Line-1
        //some valid Java code
    }
}
```

With respect to the code, how many object/objects will be available for garbage collection after Line-1? Choose the most appropriate option

Ans- 2

2. Choose the most appropriate option

```
interface A
{
    public static final int DATA =3;
    void doWork(int t);
}
public class Main implements A
{
    public static void main(String[] args)
    {
        int x=5;
        new Main().doWork(++x);
    }
    void doWork(int s)
    {
        s=DATA+s;
        System.out.println("s "+s);
    }
}
```

Ans – Compile time error

```
Main.java:21: error: doWork(int) in Main cannot implement doWork(int) in A
    void doWork(int s)
        ^
    attempting to assign weaker access privileges; was public
1 error
```

3. Refer to the below code and predict the output

```
public class Main
{
    public static void main(String[] args)
    {
        int i=10;
        boolean b=false;
        if((b==true) && ((i+=10)==20))
        {
            System.out.println("We are equal "+i);
        }
        else
        {
            System.out.println("Not equal! "+i);
        }
    }
}
```

Ans -

Not equal! 10

4. What is the output expected on the execution of the following code?

```
public class Main
{
    static int num=50;
    static void testMethod()
    {
        num=num+10;
    }
    public static void main(String[] args)
    {
        Main m=new Main();
        m.num=20;
        testMethod();
        System.out.println(num);
    }
}
```

Ans – 30

5. Consider the table Employee(empId,jobBand)

What is the correct DML statement to update the job band of all employees to NULL?

ANS –

UPDATE TABLE employee SET jobBand is NULL;

UPDATE employee SET jobBand = NULL;

UPDATE TABLE employee SET jobBand = NULL;

UPDATE employee SET jobBand is NULL;

**6. Consider the table Employee(empId,jobBand)**

**What is the correct SQL statement where all unique job band from employee table?**

**Ans –**

select jobBand DISTINCT from employee;

select DISTINCT jobBand,empid from employee;

select DISTINCT(jobBand) from employee; // gave right answer as well

**select DISTINCT jobBand from employee;**

**7. Consider table Account(accountId,balance) Identify the SQL queries which gives the same result**

**Ans –**

SELECT \* FROM Account WHERE balance>1000 and balance<5000;

SELECT \* FROM Account WHERE balance>=1000 OR balance<=5000;

**SELECT \* FROM Account WHERE balance between 1000 and 5000;**

**SELECT \* FROM Account WHERE balance>=1000 AND balance<=5000;**

**8. Refer the incomplete HTML Code given below**

```
<html>
<body>
<form action="abc.html" ____ > <!--Line 1-->
First Name: <input type="text" name="f1"/>
<br/>
Last Name: <input type="text" name="l1"/>
<br/>
Password: <input type="password" name="p1"/>
<br/>
<input type="submit" value="Submit"/>
</form>
</body>
</html>
```

Assume abc.html is existing and a valid HTML page. Identify the appropriate option to be placed at Line 1 so that values entered in the text boxes are not appended to URL while submitting to abc.html.

**Ans –**

method =" GET"

**method = "POST"**

submit = "GET"

submit =" POST"

9. What would be the output of the following Java Script

```
<html>
<body>
  <script>
    var key1=1;
    document.write(typeof(key1)+" ");
    var key2=null;
    document.write(typeof(key2));
  </script>
</body>
</html>
```

Ans –

**number object**

int object

number undefined

int undefined

10. Which of the following is not a part of SRS document

Ans –

Functional Requirement

Non-Functional Requirements

**Implementation Details**

Hardware Software specifications

11. Consider the following array (12,3,1,5,8) Tell us the number of steps that are required to sort the elements into the ascending order using insertion sort

Ans – 3

12. Choose the appropriate option where prototype model is used

Ans –

For projects where requirements are clear

**For projects where requirements are unclear**

Projects where lot of risk factors need to be considered

Projects with frequent changes

**13. Arrow symbols in the flowchart is used to show the sequence of steps and the relationship among them. State true or false**

**Ans-**

**True**

False

**14. Which command in UNIX is used for clearing the Screen?**

**Ans-**

clrscr

cls

**clear**

clearscreen

**15. What is the command to concatenate fname and lname with a space in between and display the output under the heading of "Full Name"?**

**Employee(eid,fname,lname,salary)**

**Ans-**

**Select fname || " " || lname as 'Full Name' from employee;**

**Select fname || " " || lname 'Full Name' from employee;**

Select fname & lname as 'Full Name' from employee;

Select fname & ' ' & lname 'Full Name' from employee;

**16. From the below list which files will be listed using the following command**

**ls chap(^1-4)**

**Ans-**

Chap4

**Chap5**

**Chap6**

**Chap7**

**17. What is an identity of an object?**

**Ans-**

**Is the property that uniquely differentiates the object from other objects**

Is the id given to the object by the class

Is the state of an object

Is the behavior of the object

**18. Consider the following table structure and write a query to display all the employees who have and don't have department assigned**

**Emp(fname,lname,dno)**

**Dept(deptid,dname)**

**Ans-**

Select fname,deptid from emp e, dept d where e.dno(\*)<math>=d.deptid</math>;

**Select fname,deptid,dname from emp e left outer join dept d on (e.dno=d.deptid);**

Select fname,deptid,dname from emp e, dept d where.dno = d.deptid(\*);

Select fname,deptid,dname from emp e full outer join dept d on (e.no=d.deptid);

**19. Refer the code and predict the output**

```
class Apartment
{
    Apartment()
    {
        System.out.print("b ");
    }
    Apartment(String name)
    {
        this();
        System.out.print("Hreeva "+name);
    }
}
public class Main extends Apartment
{
    Main()
    {
        System.out.print("A ");
    }
    Main(String name)
    {
        this();
        System.out.print("B "+name);
    }
    public static void main(String[] args)
    {
        new Main("C ");
    }
}
```

**Ans-**

**b A B C**

A B C

A B C b

B Hreeva A B C

20. given the following code snippet: which of the following are true

```
import java.util.List;
import java.util.ArrayList;
public class Main
{
    public static void main(String[] args)
    {
        List list=new ArrayList(3); //Line 1
        list.add(7);
        list.add("D");
        list.add(new Integer(7));
        System.out.print(list);
    }
}
```

Ans – the output will be [ 7 , D, 7 ]

21. Predict the output

Given two files

```
package A;
public class One
{
    int no1=50;
    protected int no2=60;
    public int no3=70;
}
```

```
package B;
import A.*;
public class Main
{
    public static void main(String[] args)
    {
        One o=new One();
        System.out.print(" "+o.no1);
        System.out.print(" "+o.no2);
        System.out.print(" "+o.no3);
    }
}
```

Ans – Compile time error

Main.java:16: error: no1 is not public in One; cannot be accessed from outside package

```
System.out.print(" "+o.no1);
```

^

Main.java:17: error: no2 has protected access in One

```
System.out.print(" "+o.no2);
```

^

2 errors

**22. Identify the correct CSS representation for a paragraph**

**Ans-**

**p{padding:25px;}**

p{padding=25px;}

p=padding:25px;

p: padding: 25px;

**23. Which attribute is used to reference an xml schema in an xml document**

**Ans-**

**xsi:schemaLocation**

xsi:Location

xsd:schemaLocation

xsi=schemaLocation

**24. Two modules with more dependency is known as loosely coupled modules and two modules with less dependency is known as uncoupled modules state true or false**

**Ans-**

True

**False**

**25. Carefully read the question and answer accordingly. To execute the result of the last executed procedure, call recursive procedures use stacks. State true or false**

**Ans-**

True

False

**26. Path is used to locate file in Unix filesystem. The types of path supported are \_\_\_\_ and \_\_\_\_**

**Ans-**



**Absolute**

**Relative**

Reference

Dynamic

**27. Predict the output**

**Step 1: start the program**

**Step 2: Declare a variable count and set the count as 1**

**Step 3: Print the count**

**Step 4: Increment the count by 1**

**Step 5: Check whether count is greater than or equal to 1. If yes go to step 3. If no go to step 6**

**Step 6: Print the count**

**Step 7: Stop**

**Ans-**

1 1

1 2

2 1

**Loop runs indefinitely**

**28. Below statement is an example of \_\_\_\_\_ path in Unix**

**&cd /home/course/CSE/C++**

**Ans-**

**Absolute**

Relative

Reference

Dynamic

**29. Predict the output of below command**

**grep "Atul" employee.txt || echo "not found"**

**Ans-**

Searches for Atul and echoes "not found"

Searches for Atul

Searches for Atul and displays

**Searched for Atul and echoes “not found” when not found**

**30. Consider the scenario. For an insurance, customer makes a claim. The claim can be a normal or a critical claim. The insurance company confirms the claim. What diagram can be used to understand the state changes of the component triggered by events and dynamic nature?**

**Ans-**

State chart diagram

Sequence diagram

**Activity diagram**

Interaction diagram

**31. Predict the output**

```
class Mammal
{
    String name="Dog";
    String makeNoise()
    {
        return "BOW WOW";
    }
}

class Cat extends Mammal
{
    String name="Cat";
    String makeNoise()
    {
        return "Meow";
    }
}

public class Main
{
    public static void main(String[] args)
    {
        new Main().go();
    }
    void go()
    {
        Mammal m=new Cat();
        System.out.println(m.name+m.makeNoise());
    }
}
```

Cat Meow

Dog BOW WOW

**Dog Meow**

Cat Bow Wow

**32. A team of employees is trying to analyze the root cause of the issues identified for the online Library Management. From the options identify the process that is carried out.**

**Ans-**

Coding

Testing

Analysis

**Debugging**

**33. Information hiding is achieved through which OOP principle?**

**Ans-**

Abstraction

**Encapsulation**

Typing

Hierarchy

**34. From the following options choose all the possible Exceptions for the above code**

**Try{**

**Int check = Integer.parseInt("Five");**

**}**

**Ans-(class cast, number format)**

ClassCastException

IllegalStateException

**NumberFormatException**

**IllegalArgumentException**

ExceptionInInitializerError

**35. Unix file system is a collection of files and directories organized in a \_\_\_\_\_ manner**

**Ans- hierarchical**

**36. Predict the output**

```

public class Main
{
    int x=50;

    public static void main(String[] args)
    {
        final Main f1=new Main();
        Main f2 = new Main();
        Main f3 = isValid(f1,f2);
        System.out.println((f1==f3)+" "+(f1.x==f3.x));
    }

    static Main isValid(Main x, Main y)
    {
        final Main z=x;
        z.x=60;
        return z;
    }
}

```

Ans- true true

### 37. Predict the output

```

import java.util.Iterator;
import java.util.Set;
import java.util.TreeSet;

public class TestMain
{
    public static void main(String[] args)
    {
        checkTest();
    }

    public static void checkTest()
    {
        Set set = new TreeSet();
        set.add("A");
        set.add(3);
        set.add("B");
        Iterator it=set.iterator();
        while (it.hasNext())
        {
            System.out.print(it.next()+"");
        }
    }
}

```

Ans-

A 3 B

A B

3

A followed by an exception

An exception is thrown at runtime

Exception in thread "main" java.lang.ClassCastException: java.lang.String cannot be cast to java.lang.Integer

### 38. What is true regarding State Chart Diagram?

Ans-

**Depicts different states of an object during lifetime**

Flow of activity

Chart diagram of objects

Static view of objects

### 39. Predict the output

```
public class TestMain extends Tree
{
    public static void main(String[] args)
    {
        new TestMain().go();
    }

    void go()
    {
        grow2(new Tree(), new TestMain());
        grow2((TestMain) new Tree(), new TestMain());
    }

    void grow2(Tree t1, TestMain r1)
    {
        TestMain r2 = (TestMain) t1;
        Tree t2=(Tree) r1;
    }
}

class Tree
{
}
```

**An exception is thrown at runtime**

The code compiles and runs with no output

CTE

- Exception in thread "main" java.lang.ClassCastException: Tree cannot be cast to TestMain

40. Predict the output

```
public class TestMain
{
    {
        index = 1;
    }
    int index;

    public static void main(String[] args)
    {
        new TestMain().find();
    }

    void find()
    {
        int[][] d={{7,8,9},{4,5,6},{0,1,2,3}};
        System.out.println(d[index++][index++]);
    }
}
```

Ans – 6

41. Predict the output. Which statement can replace to allow the above code to compile and run.

```
import java.util.ArrayList;
import java.util.List;

public class TestMain
{
    public static void main(String[] args)
    {
        //INSERT LIST DECLARATION HERE
        for (int i=0;i<=5;i++)
        {
            List<Integer> row=new ArrayList<Integer>();
            for(int j=0;j<=5;j++)
                row.add(i*j);
            db.add(row);
        }
        for(List<Integer> row : db)
            System.out.println(row);
    }
}
```

Ans –

**List<List<Integer>> db = new ArrayList<List<Integer>>();**

List<List<Integer>> db = new List<List<Integer>>();

List<List,Integer> db = new List<List,Integer>();

[0, 0, 0, 0, 0, 0]

[0, 1, 2, 3, 4, 5]

[0, 2, 4, 6, 8, 10]

[0, 3, 6, 9, 12, 15]

[0, 4, 8, 12, 16, 20]

[0, 5, 10, 15, 20, 25]

**42. Carefully read the question and answer accordingly. In Linear search algorithm, if an item to be searched is found in the middle of an array then it is said to be \_\_\_\_\_**

**Ans-**

Best case

Worst case

**Average case**

Null case

**43. Which of the given phases consume more time during the Software life cycle**

**Ans-**

Analysis

**Design**

Testing

Maintenance

**44. If you are asked to do a modular software design, which combination of coupling and cohesion should you use for designing the software?**

**Ans-**

High cohesion and high coupling

**High cohesion and low coupling**

Low cohesion and high coupling

Low cohesion and low coupling

**45. What is the output of the following script**

```
<script>var x=16+4+"100"
```

```
alert(x)</script>
```

**Ans – 20100**

**46. Which jquery syntax hides all the paragraph elements**

**Ans-**

**`$("p").hide();`**

`$(p).hide();`

`$("p")-hide();`

("p").hide();

**47. Match the following**

**DDL, DML, DCL, TCL**

**GRANT, COMMIT, SELECT, CREATE**

**Ans-**

**DDL – CREATE**

**DML – SELECT**

**DCL – GRANT**

**TCL – COMMIT**

**Note:**

**DDL (Data Definition Language) – Create, drop, alter, truncate, comment, rename**

**DQL (Data Query Language) – SELECT**

**DML (Data Manipulation Language) – Insert, update, delete**

**DCL (Data Control Language) - Grant, revoke**

**TCL (transaction Control Language) – Commit, rollback, savepoint, set transaction**

**48. Which is the root element of every XSD?**

**Ans-**

**Schema**

Root

Schema xsd

Base

**49. The kernel is the core part of UNIX operating system. Choose 3 tasks achieved by Kernel from the list below**

**Ans-**

**Performs disk operations**

**Manages I/O operations**

**Performs memory and processes management**

Interfaces between user and operating system



**50. You must explicitly commit GRANT on tables. State true or false**

**Ans-**

**True**

False

**51. Which of the following algorithm(s) is/are said to be non-adaptive?**

**Ans-**

Selection sort

**Merge sort**

Bubble sort

Insertion sort

**52. Which of the following is more efficient in terms of memory utilization and execution speed?**

**Ans-**

Recursion

**Iteration**

Sequential

Conditional

**53. In HTML, what is the default min and max values for the input type called range?**

**Ans-**

**Min=0, max=100**

Min=1, max=10

Min=0, max=10

Min=1, max=100

**54. Root is a super user in Unix operating system and it is represented using \_\_\_\_\_**

**Ans-**

\$

/

>

~

55. Given

```
public class Main
{
    public static void main(String[] args) {
        check();
        check(10);
        check(10,20);
    }

    //insert code here
}
```

Which of the following statement can replace // insert code here, that will compile without any errors? Choose all that apply

Ans-

`static void check(int...checkArgs){}`

`static void check(int[] checkArgs){}`

`static void check(int...checkArgs,int y){}`

`static void check(int checkArgs...){}`

`static void check(int x,int...checkArgs){}`

56. `java.util.List` allows you to grow or shrink its size and provides indexed access to its elements, but whose methods are not synchronized. State True or False

Ans-

True

False

57. State true or false

White box testers require the working knowledge of the code being tested

Ans-

True

False

**58. Carefully read the question and answer accordingly. In an array, if an item to be searched is found in the last element of the array or not found in the array then it is said to be \_\_\_\_\_**

**Ans-**

Best case

**Worst case**

Average case

Null case

**59. What does public String pattern() return?**

**Ans-**

**Returns the compiled version of boolean after matching the regular expression against the given**

Returns the compiled version of regular expression into a Pattern

Returns the pattern's source regular expression

Returns the compiled version of string into the pattern

**60. What is the complexity of the given code**

```
void cou(int m)
{
    int a,b,c=0;
    for(a=m/2;a<=m;a++)
    for(b=1;b<=m;b=b*2)
        c++;
}
```

**Ans-**

**O(nlogn)**

O(n^2)

O(n^2logn)

O(logn)

**61. Choose the options which are true with respect to views in SQL?**

**Ans-**

**View is a virtual table that does not physically exist**

**Views are used for maintaining logical data independence**

View do not maintain data integrity

View is database objects that physically exist

**62. For developing a water plant application the following statements are captured in the SRS**

i) if the water level goes below 20%, then the application should raise an alarm for immediate action

ii) if the water level goes below 15%, then the application should automatically switch on the power button to fill in water in the tank

**Identify the issue with the requirement specified in the SRS**

**Ans-**

**Contradicting requirements**

No issues with the requirements

Incomplete requirements

Unreliable requirement

**63. Name the Unix command to perform safe shut down a Unix system**

**Ans-**

Poweroff

**Shutdown**

Reboot

**64. Predict the output**

```
class Store
{
    String find(short shops)
    {
        return "a few ";
    }

    String find(short...shops)
    {
        return "many";
    }
}
public class Main
{
    public static void main(String[] args) {
        System.out.print(new Store().find(1));
        System.out.print(new Store().find(1,2));
    }
}
```

Ans-

A few many

A few

Many

Compile time error - error: no suitable method found for find(int)

65. Predict the output

```
public class Main
{
    {
        index=1;
    }
    int index;

    public static void main(String[] args) {
        new Main().find();
    }

    void find()
    {
        int[][] d={{7,8,9},{4,5,6},{0,1,2,3}};
        System.out.println(d[index++][index++]);
    }
}
```

Ans-

6

66. Predict the output

```
public class Main
{
    public void printVal(Integer i)
    {
        System.out.println("Integer "+i);
    }
    public void printVal(int i)
    {
        System.out.println("Int "+i);
    }
    public static void main(String[] args) {
        new Main().printVal(127);
    }
}
```

Ans-

Int 127

67. When constructing looping statements, if the iteration condition is not terminated, it will result in infinite loop. State True or false

Ans-

True

False

68. Predict the output

```
public class Milon
{
    Milon()
    {
    }
    Milon(Milon m)
    {
        m1=m;
    }

    Milon m1;

    public static void main(String[] args)
    {
        Milon m2=new Milon();
        Milon m3=new Milon(m2);
        m3.go();
        Milon m4=m3.m1;
        m4.go();
        Milon m5=m2.m1;
        m5.go();
    }

    void go()
    {
        System.out.print("hi");
    }
}
```

Hi hi followed by exception

Hi hi hi

Hi hi

Hi

Hi followed by exception

69. Select the statements that are true about Persistence

Ans-

Persistence is a way through which the life time of object exists even after the program terminates

Java uses serialization for object persistence

Persistence is a way through which the life time of object is terminated as the program terminates

Persistence of object is done by java runtime automatically

70. Predict the output

```
public class Main extends Count
{
    public static void main(String[] args)
    {
        Short no1=10;
        System.out.println(addCount(no1,8));
    }
}

class Count
{
    int addCount(int x,int y)
    {
        return x+y;
    }
}
```

Ans-

Compile time error

10

18

8

71. Bonus calculated module was unit tested by the developer. Depending on the salary the bonus needs to be calculated. Assume if one of the salary-range is between 30000 to 40000 then the bonus should be 10%. From the given options identify the test cases for Equivalence Partitioning.

Ans-

25000,35000,45000

25000,27000,29000

42000,43000,45000

32000,35000,39000

72. Predict the output

```

public class Main extends Animal
{
    public static String bark()
    {
        return "Bow Wow";
    }
    public static void main(String[] args)
    {
        Main t=new Main();
        Animal s=new Animal();
        System.out.println(t.bark()+" "+s.bark());
    }
}
class Animal
{
    public static String bark()
    {
        return "Roar";
    }
}

```

Ans-

Bow Wow

Roar

**Bow Wow Roar**

Compile time error

**73. Choose the statement that true about Class?**

Ans-

Class is a dynamic component

**Class is described using attributes and methods**

Change the class to change the state of an object

Class properties depends on object properties

**74. Which xsd correctly defines a restriction on votingage element where the value is between 18 and 130**

Ans-



```
<xs:element name="votingage"><xs:simpleType><xs:restriction
base="xs:integer"><xs:minInclusive value="18"/><xs:maxInclusive
value="130"/></xs:restriction></xs:simpleType></xs:element>
```

**75. Given**

**Public abstract Interface1 {public void method(String s);}**

**Which of the following is/are correct class implementation(s)**

**Ans-**

```
Public abstract class Class1 implements Interface{
Public abstract void method(String s){}
}
```

**Public abstract class Class1 implements Interface1{}**

```
Public class Class1 extends Interface1{
Public void method(Integer i) {}
}
```

```
Public class Class1 implements Interface1{
Public void method(Integer i) {}
}
```

```
Public class Classs1 implements Interface1{
Public void method(String i) {}
Public void method(Integer s) {}
}
```

**76. Predict the output**

```

import java.util.*;
public class Main
{
    public static void main(String[] args)
    {
        String[] str={"Banana", "Apple", "Watermelon","Mango"};
        sortFruit o=new sortFruit();
        Arrays.sort(str,o);
        for(String s:str)
            System.out.print(s+" ");
        System.out.println(Arrays.binarySearch(str,"map"));
    }
    static class sortFruit implements Comparator<String>
    {
        public int compare(String str1,String str2)
        {
            return str2.compareTo(str1);
        }
    }
}

```

Ans-

Watermelon Mango Banana Apple -5

77. What is the relationship between these two Building has rooms

Ans-

Composition

Aggregation

Generalization

Hierarchy

78. If an element is to be retrieved from a specific location in an array, the array has to be \_\_\_\_\_

Ans-

Traversed from the first position until the element is found

Added in ascending order and compared with each element

Traversed from the last position to first until the element is found

Sorted in descending order and compared with each element.

79. Predict the output

```

class Main
{
    public static void main(String[] args)
    {
        Long x=40L;
        Long y=40L;
        System.out.print(" "+8+5+" ");
        System.out.print(print()+x+6+" ");
        System.out.println(x+y+print());
    }
    static String print()
    {
        return "Message";
    }
}

```

Ans-

85 Message 406 80Message

80. In which of the given SDLC models' rapid changes are easily incorporated

Ans-

V-model

**Agile model**

Prototyping model

Waterfall model

81. What is the lifeline in a sequence diagram?

Ans-

**Object's life time**

Actor's life time

System's life time

Modelling life time

82. What are the best ways to ensure that a class implements the required behavior?

Ans-

**Use Interface**

Method inside interface are public and abstract

Have a strict testing

Use encapsulation

### 83. Predict the output

```
public class BlackBoard{  
    public void finalize(){System.out.println("object  
        is garbage collected");}  
  
    Short story=200;  
|  
    BlackBoard write(BlackBoard bb)  
    {  
        bb=null;  
        return bb;  
    }  
  
    public static void main(String args[]){  
        BlackBoard b1=new BlackBoard();  
        BlackBoard b2=new BlackBoard();  
        BlackBoard b3=b1.write(b2);  
        b1=null;  
        System.gc();  
    }  
}
```

How many objects eligible or GC is reached, how many objects are eligible for Garbage Collection?

Ans – 1 (or 2)

### 84. Predict the output

```

import java.util.Iterator;
import java.util.Set;
import java.util.TreeSet;

public class Main
{
    public static void main(String[] args) {
        checkTest();
    }
    public static void checkTest()
    {
        Set set=new TreeSet();
        set.add("A");
        set.add(3);
        set.add("B");
        Iterator it=set.iterator();
        while(it.hasNext())
            System.out.print(it.next()+" ");
    }
}

```

**Ans-** An exception is thrown at runtime

**85. What are the types of Interaction Diagrams?**

**Ans-**

Sequence diagram

Collaboration diagram

Activity diagram

State chart diagram

**86. A Team is allocated with a new project. All their work needs to be accessed and updated in the same repository. Which of the given options would help them achieve this?**

**Ans-**

Software configuration management

Creating a common folder in the server

Creating a common folder local

Using IDE

87. Predict the output?

```
import java.util.*;

public class Main
{
    public static void main(String[] args) {
        Map<Tasks,String> m=new HashMap<Tasks,String>();
        Tasks t1=new Tasks("Jan");
        Tasks t2=new Tasks("Jan");
        Tasks t3=new Tasks("Apr");
        m.put(t1,"Design");
        m.put(t2,"Code");
        m.put(t3,"Develop");
        System.out.println(m.size());
    }
}

class Tasks
{
    String day;
    Tasks(String d)
    {
        day=d;
    }
    public boolean equals(Object o)
    {
        return ((Tasks) o).day==this.day;
    }
    public int hashCode() {return 0;}
}
```

Ans – 2

88. Choose the correct order in which the Oracle Server evaluate clauses

Ans-

Where, group by, having

Where, having, group by

Having, where, group by

Group by, having, where

89. Carefully read the question and answer accordingly

Analysis of selection algorithm eliminates \_\_\_\_ number of elements each time

Ans-

n elements

n/2 elements

n/4 elements

(n/2) + n elements

90. Predict the output

```
class Car
{
    public String name="Modial";
    public Car()
    {
        System.out.print("Car ");
    }
}

public class Ferrari extends Car
{
    public Ferrari()
    {
        System.out.print("Ferrari ");
    }
    void getModel()
    {
        name="Portofino";
        System.out.print(this.name+" "+super.name);
    }
    public static void main(String[] args)
    {
        new Ferrari().getModel();
    }
}
```

Ans- Car Ferrari Portofino Portofino

91. Software which controls radiation equipment for patients is best shut down, if it receives bad input for a radiation dosage. This is a best example for \_\_\_\_\_

Ans-

Correctness

Robustness

Verification

Validation

92. Predict the output

```
public class TestMain
{
    static String s="*";
    public static void main(String[] args)
    {
        new TestMain().s1();
        System.out.println(s);
    }
    void s1()
    {
        try
        {
            s2();
        }
        catch(Exception e)
        {
            s+="c";
        }
    }

    void s2() throws Exception
    {
        s3();
        s+="2";
        s3();
        s+="2b";
    }
    void s3() throws Exception
    {
        throw new Exception();
    }
}
```

Ans - \*c

93. Predict the output

```
class High
{
    public High(String s)
    {
        System.out.print("From High");
    }
}
public class TestMain extends High
{
    public TestMain(String s)
    {
        System.out.print("From Low");
    }

    public static void main(String[] args)
    {
        new TestMain("High Low");
        System.out.println(" ");
    }
}
```

Ans- Compile time error



**94. Predict the output**

```
import java.util.*;
public class TestMain
{
    public static void main(String[] args)
    {
        TreeSet<String> lList=new TreeSet<String>();
        TreeSet<String> sList=new TreeSet<String>();
        lList.add("One");
        lList.add("Two");
        lList.add("Three");
        lList.add("Four");
        lList.add("Five");
        sList=(TreeSet) lList.subSet("One",true,"Six",true);
        lList.add("One");
        lList.pollFirst();
        lList.pollFirst();
        lList.add("Two");
        System.out.println(lList.size()+" "+sList.size());
    }
}
```

**Ans- 3 1**

**95. Which concept ensures every change that is made to the artifact can be properly tracked and changed?**

**Ans-**

**Version control**

Resource planning

Testing

Review of artifacts

**96. Which script code produces the output as Welcome to "Javascript"**

**Ans-**

`<script>var x="welcome to \"Javascript\""; alert(x);</script>`

`<script>var x="welcome to \"Javascript\""; alert(x);</script>`

`<script>var x="welcome to \"Javascript\""; x. alert(x);</script>`

`<script>var x1="welcome to \"Javascript\""; alert(x);</script>`

**97. Which is not an attribute of schema element**

**Ans-**

targetnamespace

xmlns

elementFormDefault

**version**

**98. What is the output of the following code?**

```
<script> var str="A bag of apples is full of apples"; var pos=str.indexOf('apples');alert(pos)</script>
```

**Ans= 9**

**99. Predict the output of the below SQL query**

```
SELECT DISTINCT CITY FROM CUSTOMER;
```

**Ans-**

Displays all cities

**Displays unique cities**

**Displays distinct cities**

Query has syntax error

**100. What are the best ways to ensure that a class implements the required behavior?**

**Ans-**

**User interface**

Method inside interface are public and abstract

Have a strict testing

Use encapsulation

**101.  $O(n \log n)$  is the best-case time complexity of Bubble Sort. State True or False**

**Ans-**

True

**False**

**102. Predict the output of the following command**

```
$ who | tee userlist.txt
```

**Ans-**

The command displays the output on the monitor

**The command displays the output of who in the monitor and also saves the output in userlist.txt**

The command saves the output in userlist.txt

The command displays an error message on the monitor

**103. Which of the given options perform requirement specification- based testing**

**Ans-**

White box testing

**Black box testing**

Integration testing

Glass box testing

**104. Consider the following CSS script**

**Start program**

**padding: 20px, 30px;**

**end program**

**what is the order of padding property that has two values?**

**Ans-**

Top and right, left and bottom

Right and left, top and bottom

**Top and bottom, right and left**

Right and bottom, top and left

**105. What is the command to fetch employee id, employee name and salary with 10% increase from employee?**

**Employee(eid,ename,salary)**

**Ans-**

**Select eid, ename, (salary+salary\*0.1) from employee;**

**Select eid, ename, (salary+salary\*10/100) from employee;**

Select eid, ename, salary\*10% from employee;

Select eid, ename, salary\*10/100 from employee;

**106. UNIX is more commonly used operating system in comparison with other OS. Choose two reason from the below options in support of this statement.**

**Ans-**

**It is open source software**

**It is highly secure**

It is user friendly

Has good graphical user interface

**107. What attribute is used to indicate that an attribute is required for an element in the XSD**

**Ans-**

**use**

required

needed

mandatory

**108. Two tables joined using SELF JOIN are different tables with the same columns**

**Ans-**

True

**False**

**109. In HTML, what is the default type of an input element?**

**Ans-**

submit

**text**

hidden

reset

**110. What string datatype can be used for string that does not contain line feeds, carriage returns or tabs**

**Ans-**

**xs: string**

xs: name

xs: nospace

normalisedString

**111. Which element is used to indicate that elements defined in the xsd must appear in the same order in the xml file**

**Ans-**

**<xs: sequence>**

**<xs: ordered>**

**<xs: queue>**

**<xs: same-order>**

**112. Which is the HTML5 equivalent of <div id=" content">**

**Ans-**

**<section>**

**<body>**

**<article>**

**<header>**

**113. Which script displays an alert box with the required information when a button with the name msgbtn is clicked**

**Ans-**

**<script>document.getElementById("msgbtn").addEventListener("click",function(){alert("Welcome to button clicks!");});</script>**

**<script>document.getElementById("msgbtn").EventListener("click",function(){alert("Welcome to button clicks!");});</script>**

**<script>document.getElementById("msgbtn").includeEventListener("click",function(){alert("Welcome to button clicks!");});</script>**

**<script>document.getElementById("msgbtn").addEventListener("click",function={alert("Welcome to button clicks!");});</script>**

**114. Which of the given options define a set of activities that transform the client needs to an effective software solution**

**Ans-**

Software planning

Software cost estimation

**Software development process**

Software resource planning

**115. order the types of cohesion from the worst cohesion to the best cohesion**

**a. functional cohesion**

**b. co-incidental cohesion**

**c. communicational cohesion**

**d. temporal cohesion**

**e. procedural cohesion**

**f. logical cohesion**

**g. sequential cohesion**

**Ans- b-f-d-e-c-g-a**

**116. After the development of the online website for banking, the testers found that the application was not user friendly to differently abled people. Identify in which level of testing, the testers would have identified this issue**

**Ans-**

Unit testing

Integration testing

**System testing**

Acceptance testing

**117. In javascript, which of the following popup boxes has the cancel button? Choose one**

**Ans-**

Alert box and prompt box

Alert box and confirm box

**Confirm box and prompt box**

Alert box, prompt box and confirm box

**118. which of the following is correct if the xsd is <xs: element name="bgcolor" type="xs: string" fixed="green"/>**

**Ans-**

**<bgcolor>green</bgcolor>**

**<bgcolor>red</bgcolor>**

**<bgcolor>green<bgcolor>**

**<bgcolor>GREEN</bgcolor>**

**119. Choose a query that will display the names of colleges where the available seats are between 50 to 100 hint: inclusive of 50 and 100**

**Ans-**

Select college\_name from college where available\_seats=50 and available\_seats=100;

Select college\_name from college where available\_seats 50 and available\_seats 100;

**Select college\_name from college where available\_seats between 50 and 100;**

Select college\_name from college where available\_seats between 50 to 100;

**120. What will be the XSD definition for the following element <age>40</age>**

**Ans-**

**<xs:element name="age" type="xs:integer"/>**

**<xs:element name="age" type="Integer"/>**

**<element name="age" type="xs:integer"/>**

**<xs:element name="age" type="xs:int"/>**

**121. Which is the correct implementation for a progress bar in HTML5**

**Ans- #review**

**<progress value="20" max="100"></progress>**

**<progress value:20 max:100></progress>**

**<progress value max="20","100"></progress>**

**<progress value="20" and max="100"></progress>**

**122. Which command is used to get intermediate result in a pipeline of commands in Unix**

**Ans-**

tee

grep

wc

ls

**123. Carefully read the question and answer accordingly. A simple algorithm may have high complexity, whereas a complex algorithm may have lower complexity in the sense of time needed for the computations. State true or false**

**Ans-**

**True**

False

**124. Identify which is not an XML Naming Rule**

**Ans-**

The names of elements are case- sensitive

Names of elements must not contain spaces

**Element names can start with letters xml**

An underscore can be used to start an element name

**125. Which is not part of HTML5 API**

**Ans-**

HTML Geolocation

HTML application cache

HTML Drag and Drop

**HTML Geography**

**126. In javascript, which of the following code is valid to get an html element by name?**

**Ans-**

**document.getElementsByName**

document.getElementByName

document.getElementsByName

document.getElementByNames



127. Which of the following options in UNIX can be used for printing the calendar for December 2019?

Ans-

\$ cal 12 2019

\$ cal dec 2019

\$ cal December 2019

\$ calendar 2019

128. Kernel of UNIX operating system is written using \_\_\_\_\_

Ans-

C

C++

VC++

JAVA

129. Predict the output

```
class Clamper
{
    private final void amp()
    {
        System.out.println("Clamper");
    }
}
public class Clipper extends Clamper
{
    public final void amp()
    {
        System.out.println("Clipper");
    }
    public static void main(String[] args)
    {
        new Clipper().amp();
    }
}
```

Ans – Compile time error

130. Which option can be used to perform a forward search of string in the vi editor

Ans-

/string

/find

?find

?string

**131. Unix executables are stored in which path?**

**Ans-**

/dev

**/bin**

/usr

/tmp

**132. Which command can be used for navigating 5 pages forward in vi editor**

**Ans-**

**5 ctrl + f**

5 ctrl +b

5 ctrl + a 20 times

5 ctrl +c 20 times

**133. Carefully read the question and answer accordingly. In an array, if an item to be searched is found in the middle of an array then it is said to be \_\_\_\_\_**

**Ans-**

Best case

Worst case

**Average case**

Null case

**134. Constraints ensures \_\_\_\_\_ and \_\_\_\_\_ of the data in the database**

**Ans-**

Correctness

**Reliability**

Reuse

**Redundancy**

135. Predict the output

```
class TestException extends Exception
{
}
class Name
{
    public String sayName(String name) throws
        TestException
    {
        if(name==null)
        {
            throw new TestException();
        }
        return "Hello "+name;
    }
}
public class Main
{
    public static void main(String args[]) throws
        Exception
    {
        Name nameobj=new Name();
        System.out.println(nameobj.sayName("John"));
    }
}
```

Ans- Hello John

136. Select the abilities given by Polymorphism to the programming language

Ans-

Static polymorphism is achieved by varying the input parameters

Parent class methods can be overridden by the child class

Static class is given as-a part of relationship

Gives a stronger form of aggregation and composition

137. Sam and Rose are working on the Lone Monitoring project. The head version was checked out by both Sam and Rose, both of them made their changes in the local machine. Both of them made the required changes and updated the same to the server. From the given options identify the correct option

Ans-

Both their changes get committed to the server

First person change gets committed while for the second one the server notices life differences

Both the project gets rolled back

Second project gets overwritten by the first one

138. The following code snippets belong to \_\_\_\_\_

```
int Search(int arr[],int s,int toFind)
{
    int index,retVal=-1;
    for(index=0;index=s;index++)
    {
        if(toFind==arr[index])
        {
            retVal=index;
            break;
        }
    }
    return retVal;
}
```

Ans-

Linear search

Binary search

Merge search

Quick search

139. With respect to the Java code given below identify the number of references and number of objects

```
public class ApplicationTester{

    public static void main(String []args){
        String str1=new String("Java");
        String str2=new String("GFT");
        String str3=str1;
        str1=str1.concat(str2);
        str3=str2.toUpperCase();
    }
}
```

Ans-

4 objects and 3 references

3 objects and 4 references

**2 objects and 3 references**

3 objects and 3 references

140. What is the output expected for the below code?

```
public class ConstructorTest
{
    private ConstructorTest(int w)
    {
        System.out.println(w);
    }
    public static ConstructorTest(){ //line-6
        System.out.println(10);
    }
    public static void main(String[] args)
    {
        ConstructorTest obj=new ConstructorTest(50);
    }
}
```

Ans- Won't compile because of Line=6, constructor can't be static

141. What will be the output of the following Java code?

```
public class ApplicationTest
{
    public static void main(String[] args)
    {
        char ch='4';
        switch(ch)
        {
            case '2':System.out.println("Hello");
            break;
            default: System.out.println("Hello");
            case '1':System.out.println("Hello");
            case '3':System.out.println("Hello");
            break;
        }
    }
}
```

Ans- "Hello" will be displayed 3 times

142. Consider the following Java code

```
public class Employee
{
    int empNo;
    public void setEmpNo(int num)
    {
        this.empNo=num;
    }
    public int getEmpNo()
    {
        return this.empNo;
    }
}
```

With respect to Employee class identify where empNo and num are stored in the memory?

Ans-

empNo and num both are stored in heap

empNo and num both are stored in stack

**empNo is stored in heap and num is stored in stack**

empNo is stored in stack and num is stored in heap

143. What will be the output of the following code?

```
public class Test
{
    public static void main(String[] args)
    {
        int x=7;
        switch(x)
        {
            case 2:
                System.out.println("2");
                break;
            default: //line-1
                System.out.println("default");
                break;
            case 3:
                System.out.println("3");
                break;
        }
    }
}
```

Ans- default

144. Consider the following Java code

```
public class Employee
{
    private int empId;
    String empName;
}
```

If you want to access empName of Employee class in all the sub classes of Employee class in the same package as well as sub classes is in some other package; which access specifier will you use?

Ans-

Public

Private

**Protected**

Default

145. Which of the following are inline HTML elements

<i>, <h6>, <a>

Ans- <i> and <a>

146. Consider the javascript code given below. What would be the print values from line 1 and line 2 on execution?

```
<html>
<body>
  <p id="id1"></p> <!-- line 1-->
  <p id="id2"></p> <!-- line 2-->
  <script>
    var y=10;
    myFunction();
    document.getElementById("id1").innerHTML=y;
    document.getElementById("id2").innerHTML=window.y;
    function myFunction()
    {
      y=20;
      y=y+window.y;
    }
  </script>
</body>
</html>
```

Ans- 40 40

147. What is the output of the program?

```
public class Compute
{
    public static void main(String[] args)
    {
        int arr1[]={1,2,3,4,5};
        int arr2[]=arr1;
        int sum=0;
        for(int j=0;j<3;++j)
            sum+=(arr1[j]+arr2[j+1]);
        System.out.println(sum);
    }
}
```

Ans- 15 (20)

148. Consider table Event(EventId, dateOfEvent) has following records

Event id	DateOfEvent
----------	-------------

_____	_____
-------	-------

**E1                      12-JAN-2018**

**E2**

**E3                      13-JUN-2018**

**Identify the appropriate SQL statement to retrieve the eventid for which there is no date available**

**Ans-**

**Select eventide from event where dateOfEvent IS NULL;**

Select eventide from event where dateOfEvent = NULL;

Select eventide from event where dateOfEvent LIKE "NULL";

Select eventide from event where dateOfEvent IS "NULL";

**149. Consider table Department(deptId, deptname) Which of the following query is used to display the department details whose dept\_name has second letter as 'a' and second last letter as 'e'?**

**Ans-**

**Select \* from department where deptname LIKE '\_a%e\_';**

Select \* from department where deptname LIKE 'a%e\_';

Select \* from department where deptname LIKE '%a%e\_';

Select \* from department where deptname LIKE 'a%e%';

**150. Consider table Product(prodId, price) Identify the appropriate SQL statement to display all the product details whose price range is 2500 and 5000 (exclusive 2500 and 5000) choose two most appropriate option**

**Ans-**

Select \* from product where price BETWEEN 2500 and 5000;

**Select \* from product where price>2500 and price<5000;**

Select \* from product where price>=2500 and price<=5000;

**Select \* from product where price BETWEEN 2501 and 4999;**

**151. What will be the output of the following Java code?**



```

public class ApplicationTester
{
    public static void main(String[] args)
    {
        for(int i=1;i<=3;i++)
        {
            if(i==2)
            {
                continue;
            }
            for(int j=1;j<=3;j++)
            {
                if(j==2)
                {
                    continue;
                }
                System.out.println("GFT");
            }
        }
    }
}

```

Ans- GFT will be displayed 4 times

152. Consider the table Item( ItemCode, ItemName, Price, Category). Which is the correct sql query to display minimum price for categories 'A','C'? Choose most appropriate option

Ans- review

Select Category, MIN(Price) from Item where Category IN ('A','C');

Select Category, MIN(Price) from Item group by category where Category IN ('A','C');

Select MIN(Price) from Item group by Price having Category IN ('A','C');

Select Category, MIN(Price) from Item where Category IN ('A','C') Group by Category;

153. What would be the output of the SQL statement given below?

SELECT TRANSLATE('aAB-Cb-abc', 'abc-', '123\*') from DUAL;

Ans- 1AB\*C2\*123

154. Consider table Account(acclId, acctype, balance). Identify the appropriate SQL statement to display account details in the ascending order of balance and in the descending order of acclId if the balance is same. Choose most appropriate one

Ans-

Select \* from account order by balance, acclId DESC;

Select \* from account order by balance ASC,acclId;

Select \* from account order by acclId DESC, balance ASC;

Select \* from Account Order by acclId DESC,balance;

**155. Consider table Students (sid NUMBER (3), sname VARCHAR2 (10), scontact NUMBER (10)) is already created in the database. It is required to change the data type of the column "scontact" to VARCHAR2 (15). Which of the following is Correct for the above requirement?**

**Note: sid column is primary key**

**Choose most appropriate option**

**Ans-**

**To change the data type of a column, it is important to ensure that the corresponding column is not having data for any of the record**

There are no criteria to be followed. We can change the datatype of the column irrespective of the data.

Data type can be changed only for primary key column

It is not possible to change the data type of a column

**156. Identify the correct statements with respect to constraints**

**(i) A table can have only one FOREIGN KEY**

**(ii) A column with UNIQUE constraint cannot have NULL value**

**Ans-**

Only (i)

Only (ii)

Both (i) and (ii)

**Neither (i) and (ii)**

**157. What will be displayed in alert box while executing the below code**

```
<html>
  <head>
    <script>
      var data1=100;
      var data2="100";
      if(data1==data2)
      { //Line-x
        alert(data1+data2);
      }
      else
      {
        alert('not equal');
      }
    </script>
  </head>
  <body>
</body>
</html>
```

**Ans- 100100**

158. Refer the HTML code given below. How many cells will be displayed when the page is displayed on the browser?

```
<html>
<body>
  <table border="1">
    <tr><th>A</th>
      <th colspan="2">B</th>
    </tr>
    <tr><th rowspan="3">C</th>
      <th>D</th>
      <th>E</th>
    </tr>
    <tr>
      <th>A</th>
      <th rowspan="2">B</th>
    </tr>
    <tr>
      <th>D</th>
    </tr>
  </table>
</body>
</html>
```

Ans- 8

A	B	
C	D	E
	A	B
	D	

159. Assume below code present in the HEAD tag of a HTML page.

```
<style> #myclass{background-color: lightgrey; color:blue;}</style>
```

Identify the appropriate HTML code to USE the style given Above

Ans-

```
<h1 id="myclass"> Welcome to My Homepage</h1>
```

```
<h1 style="myclass"> Welcome to My Homepage</h1>
```

```
<h1 class="myclass"> Welcome to My Homepage</h1>
```

```
<h1 id=".myclass"> Welcome to My Homepage</h1>
```

160. What would be the color of the text "Bengaluru" and "India" while executing the below html and css code? Assume that "Black" is the default color if there is no style applied

```

<html>
  <head>
    <style>
      p{color:red;} .c1{color:green;}
    </style>
  </head>
  <body>
    <p>Bengaluru</p>
    <p class="c1">India</p>
  </body>
</html>

```

Ans-Bengaluru – Red, India- Green

161. What would be the output of the java script code given below?

```

<html>
  <head>
    <script>
      function print()
      {
        var value1=1;
        var value2="2";
        var value3=2;
        if(value2===value3)
        {
          alert(value1+value3);
        }
        else
        {
          alert(value1+value2);
        }
      }
      print();
    </script>
  </head>
</html>

```

Ans- 12

162. Consider the java code given below. How many times will the Grandfather class constructor be called?

```

class Grandfather
{
    public Grandfather()
    {
        System.out.println("Grandfather");
    }
}
class Father extends Grandfather
{
    public Father()
    {
        System.out.println("Father");
    }
}
class Child extends Father
{
    public Child()
    {
        System.out.println("Child");
    }
}
public class MainClass
{
    public static void main(String[] args)
    {
        new Child();
        new Father();
    }
}

```

**Ans- (2 times)**

Grandfather  
 Father  
 Child  
 Grandfather  
 Father

**163. Which of the following is TRUE about the final keyword?**

1. Final variables cannot be modified once initialized
2. Final methods can be overridden
3. Final classes cannot be inherited

**Ans-**

- Only 1  
 Both 1 and 2  
 Only 2  
 Both 1 and 3

**164. Which of the following statements is/are FALSE?**

- a. JVM is platform dependent
- b. Byte code is platform dependent

Ans-

Only a is false

Both a and b are false

Only b is false

Both a and b are true

165. What will be the output of the following Java code?

```
public class Test
{
    static int x=0;
    public static void main(String[] args)
    {
        for(int x=0;x<5;x++)
        {
        }
        System.out.println(x); //line 8
    }
}
```

Ans- 0

166. What will be printed in alert box in line 1

```
<!DOCTYPE html>
<html>
    <body>
        <script>
            var x=(3+3)+4+'6';
            alert(x); //line-1
        </script>
    </body>
</html>
```

Ans- 106

167. What would be the output of the javascript code given below

```

<!DOCTYPE html>
<html>
  <head>
    <script>
      var data=10;
      document.write(typeof(data));
    </script>
  </head>
</html>

```

Ans- number

168. Which of the following are Correct statement

- a. onClick() and onFocus() are DOM events
- b. In javascript a browser is represented by an implicit object called Document
- c. Java script is used server-side validation

Ans-

A and c

Only a

B and c

A and b

169. What would be the output of the java script code given below

```

<html>
  <head>
    <script>
      var data1=100;
      function test()
      {
        var data1=200;
        window.data1=data1+10;
      }
      test();
      document.write(data1);
    </script>
  </head>
  <body></body>
</html>

```

Ans- 210

170. What will be the output of the following code?

```

public class Test5
{
    int i;
    Test5()
    {
        System.out.println("hi ");
    }
    Test5(int xyz)
    {
        i=xyz;
        System.out.println(i);
    }
    public static void main(String[] args)
    {
        Test5 e1=new Test5();
        Test5 e2=new Test5(10);
    }
}

```

Ans- hi 10

171. Which code should be inserted at line #4 to get the below output – 2 4 6 8 10

```

public class ArrayTester
{
    public static void main(String[] args)
    {
        int[] evenNumbers={2,4,6,8,10};
        //Code to be inserted
        System.out.print(evenNumbers[i]+" ");
    }
}

```

Ans-

for(int i=0; i<=evenNumbers.length;i++)

for(int i=0; i<evenNumbers.length-1;i++)

for(int i=0; i<evenNumbers.length;i++)

for(int i=0; i<evenNumbers.length-2;i++)

172. Consider table Book (bookId, bookName, copies) has following records

bookId	bookName	copies
--------	----------	--------

B1	JAVA	0
B2		4
B3	ORACLE	2

Identify the output of the given sql statement

SELECT COUNT (bookName) FROM Book WHERE copies>0;



Ans- 1

173. Consider table Employee (empId, empname, jobband). Choose the correct sql statement to retrieve all employee ids along with their job band. If job band is not assigned to an employee, then it should display 'NA' as job band (note: Data type of column jobBand is VARCHAR2)

Ans-

SELECT empId, NVL(jobband),'NA' FROM Employee;

SELECT empId, NVL(jobband,NULL,'NA') FROM Employee;

SELECT empId, NVL(NULL,'NA',jobband) FROM Employee;

**SELECT empId, NVL(jobband,'NA') FROM Employee;**

174. Refer the following Java code

```
public class ApplicationTester
{
    public static void main(String[] args)
    {
        int i=1;
        while(i<=5)
        {
            if(i==2)
            {
                i++;
                continue;
            }
            if(i==3)
            {
                break;
            }
            i++;
            System.out.println("Hello ");
        }
    }
}
```

When the above code is executed how many time/times "Hello" will be printed on the console?

Ans- 1 time

175. Consider table Students(studentId,branchId). Identify the correct sql statement to retrieve the branches which has more than 3 students.

Ans-

SELECT branched FROM Students WHERE COUNT(\*)>3 GROUP BY branched;

SELECT branched FROM Students HAVING COUNT(\*)>3;

SELECT branched FROM Students GROUP BY studentid HAVING COUNT(\*)>3;

**SELECT branchid FROM Students GROUP BY branchid HAVING COUNT(\*)>3;**

176. With respect to the java code given below identify the relationship that exists between class account and SavingsAccount

```
public class Account
{
    private double balance;
    private int accountNumber;
}
public SavingsAccount extends Account
{
    //some valid java code
}
```

Ans-

Aggregation

Composition

There is no relationship between class Account and class SavingsAccount

**Inheritance**

177. Which of the following statement/s is/are TRUE?

1. Abstract method can have body

2. Abstract class cannot be instantiated

3. Abstract class can have constructor

Ans-

Both 1 and 2 are true

**Both 2 and 3 are true**

Both 1 and 3 are true

Only 2 is true

178. Given the following declaration which expression returns the size of the array, assuming the array has been initialized?

Int[] array;

Ans-

Array[].length();

Array.length();

**Array.length;**

Array[].size());

179. What will be the output of the following java code?

```
public class ApplicationTester
{
    public static void main(String[] args)
    {
        char ch='n';
        if(ch>='a' && ch<='z')
        {
            System.out.println("Lower case letter");
        }
        else
        {
            System.out.println("Upper case letter");
        }
    }
}
```

Ans- Lower Case Letter

180. Identify how many variables/object will be in stack and heap residency?

```
public class ApplicationTester
{
    public static void main(String[] args)
    {
        int id=12345;
        String name=new String("Rama");
        double salary=55555.55;
    }
}
```

Ans-

3 in stack 1 in heap

2 in stack 2 in heap

4 in stack 0 in heap

0 in stack 4 in heap

181. Refer to the below code and predict the output

```
public class ApplicationTester
{
    public static void main(String[] args)
    {
        String x=new String("xyz");
        String y="abc";
        x=x+y;
    }
}
```

How many String objects are created in the above code?

Ans-

2

3

1

4

182. Consider the Employee class given below

```
public class Employee
{
    private int empno;
    private double salary;
    public void computeSalary()
    {
        //    code for compute salary
    }
}
```

If you do not want all the subclasses of Employee class to override the computeSalary() method, what modification will you do for computeSalary() method?

Ans-

Make computeSalary() method as abstract

**Make computeSalary() method as final**

Make computeSalary() method as static

183. Choose most appropriate option

```
//line 1 to line 32 code no image
import pack1.A;
public class B extends A
{
    public B()
    {
        //line 1
    }
    void display()
    {
    }
}
package pack2;
import pack1.A;
public class MyMain
{
    public static void main(String[] args)
    {
        A obj1=new B();
        obj1.setI(30);
        obj1.setJ(40);
        A obj2=obj1;
        obj2.setI(50);
        obj1.disp();
        obj2.disp();
    }
}
```

Ans- 50 40 50 40

184. Identify the relationship that exists between class Student and class Faculty.

```
public class Student
{
    private String name;
    private int rollNumber;
    //getter setter methods
}
public class Faculty
{
    private String name;
    private Student student;
    public void setStudent(Student student)
    {
        this.student=student;
    }
}
```

Ans-

Composition

Inheritance

No relationship

**Aggregation**

**185. Which is the correct CSS code to display the text “Accenture” in light grey background?  
Choose most appropriate option**

**Ans-**

`<h2 style = “background-color : lightgrey”> Accenture </h2>`

`<h2 background-color : lightgrey> Accenture </h2>`

`<h2 style = “background-color(lightgrey)”> Accenture </h2>`

`<h2 style = “background-color = lightgrey”> Accenture </h2>`

**186. Which of the following are the CSS selectors?**

**a. Element selector**

**b. form selector**

**c. class selector**

**Ans-**

A and b

**A and c**

B and c

A, b and c

**187. Consider the java code given below and determine how many references are used in the java code. Assume the student is a valid java class**

```
public class StudentTester
{
    public static void main(String[] args)
    {
        Student s1=new Student();
        Student s2=new Student();
        Student s3=s1;
        Student s4=s1;
    }
}
```

**Ans-**

**2 objects and 4 references**

4 objects and 2 references

2 objects and 2 references

3 objects and 4 references

188. Predict the output of the following code

```
package com.accenture.demo;
public class WhileLoopSample
{
    public static void main(String[] args)
    {
        int number1=100;
        while(number1>200); //Line-5
        {
            System.out.println("welcome");
        }
        System.out.println("Hello");
    }
}
```

Ans- Welcome hello

189. Predict the output

```
public abstract class Employee
{
    public abstract Employee()
    {
        System.out.print(" 1 ");
    }
}
public class ProjectManager extends Employee
{
    public ProjectManager()
    {
        System.out.print(" 2 ");
    }
}
public class ApplicationTester
{
    public static void main(String[] args)
    {
        Employee emp=new ProjectManager();
    }
}
```

Ans-

Compilation error: illegal modifier for the constructor in type Employee

190. What would be the output of the below java script code?

```
<html>
  <body>
    <script>
      var x=5;
      var d=(x !="5");
      document.write(d+"--");
      d=(x=="5");
      document.write(d);
    </script>
  </body>
</html>
```

Ans- false—false

191. You have three packages p1,p2,p3 what is the expected output of compiling and running file tester in p3 package?

```
package p1;
public class Account
{
    protected Account(){ //line 3
        System.out.println("Account");
    }
}
package p2;
import p1.Account;
public class CurrentAccount extends Account
{
    public CurrentAccount()
    {
        System.out.println("CurrentAccount");
    }
}
package p3;
import p1.Account;
import p2.CurrentAccount; //line3
public class Tester
{
    public static void main(String[] args)
    {
        Account c=new Account(); //line 6
        CurrentAccount ca=new CurrentAccount();
    }
}
```

Ans-

Account CurrentAccount

**Compilation error at line6 in package p3 Constructor 'Account' is not visible**

Compilation error at line3 in package p3 cannot import CurrentAccount class



192. What will be the output of the following java code

```
public abstract class Employee
{
    protected double salary;
    public Employee(double salary)
    {
        this.salary=salary;
    }
    public abstract void computeSalary();
    public double getSalary()
    {
        return this.salary;
    }
}
public class ProjectManager extends Employee
{
    private int teamSize;
    public ProjectManager(double salary,int teamSize)
    {
        //Line-1
        this.salry=salary;
        this.teamSize=teamSize;
    }
    public void computeSalary()
    {
        System.out.println(this.salary);
    }
}
public class ApplicationTester
{
    public static void main(String[] args)
    {
        Employee emp=new ProjectManager(10000,0,5);
        emp.computeSalary();
    }
}
```

Ans-

10000

0

Null

Compilation error at Line-1 : Implicit super constructor: Employee() is undefined Must explicitly invoke another constructor

193. Refer to the below code and predict the output

```

interface A
{
    public void method1();
}
class Demo implements A
{
    public void method1()
    {
        System.out.println("1");
    }
}
class ParentTest extends Demo
{
    public void method1()
    {
        System.out.println("2");
    }
}
public class Test extends ParentTest
{
    public static void main(String[] args)
    {
        A a=new ParentTest();
        a.method1();
    }
}

```

Ans- 2

**194. Consider table Item(itemId, category, unitprice). Identify the appropriate SQL statement to display the category and count of items in each category in the ascending order of item count. It should display the item details only if the count of item is greater than 1**

Ans-

SELECT category, count(itemId) FROM item WHERE Count(itemId)>1 GROUP BY category ORDER BY COUNT (itemId);

**SELECT category, count(itemId) FROM item GROUP BY category HAVING Count(itemId)>1 ORDER BY COUNT(itemId);**

SELECT category,count(itemId) FROM item HAVING Count(itemId)>1 ORDER BY COUNT(itemId);

**195. Consider table Item(itemId, category, unitprice). Identify the appropriate SQL statement to display Item id, and discount in the ascending order of discount**

Ans-

Select itemid, discount=unitprice\*0.1 from Item order by discount;

**Select itemid, unitprice\*0.1 as discount from Item order by discount;**

Select itemid, discount from item order by discount;

Select itemId, unitprice\*0.1 as discount from item order by itemId;

196. You are suppose to create a table "ExamResult" with the following descripton. studentId NUMBER(4), courseid VARCHAR(10), mark NUMBER(3). There should not be duplicate combination of studentId, and courseid in any record. Identify the correct DDL statement to create ExamResult table

Ans-

```
CREATE TABLE ExamResult( studentId NUMBER(4), courseid VARCHAR2(10), mark NUMBER(3),  
CONSTRAINT er_pk PRIMARY KEY(studentId, courseid));
```

197. Kevin is a java programmer. He writes a Java code and compiles his code. What type of file Kevin will get as a result of compiling his Java code?

Ans-

Java file

.exe file

**.class file**

Obj file

198. Ram is a Developer; he receives a defect list from the testing team for the code which he developed. He fixes the defects and assigns it back to the test manager/tester. What should be the status of the defect now?

Ans-

Open

**Fixed**

Closed

New

199. Software Configuration Management, \_\_\_\_\_ concept is used to control the changes

Ans-

**Baseline**

Process

Procedure

Audit

200. Consider the given array:

**E A F B D C**

**E A F B D C**

**A E F B D C**

**A E B F D C**

**A E B D F C**

**A E B D C F.... so on**

**After all consecutive iterations, the array is sorted**

**Which sorting technique compares the adjacent data elements and swaps each pair of elements?**

**Ans-**

Quick sort

**Bubble sort**

Merge sort

Heap sort

**201. Difficult Unit test performed on the post office savings schemes module. Assume that the minimum deposit amount is Rs. 1000 and the maximum deposit amount is Rs. 10000. Based on the Boundary Value Analysis choose the correct test cases to perform this unit test.**

**Ans-**

**999,1000,10000,10001**

800,6000,15000

999,1001,5000,9999,10001

1000,5000,10000

**202. John is a poker card player in a casino. The way he arranges his cards as he picks them up one by one is a real time example of which sorting technique?**

**Ans-**

Bubble sort

Merge sort

**Insertion sort**

Selection sort

**203. In many situations, it would be necessary to make a decision before arriving at a conclusion or to go on to the next step of processing. Which of the following suits the given description?**

**Ans-**

**Conditional statement**

All of the options

Iterative statement

Sequential statement

**204. which of the following program has the lowest run-time complexity?**

**Ans-**

Tower of Hanoi

Sum of n Digits

**Find even or odd**

Fibonacci series

**205. Manual execution of steps in an algorithm is called as \_\_\_\_\_.**

**Ans-**

**Dry run**

Flowchart

Quick run

Pseudocode

**206. In case of Banking application, customers are the only stakeholders State true or false**

**Ans-0**

**207. Dave has to store data in a nonlinear data type to represent hierarchical relationship between elements. Which data structure should he use for it?**

**Ans-**

Linked List

Stack

Queue

**Tree**

**208. The names in a telephone directory were not in order. It took a long time to look for the telephone number of a particular person. Which algorithm would be the best to resolve this issue.**

**Ans-**

Binary Search

Linear Search

Deletion Algorithm

**Sorting Algorithm**

**209. Roshan is a beginner in the learning path of Data Structure. Assume a singly linked list of length  $n$  is given. In a worst-case scenario, he wants to find out the maximum number of computations required to search for a given element. Help Roshan to find out the best option**

**Ans-**

$\log_2 n$

**N**

$\log_2 n+1$

$\log_2 n-1$

**210. A Professor class uses the Scheduler class to display the scheduled classes of the professor for a week. What will be the relationship between the Professor and the Schedule class?**

**Ans-**

Inheritance

Aggregation

Composition

**Dependency**

**211. A system administrator needs to identify different types of files in the UNIX system. Help by matching the correct symbols used to identify the file type**

**1. - 2. l 3. b 4. c**

**With**

**a. Regular file b. Link file c. Block device file d. Character device file**

**Ans-**

**1-A, 2-B, 3-C, 4-D**

**1-D, 2-A, 3-B, 4-C**

1-D, 2-B, 3-C, 4-A

1-D, 2-C, 3-B, 4-A

**212. Choose the executable query to display contact\_details by concatenating mail\_id and the phone number of employees (multiple answers possible)**

**Example: table name- employee**

Mail-id	phone_number
---------	--------------

123@gmail.com	9755367343
---------------	------------

**Sample output: 123@gmail.com,9755367343**

**Ans-**

SELECT concat(mail\_id, phone\_number) as contact\_details FROM employee;

SELECT mail\_id, (';'), phone\_number as contact\_details FROM employee;

**SELECT concat(concat(mail\_id,';'),phone\_number) as contact\_details FROM employee;**

SELECT || mail\_id || ';' || phone\_number as contact\_details FROM employee;

**213. Zara marketing company wants to keep track of the attendance of its employees in all of their branches so that the salary calculation can be done from the Central office located at Bangalore. The head office has delegated the work to the branch offices so that they can keep track of the attendance in any manner, be it manual or biometric or swipe cards etc.**

**For the above scenario, identify the correct statements from the given options.**

**Ans-**

**Head office is an abstract class**

Branch office is an abstract class

Head office is a concrete class

**Branch office is a concrete class**

Both head office and branch office are abstract classes

**214. Which of the following statements are true in regard to the object-oriented programming technique?**

- 1. object is a blueprint or template for a class**
- 2. class is a blueprint or template for an object**
- 3. object is an instance of a class**
- 4. class is an instance of an object**

**Ans-**

1 2 only

1 4 only

**2 3 only**

3 4 only

**215. Assume a class Student with the attributes id, name, grade and collegeName. The value for collegeName is “Trindy” which is same for all the objects of the Student class. What type of variable is collegeName?**

**Ans-**

**Static variable**

Instance variable possessed by each object

Local variable for the class

Public variable

**216. Predict the output**

```
import java.util.ArrayList;
import java.util.List;
public class TestUserMain
{
    public static void main(String[] args)
    {
        List<Number> l1=new ArrayList<Number>();
        l1.add(5);
        l1.add(5);
        System.out.println(sum(l1));
    }
    public static double sum(List<Number>l)
    {
        double sum=0;
        for(Number i:l)
            sum+=i.doubleValue();
        return sum;
    }
}
```

**Ans- 10**

**217. What does an action flow represents in an Activity Diagram?**

**Ans-**



**Transition from one action state to another**

Passing of data from activity to another

Trigger events

Flow of priority flows

**218. Which of these is used to prevent the error 'ORA-00937' not a single group group function?**

**Ans-**

**Use group by clause**

Use where clause

Use order by clause

Use having clause

**219. Which key can be used to change the mode from input mode to command mode?**

**Ans-**

**Esc**

Esc + i

Esc + a

Esc + l

**220. Match the following**

**1. Tables 2. Index 3. Views 4. Synonyms 5. Sequences**

**a. store all the data in database**

**b. indicate where data is stored in another table**

**c. modify the user's view of data to only certain rows and columns in a table**

**d. definable label for a table**

**e. generate unique integers that can be assigned primary keys of tables**

**Ans-**

**1-A, 2-B, 3-C, 4-D, 5-E**

1-E, 2-A, 3-B, 4-C, 5-D

1-D, 2-E, 3-C, 4-A, 5-B

1-D, 2-C, 3-E, 4-A, 5-B

**221. Choose an DDL command which delete all rows from the table and where the deleted data cannot be rolled back (hint: Table structure should not get deleted)?**

**Ans-**

DROP

**TRUNCATE**

DELETE

None of the above

**222. Match the following data command with the correct output**

**Consider today's date is 22<sup>nd</sup> April 2020**

**1. date +%b    2. data +%D    3. date +%F    4. date +%H**

**With**

**a. Apr    b. 04/22/20    c. 20-04-22    d.05**

**Ans-**

**1-A, 2-B, 3-C, 4-D**

1-D, 2-A, 3-B, 4-C

1-D, 2-B, 3-C, 4-A

1-D, 2-C, 3-B, 4-A

**223. predict the output for the given pseudocode snippet**

**SET count = 1**

**WHILE count less than or equal to 5**

**Print "Hello world"**

**Count = count+1**

**END WHILE**

**Ans-**

**Prints "Hello world" 5 times**

Prints "Hello world" 6 times

Loop goes on infinitely

Prints "Hello world" 4 times

224. Predict the output

```
import java.util.ArrayList;
import java.util.List;
public class TestUserMain
{
    public static void main(String[] args)
    {
        List<Double> l1=new ArrayList<Double>();
        for(Double d: l1)
        {
            System.out.print(d);
            l1.add(54.98);
        }
        l1.add(29.32);
        l1.add(45.71);
        l1.add(34d);
        System.out.println(l1.size());
    }
}
```

Ans- 3

225. Match the metacharacters with the respective types

1. ?"[]!| 2. >>><<< 3. ,() && || 4. \$1 to \$9

a. Positional parameters b. Filename substitution c. I/O Redirection d. Process Execution

Ans-

1-A, 2-B, 3-C, 4-D

1-D, 2-A, 3-B, 4-C

1-D, 2-B, 3-C, 4-A

1-D, 2-C, 3-B, 4-A

226. the standard output of one program can be redirected as standard input to another program using \_\_\_\_\_

Ans-

|

||

>

<

227. Consider the query

Start program

**DELETE FROM departments WHERE department\_id=50;**

**ERROR 1: ORA-02292: integrity constraint (HR.EMP\_DEPT\_FK) violated – child record found**

**End program.**

**What does the error convey?**

**Ans-**

**You cannot delete a row, if the row's primary key column holds a input that is present as a foreign key in another table**

You cannot delete a row when it has column level constraints

You cannot delete a row when it has table level constraints

None of the options

**228. Which of the following**

- a. `int number();`
- b. `float average`
- c. `double[] marks;`
- d. `counter int[];`

**Ans-**

**229. Consider the following code snippet and predict the output**

```
public interface I
{
    int x; //Line - 1
    public void display();
}
public class C implements I //Line- 2
{
    public void display()
    {
        System.out.println("Hello");
    }
}
public class TestInterface
{
    public static void main(String[] args)
    {
        C obj=new C(); //Line-3
        obj.display();
    }
}
```

**Ans- Compilation error at Line-1 : The blank final field 'x' may not have been initialized**

**230. What will be the output of the following Java code**

```
//Trainee.java
public class Trainee
{
    private static int traineeCount;
    static{
        traineeCount=1000;
    }
    public Trainee()
    {
        traineeCount++;
    }
    public static void getTraineeCount()
    {
        System.out.println(traineeCount);
    }
}

//TraineeTester.java

public class TraineeTester
{
    public static void main(String[] args)
    {
        Trainee t1 = new Trainee();
        Trainee t2 = new Trainee();
        Trainee t3 = new Trainee();
    }
}
```

Ans- 1003

231. What is the output of the following Java code

```
class Employee
{
    private int employeeId;
    private float basicPay;
    public void setEmployeeId(int employeeId)
    {
        this.employeeId = employeeId;
    }
    public void setBasicPay(float basicPay)
    {
        this.basicPay=basicPay;
    }
}

public class EmployeeTester
{
    public static void main(String[] args)
    {
        Employee emp = new Employee();
        emp.setEmployeeId(1001);
        emp.setBasicPay(15000.0f);
        System.out.println("Employee ID: "+employeeId);
        System.out.println("Basic Pay: "+emp.basicPay);
    }
}
```

Ans- Compilation error

232. Predict the output

```

abstract class Test1
{
    public Test1()
    {
        System.out.println("ONE");
    }
    abstract void abstractMethod();
}
class Test2 extends Test1
{
    public Test2()
    {
        System.out.println("TWO");
    }
    void abstractMethod()
    {
        System.out.println("THREE");
    }
}
public class TestClass
{
    public static void main(String args[])
    {
        Test1 x = new Test2();
        x.abstractMethod();
    }
}

```

Ans- ONE TWO THREE

233. Consider the table Product (pid, pname, pcost) Identify the appropriate SQL statement to rename the table to ProductsInfo.

Ans-

ALTER TABLE Products RENAME TO ProductInfo;

234. Consider the table Account (accId, balance, accountType). The following constraints to be enforced

1. AccId should be unique and NOT NULL

2. Account type should be 'C' or 'S'. Balance should be greater than 1000 and 3000 for account type 'C' and 'S' respectively.

Identify the CORRECT SQL statement to create the Account table with the above mentioned constraints.

Ans-

CREATE TABLE account (accId NUMBER (2) CONSTRAINT acc\_pk PRIMARY KEY, balance NUMBER (4), accountType CHAR , CONSTRAINT acc\_chk CHECK (accountType='S' AND balance>3000) OR (accountType='C' AND balance>1000));

235. Which of the following is used to reference data that can act as an abbreviation or can be found at an external location?

Ans- ENTITY

236. Display the contents present inside <h1> tag in uppercase. Which of the following options will suit the requirement?

Ans- h1{text-transform: uppercase;}

237. \_\_\_\_\_ is an unparsed character data that can't be parsed by the parser.

Ans- CDATA

238. In a CSS script, each property of an element is separated by a \_\_\_\_\_

Ans – semicolon (;)

239. In CSS script, which of the following style is used to print a table with double border?

Ans- border-style: double;

240. An external Java script file can be included in an HTML code using the \_\_\_\_\_ attribute in a script tag

Ans – src

241. Predict the output

```
import java.util.ArrayList;
import java.util.List;
public class TestUserMain
{
    public static void main(String[] args)
    {
        List<Integer> l1 = new ArrayList<Integer>();
        l1.add(10);
        l1.add(20);
        l1.remove(10);
        l1.add(10);
        System.out.println(l1.size());
    }
}
```

Ans- Run time exception

242. Which of the following tag is not supported in HTML5 but used in HTML4?

Ans- <hr>

243. which OOP principle is the ranking or ordering of abstraction

Ans- hierarchy

244. The object which is used to fetch the input from an element for processing is \_\_\_\_\_

Ans- document

Form

navigate

245. Predict the output

```
import java.util.LinkedHashSet;
import java.util.Set;
public class TestUserMain
{
    public static void main(String[] args)
    {
        Set s1= new LinkedHashSet();
        s1.add("One");
        s1.add(1);
        s1.add(null);
        s1.add(3.4);
        s1.add("null");
        System.out.println(s1);
    }
}
```

Ans- [One, 1, null, 3.4, null]

246. in which of the following statements can sub queries used?

Ans –

SELECT statement and UPDATE statement

Alter statement

DELETE statement

All of the above

247. Match the appropriate options to move cursors in the vi editor



1. l 2. k 3. h 4. b

With

- a. move cursor down one line
- b. move cursor up one line
- c. move cursor left one line
- d. move cursor to beginning of next word

Ans-

1-A, 2-B, 3-C, 4-D

248. For a logically cohesive module, there are some activities to be experimented. These activities are preferred from inside the module itself

Is the above given statement true? If not, choose the correct option to make it true.

Ans-

the activities are selected from outside the module

the activities are selected in a random manner

the activities are selected in a sorted manner

the given statement is true

249. Which of the given pseudocodes finds the perimeter (circumference) of the circle radius

Ans-

BEGIN

NUMBER radius, circumference

INPUT radius

Circumference=2\*3.14\*radius

OUTPUT circumference

END

250. which of the given statements are true with respect to hierarchy principle of OOP

Ans-

Generalization represents "IS A" relationship between classes

251. Predict the output

```
import java.util.Map;
import java.util.TreeMap;
public class TestUserMain
{
    public static void main(String[] args)
    {
        Map<String,String> m1= new TreeMap<String,String>();
        m1.put("null",null);
        m1.put(null,"Raju");
        System.out.println(m1);
    }
}
```

Ans- Run time exception

252. Predict the output

```
import java.util.Arrays;
import java.util.Comparator;
class Test implements Comparator<Integer>
{
    public int compare(Integer o1,Integer o2)
    {
        return o1.compareTo(o2);
    }
}
public class TestUserMain
{
    public static void main(String[] args)
    {
        Integer intArr[]={3,8,1};
        Arrays.sort(intArr,new Test());
        for(int i:intArr)
            System.out.print(i+" ");
    }
}
```

Ans – 1 3 8

253. Predict the output

Which of the following statement has to be uncommented in order to compile the above code without any errors?

```

import java.util.*;
class Employee
{
}
class TempEmp extends Employee
{
}
class DayEmp extends TempEmp
{
}
public class TestMain
{
    ArrayList<TempEmp> getSalary()
    {
        //return new ArrayList<TempEmp>();
        //return new ArrayList<DayEmp>();
        //return new ArrayList<Object>();
        //return new ArrayList<Employee>();
    }
}

```

Ans-

Return new ArrayList<TempEmp>();

254. which of the following is a well formed XML document?

Ans-

Startprogram

```

<employee>
  <empname>ravi</employee>
  <address location="north">nehrunagar</laddress>
  <phone>23251545</phone>
</employee>

```

Endprogram

255. Which of the following java script code helps to change the content of the anchor tag?

Startprogram

```

<script>
function func(){
// insert the appropriate code from the given options

```

```

}
</script>
<a href="#" id="hid1" onclick="func()"> click here </a>

```

End program

Ans=

```
Document.getElementById("hid1").innerHTML="clicked"
```

256. which of the following jQuery script is valid to hide the first occurred paragraph with the class name as hideMe

Ans – review

```
$(“p.hideMe:hide(first)”);
```

257. consider the table Project (ProjectId, ProjectName, ProjectType) is created without any constraint and has the records as per attachment

ProjectId	ProjectName	ProjectType
P1	FIN	A1
P2	SALE	A2
P1	FIN	A1

Identify the ALTER statement which executes successfully on project table.

Ans-

```
ALTER TABLE Project ADD CONSTRAINT proj_pk PRIMARY KEY(ProjectId);
```

```
ALTER TABLE Project ADD CONSTRAINT proj_uk UNIQUE(ProjectName);
```

```
ALTER TABLE Project ADD CONSTRAINT proj_no NOT NULL(ProjectType);
```

```
ALTER TABLE Project ADD CONSTRAINT proj_chk CHECK(ProjectType IN(“A1”,“A2”));
```

258. Consider table Player(PlayerId, PlayerName, Rating) has records as shown below.

PlayerId	PlayerName	Rating
P1	Sachin	5
P2	ABD	4.3
P3	Virat	4.6
P4	Watson	4.3
P5	Butler	4.6

Identify the appropriate SQL statement to display the player details whose rating is equal to Virat's rating or Watson's rating (note: Result can have Virat's and Watson's record as well)

Ans-

SELECT \* FROM Player where Rating IN (SELECT Rating FROM Player WHERE PlayerName = "Virat" or PlayerName= "Watson");

259. What access specifier can be used for computeSalary() method in Employee class so that code in Line-1 will execute without any error?

```
package myPackage;
public class Employee
{
    private int empNo;
    private double salary;
    //getter and setter methods
    void computeSalary()
    {
        //logic to compute salary
    }
}

package myPackage;
public class PackageTester
{
    public static void main(String[] args)
    {
        Employee emp = new Employee();
        //valid Java code
        emp.computeSalary(); //Line-1
    }
}
```

Ans- Either public or protected or default

260. Consider the tables given below

Customer (customerId, customerName)

Book (bookId, bookName)

Purchase (purchaseId, bookId, customerId)

bookId and customerId in purchase table are foreign keys referring to Book and Customer book tables respectively. Which is the CORRECT SQL statement to retrieve name and book name for all books purchased by customers?

Ans-

SELECT c.customerName, b.bookName FROM customer c INNER JOIN purchase p ON c.customerId=p.customerId INNER JOIN book b ON b.bookId=p.bookId;

261. Which command can be used in vi editor to delete 10 lines?

Ans – 10 dd

**262. What operator is used to present the error “ORA-01427: single row sub query returns more than one row?”**

**Ans – Use the IN operator**

**263. a company wants to create a Leave Management System software for its employees. Find the classes for Employee Leave Management software. The company wants to maintain its employee’s leave information.**

**Ans- (some chose company also)**

**Employee**

**Leave**

**Company**

**Project**

**264. Choose an SQL query to find name of all the employees whose name contain the word “kumar” example kumaran, arun kumar (kumar will be at any place)**

**Ans-**

**SELECT \* FROM employees where lower(name) like “%kumar%”;**

**265. the element to specify a list of predefined options for input controls is**

**Ans- <datalist>**

**266. Given the following XML document**

**<studentname>**

**<first>raveena</first>**

**<last>dantan</last>**

**</studentname>**

**What is a correct schema structure for it?**

**Ans-**

**Startprogram**

**<xsd:schema xmlns:xsd="http://www.w3.org2001/XMLSchema">**

**<xsd:element name="studentname">**

**<xsd:complexType>**

```

<xsd:sequence>
<xsd:element ref="first"/>
<xsd:element ref="last"/>
</xsd:sequence>
</xsd:complexType>
</xsd:element>
</xsd:schema>

```

Endprogram

267. Predict the output

```

import java.util.ArrayList;
public class TestUserMain
{
    public static void main(String[] args)
    {
        ArrayList<String> a1=new ArrayList<String>(5);
        a1.add("Ten");
        a1.add("Twenty");
        a1.add(4,"Fifty");
        a1.add("Thirty");
        a1.add("Fourty");

        System.out.println(a1);
    }
}

```

Ans- IndexOutOfBoundsException

268. Predict the output

```

import java.util.Iterator;
import java.util.Set;
import java.util.TreeSet;
public class TestUserMain
{
    public static void main(String[] args)
    {
        Set s1=new TreeSet();
        s1.add(10);
        s1.add("20");
        s1.add(30);

        Iterator t1=new Iterator();
        while(t1.hasNext())
            System.out.println(t1.next()+" ");
    }
}

```

Ans – CTE

269. Consider the following java code

```
public class SoftwareEngineer
{
    private String name;
    private int empId;
    public SoftwareEngineer(String name,int EmpId)
    {
        this.empId=empId;
        this.name=name;
    }
}
```

Identify the CORRECT Java code which will help you to create an instance of Software Engineer

Ans- SoftwareEngineer engineer = new SoftwareEngineer("Dave",1007);

270. Given two executable queries

a.) select name, address from users where user\_id not in(select user\_id from bookingdetails where lower(name)='city union bank') order by name;

b.) select name, address from users where user\_id in (select user\_id from bookingdetails where lower(name) != "city union bank") order by name;

will both queries produce the same output?

Ans- True

271. State True or False

A sequence diagram can represent object interactions arranged in a time sequence. It will represent only a sequence of the flow but aspects like branching, looping cannot be represented in the sequence diagram

Ans- False

272. Mrs, Nancy has a Pan Card

What is the cardinality relationship between the entities: Person and Pan card

Ans- One to One

273. In the City Library when a member needs to return a book, the librarian will collect the penalty from the member if the book is returned later than the due date. When this is represented in a use case diagram, what is the relationship between the use cases "Return Book" and "Calculate Penalty"?



**Ans- extend**

Include

Exclude

Generalization

realization

**274. which of the following statements are true with respect to “a query with join operation”?**

**Ans-**

You must refer to all the columns from both tables with ....

**You must refer to the columns that are common to 2 tab...**

**You must have the column common to 2 tables in the....**

You can sort your result by a column which is not p.....

**275. which of these have higher precedence: the AND operator or the NOT operator?**

**Ans-**

AND

**NOT**

Both have equal precedence

None of the above

**276. Which of the following statements is true with respect to given Oracle query**

**Start program**

**Create table AQI\_DELHI\_1 as Select \* from AQI\_DELHI;**

**End program**

**Ans-**

**Table “AQI\_DELHI\_1” is created with same structure as that of “AQI\_DELHI” table – with AQI\_DELHI table’s data**

The query is erogenous

Table “AQI\_DELHI\_1” is created with same structure as that of “AQI\_DELHI” table – without AQI\_DELHI table’s data

**277. Which jQuery is syntactically wrong?**

**Ans-**

```
<script>$(document).ready(function(){$("#flow").click(function  
$("#box").slideDown("slow");});});</script>
```

**278. what is the syntax for representing the minimum of an element in XMLSchema?**

**Ans-**

```
<xsd:element ref="note" minOccurs="0" />
```

```
<xsd:element ref="note" mins="0" />
```

```
<xsd:elements ref="note" minOccurs="0" />
```

```
<xsd:elements ref="note" minOccurs="0" />
```

**279. what is a lifeline in a Sequence Diagram?**

**Ans-**

**Objects's life time**

Actor's life time

System's life time

Modelling life time

**280. what is the use of a DTD in XML development?**

**Ans-**

**It is required for validating XML documents**

For displaying a particular section of XML code

For avoiding name collisions

For giving more control over structure and content of XML document

**281. Consider the given problem statement**

**You have to input 100 numbers and find the sum of the 100 numbers and display the process of the sum.**

**Identify which of the given pseudo code snippets would achieve the desired result.**

**Ans- (pls understand I'm not gonna type all snippets :D) All of the option**

## 282. Predict the output

```
import java.util.Map;
import java.util.TreeMap;
public class TestUserMain
{
    public static void main(String args[])
    {
        Map<String,String> m1=new TreeMap<String,String>();
        m1.put(new String ("map"), "IDB1000");
        m1.put("Map","Idb1001");
        System.out.println(m1);
    }
}
```

Ans- (Map=IDB1001,map=IDB1000)