End Semester Examination.

Name: Aman Yadav
Roll no : 20207005
Enroll : GGV/20/05105
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Email-id : amanyadav592002@gmail.com
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Answer NO - 1

OOPS - Refer to object oriented programming. The main aim of OOP is to bind together the data and the function that operate on them so that no other part of the code can ~~gea~~ access this data except the function.

Object . Class - Object is a basic runtime entity in an object oriented system. they may represent person, a name anything that program may handle. Class is a collection of object of similar data type and behave like built in types of programming language.

Abstraction and Encapsulation - The wrapping up of a data and method into a single unit (a class) is known as encapsulation. this data is not accessible outside of the class only wrapped in class can access. Abstraction refers to act of representing essential feature without including the background details. Classes use the concept of abstraction and are defined as a list of abstract attributes.

Inheritance :- Inheritance is the process by which object of one class acquire the properties of another class. Inheritance ~~prov~~ provide the idea of reusability.

Polymorphism - Polymorphism means the ability to take more than one form. for example operation addition can add two numbers and also it can concat two strings.

Ans No - 5

```
<script>
  function even(n){
        return n%2==0;
  }
  function findSum(no){
     let sum =0;
    for (var i=1; i<=no; i++){
         if(even(i)){
           sum += i;
        }
      }
    return sum;
  }
```

we can check this by console.log(findSum(100));

Ans No - 09

```
import java.util.scanner;
class sort {
    public static void main(String[] args){
        int a[] = new int[5];
        Scanner sc = new Scanner(System.in);
        for(int i=0; i<=4; i++){
            System.out.println("enter no:");
               a[i] =sc.nextInt();
        }
        int temp;
        for(int i=0; i<5; i++){
            for(int j = 0; j<5-i-1; j++){
            if(a[j]>a[j+1]){
                temp = a[j];
                a[j] = a[j+1];
                a[j+1] = temp;
            }
          }
        }
        System.out.Println("Afterusing bubble sort:");
        for(int i =0; i<5; i++){
            System.out.println(+a[i]);
        }
    }
  }
```

Ans No - 4

Java vs Java Script :-

- Java is an OOP programming language while java script is an OOP scripting language
- Java create application that run in virtual machine or browser while java script code run on a browser only.

- Java code neede to be compiled while javaScript code are all in text the Java also need JDK.
- They both require different plugins.
- Java Script developed by Netscape, inc. is not the part of Java platform
- JavaScript doesnot create applet or stand alone application. JavaScript resides inside a HTML code can provide interactivity to the webpages.

Ans NO - 2

Important feature of java -

1. Compile and Interpreted- Java comes together to the both these approach thus making Java a two stage system. Java compiler transfer java code to byte code. Java interpreter generate machine code that can be executie by mach

2. Robust & Secure :- Java able to manage error automatic this process is called robust. It designed as garbage-collected language. which heps the programmer virtually from all memory management problems. the absence of pointer helps in security.

3. Multithreaded - multithread means managing multiple task simultaneously. Java maintains multithread programs that means we don't need to wait for only one particular task to be done for another task.

4. Simple and small:- Java doesnot use pointers, headerfiles goto statments etc. it also eliminate operator overloading and multiple inheritance. making it small.

5. Dynamic - Java is capable of linking newclass dynamically, also library method. Java can also establish class through the query building.

Ans NO - 3

Operator is operation between two or more operands depending upon the type of operator. There are various type of operator.

Types of operators :-

1) Arithmetic operator - arithmetic operators performed bet.

two operands and the operation between them +, −, *, /, % are the arithmetic operators.

2) Comparison operator - performed between two operands to compare there values. <, >, ==, =! are comparison operators.

3) logical operators. : logical operators are OR, and, NOT

4) assignment operators : helps us to assign the new value to the variable, property or event.

5) Ternery Operator: Ternary operator help us to determine the condition and gives us the value based on expression. ? is an ternary operator.

Ans No - 7

Types of operator in javascript :-

① Assignment operator :- help us to assign value to the dataType

example: let number = 3;

② Arithmetic operator : help us to perform arithmetic calculation bet. two operands.

example : let x=5; let y= 3;

```
console.log("x+y", x+y);     // addition
console.log("x-y", x-y);     // substraction
```

③ comparison operator : helps to compare the value. and return boolean value.

example: console.log(x>y); // it'll return true val.

④ logical Operators :- this also can perform logical operation return boolean value.

```
console.log((x<6)&&(y<5)); // true.
```

⑤ string operators :- this operators can perform operation between between strings.

```
let a = "aman";
let b = "yadav";
console.log(a+b);     // amanyadav
```

Ans NO-11

we have to write all this code in java code and make connection with jdbc. syntax ↓

```
import java.sql.*;
public class Con {
    public static void main(String[] args) {
            try{
                Class.forName("oracle.jdbc.driver.OracleD
        river");
                Connection con = DriverManager.getConnection
        ("jdbc:oracle:thin:@localhost:1521:xe", "system",
        "system");
                System.Out.println("connection established");
                con.close(); //close the connection.
    }
```

Ans NO-12

Statement :- use this for general purpose access to your database this is useful when you are using static sql statement

```
statement stmt = null;
 try{
      stmt = conn.createStatement();
      :
  }
catch(exception(e)) {
        systemout.println(e);
  }
```

Prepared Statement :- it extends the Statement interface. which gives you added functionally with couple of advantage over gen. statment

```
try{ string sql = "update employee set age = ? where id = ?";
     pstmt = conn.prepareStatement(Sql);
 }
```

Callable Statement ! just as connection object create the statement and prepared statement object . it also create the callable Statement object , which will be used to execute a call to database stored procedure.

Ans No -18

Java beans . is a java class that should follow the following convention. It should have a no-arg constructor , it should be serializable . It should provide method to set and get valu of the properties. known as getters and setters.

steps :- 1) Browser sends HTTP request to web server.

2) web server recognize this using url or jsp page which ends with .jsp.

3) The jsp engines loads the jsp pages from disk and and converts it into servlet content. this conversion is very simple in which all txt converted to println().

4) Jsp engine compile servlet into an executable class and forwards the original request to a servelet engine .

5) the web server forward the http response to you browser in terms of static Html content

6) finally , the web browser handles the dynamically generate html page inside http response exactly as if it were a static page.

Ans No -16

lets first create html file,

```
<html>
  <body>
    <form action ="main.jsp" method = "post">
         username:<input type="text" name="username">
         <br/>
         password:<input type = "password" name ="pass">
         <button class = "btn> ~~button~~ ~~Submit~~ login </button>
    </form>
  </body>
</html>
```

lets create main.jsp.

```
<html>
  <hedd >
       <title> get</title>
  </head>
  <body>
       <ul>
          <li><p> username: <% = request.getParameter(
                  "username")%>
              </p> </li>
          <li><p> password:<% = request.getParameter(
                  "pass")%>
              </p></li>
  </body>
</html>
```

based on input provide it will store the data.

Ans No-17

java program to get ip address

```
import java.net.InetAddress;
Class Ip Address {
     public static void main(String[] args) throws exception {
          System.out.println(InetAddress.getLocalhost());
          }
     }
```

this's will give ip address of the

Ans No - 15

```
<% page import= "java.sql.*" %>
<html>
<body>
<%!   connection con = null;
       Statement stml = null;
       Resultset rs = null;
       String url = "jdbc:mysql://localhost:3306/test"
       String user = "root";
```

```
    string pass = "system";
%>
<% try{
        class.forName("oracle,thin.driver.OracleDriver");
        ~~Conn~~ con = DriverManager.getConnection
        (url, user, pass);
        if(con!=null){
            out.println("successfully connected");
            stmt = con.createStatment();
            rs = stmt.executeQuery("select * from
         students");
        }
        while(rs.next()){
    %>
      <tr>
          <td><%=rs.getString(1)%></td>
          <td><%=rs.getString(2)%></td>
      </tr>
<%
      }
  }
  catch(exception e){
          out.println(e);
  }
  %>
 </table>
 </body>
 </html>
```