Faculty of Computing , Online Examinations 2022

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INDEX NUMBER (NSBM)	**24375**	**YEAR OF STUDY AND SEMESTER**	**Year 1 Semester 2**
MODULE NAME **(As per the paper)**	**Object Oriented Programming with Java**		
MODULE CODE	**SE 101.3**		
MODULE LECTURER	**Mr.M Shafraz**	**DATE SUBMITTED**	**12/08/2022**

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Declaration

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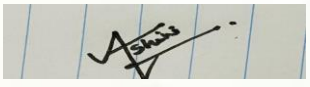

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01.

a.

```
package BankObj;

public class BankAccount{
private int Acc_no;
private String Acc_h_name;
privete String Branch;
private float Current_Balance;

public BankAccount( ){
Acc_no=0;Acc_h_name= “”;Branch= “”;Current_Balance=0;
}

Public BankAccount(int Acc_no,String Acc_h_name;String Branch,float Current_Balance)
{
this.Acc_no=Acc_no;
this.Acc_h_name=Acc_h_name;
this.Branch=Brance;
this.Current_Balance=Current_Balance;
}
public void(float amount)
{
Current_Balance=Current_Balance+amount;
System.out.println(“Your new balance :”+Current_Balance);
}

Public void withdraw(float amount)
{
if(Current_Balance>=amount)
{
Current_Balance=Current_Balance-amount;
System.out.println(“Your new Balance”+Current_Balance);
```

```
}
else
System.out.println(“Insufficient Credit”);
}

public void display()
{
System.out.println(“Acc_no”+Acc_no);
System.out.println(“Account holder name”+Acc_h_name);
System.out.println(“Brance”+Branch);
System.out.println(“Current Balance”+Current_Balance);
}
}
```

b.

```
package BankObj;

public class BankObj{
public static void main(String[] args){
BankAccount b1=new BankAccount(1234, “Perera”, “Branch”, “20000.00f”);
b1.display();
System.out.println(“\n”);
b1.deposite(5000.00f);
System.out.println(“\n”);
b1.display();
System.out.println(“\n”);
b1.withdraw(2000.00f);
}
}
```

02.

I.

```
public class SavingsAccount extends BankAccount{
public float rate_of_interest;

public SavingsAccount(float rate_of_inerest,int Acc_no,String Acc_h_name,String
Branch,float Current_Balance)
{
super(Acc_no, Acc_h_name,Branch,Current_Balance);
this.rate_of_interest=rate_of_interest;
}
public void setRate_of_intereset(float interest)
{
this.rate_of_interest=interest;
}
public float getRate_of_interest()
{
return
rate_of_interest;
}
}
```

II.

```
abstract class Loan{

public void displayInterest(){
System.out.println(“Interest of 8% is”);
}
}

Class HousingLoan extends Loan{
```

```
public static void main(String [] args){
HousingLoan obj=new HousingLoan();
obj.displayInterest();
}
}
```

III.

public	**private**	**protected**	**package**
Takes from the same class **Take class from the same package** **No any restrictions** **Accessible by classes in other packages**	**Takes from the same class** **Does not take class from the same packsge** **Only access within the class** **Not accessible by classes in other packages**	**Takes from the same class** **Take class from the same package** **Comes from inheritance** **Not accessible by classes in other packages**	**Takes from the same class** **Take class from the same package** **Default class** **Not accessible by classes in other packages**

IV.

Public

package P1

```
public class Example1{
public void show()
{
System.out.println(“Hello”)
}
}
```

```
package P2;
import P1.*;
class Example2
{
public static void main(String []args)
{
Example1 obj=new Example1();
obj.show();
}
}
```

Private

```
Class Example1
{
private void show()
{
System.out.println(“Hello”);
}
}

public class Example2
{
Public static void main(String[] args)
{
Example1=obj new Example();
obj.show();
}
}
```

V.

```
Interface SpecialLoan{
public void calcPremium();
```

```
}
Class Loan implements SpecialLoan
{
public void calcPremium();
}
public static void main(String[] args)
{
StaffLoan obj=new Loan();
obj.calcPremium();
}
}
```

03.

I.Method Overloading

```
package  methodoverload{

public static void main(String[] args){
Area a1=new Area();
A1.CalArea(20);
A1.CalArea(5,10);
}
}

package  methodoverload;
public class Area{
public void CalArea(int a)
{
System.out.printnl(“Area ia :”+(a*a);
}

public void CalArea(int a,int b)
{
System.out.println(“Area is”+(a*b));
```

```
}
}
```

Method Overriding

```
Package method override;
public class Methodoverride{

public static void main(String[] args){
Lecturer=L1=new Lecturer();
L1.display();
Lecturer L2=new Lecturer();
L2.display();
```

```
package methodoverride;
public class Lecturer{
public void display()
{
System.out.println(“Lecturer Name”);
}
}
```

```
package methodoverride;
public class Module{
public void display()
{
System.out.println(“Module Name”)
}
}
```

II.ArithmeticException

```
package exception;
```

```
public class Exception{
public static void main(String[] args){
int a=5,b=10,c;
try
{
c=a/b;
System.out.println(“Answer is”+c);
int arr[]=new int[10];
arr[10]=100;
System.out.println(“Last element contains”);
}
Catch(ArithmeticException e)
{
System.out.println(“Number devided by zero error”);
}
catch(ArrayIndexOfBoundException e)
{
System.out.println(“Array based error”);
}
finally
{
System.out.println(“Finally Block”);
}
}
}
```

4.

a.

(i)

a.Introducing the drive name

b.Database URL

c.Creating statement object

(ii)

a.SQL statement

b.Command Excecution

b.


```
private void jButton2ActionPerformed(java.awt.event.ActionEvent evt){
int x,y,result;
a=Integrer.parseInt(jTextField1.getText());
b=Integer.parsenInt(jTextField2.getText());
M1=new FindMax(x,y);
Result=M1.findMax();
String s=String.valueOf(result);
jTextField3.setText(s);
}

private void
jButton3ActionPerformed (java.awt.event.ActionEvent evt){
jTextField1.setText(“”);
jTextField2.setText(“”);
jTextField3.setText(“”);
}
```

c.

```
package file;
import java.io *;
public class File
{
public static void main(String[] args){
{
char[] in=new char[50];
int size=0;
try
{
File file=new File(“Text.txt”)
FileWriter fw=new FileWriter(file);
fw.write(“Hello World!”);
fw.flush();
fw.close();

FileReader fr=new FileReader(file);
Size=fr.read(in);
System.out.println(size + “ ” );
for( char c:in)
System.out.println(c);
fr.close();
}
catch(IOException e)
{}
}
}
}
```

d.

```
package threadobj;
```

```
public class Thread{
public static void main(String[] args)
{
T1 obj1=new T1();
T2 obj2=new T2();
Thread th1=new Thread(obj1);
Thread th2=new Thread(obj2);
th1.start();
th2.start();
}
}
```

```
package threadobj;
public class T1 extends Thread
{
public void run()
{
int i;
for(i=1;i<=5;i++)
}
try
{
Thread.sleep(1000);
}
catch(InterruptedException e)
{
System.out.println(e);
}
System.out.println(x);
}
}
}
```