KENDRIYA VIDYALAYA SANGTHAN

SESSION ENDING EXAMINATION

Informatics Practice (CLASS XI)

SAMPLE PAPER

MM: 70 **TIME:3:00 HRS**

Q.1 What is a Bluetooth? 1

Q.2 What is the function of an OCR? 1

Q.3 What are non-impact printers? 1

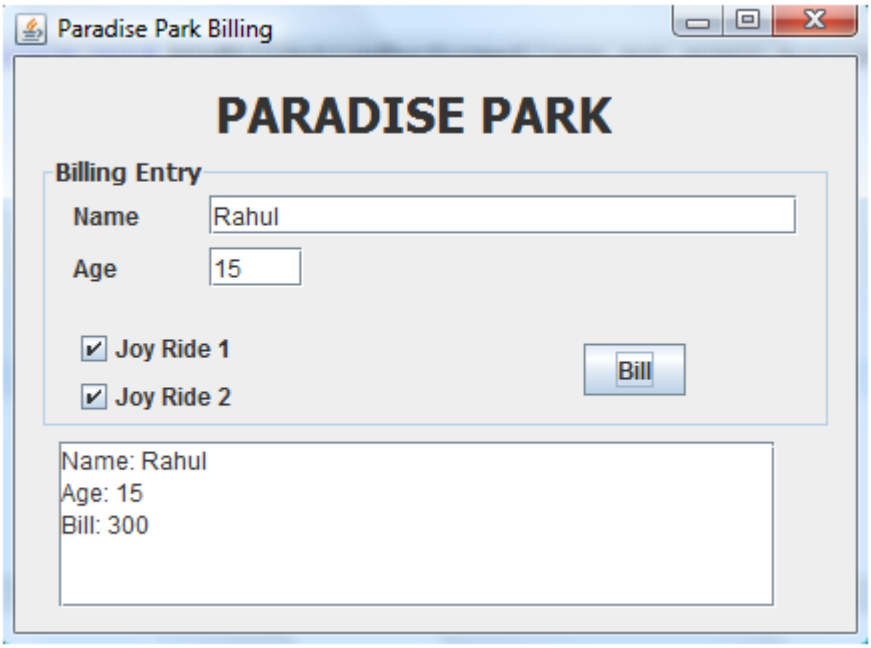
Q.5 Write two characteristics of Random Access Memory. 2

Q.6 How Multi Processing Operating Systems is different from Multi Programming Operating Systems? 2

Q.7 Write a short note on Firewall. 2

Q.8 What is an Assembler? 1

Q.9 Paradise Park uses the following interface to generate bill for its customers. 4



The controls used in the above interface are as follows:

Control Type	Control Name	Functionality
jTextField	txtName	Customer Name
jTextField	txtAge	Customer Age
jCheckBox	chkJr1	Joy Ride 1
jcheckBox	chjJr2	Joy Ride 2

jTextArea	txtRes	Bill Area
jButon	btnbill	To generate Bill

When the bill button is clicked the bill is displayed as shown in the interface above. The functionality is as follows:

Rate for joy ride 1 is 100 and that for Joy ride 2 is 200. A customer can select one or both the joy rides. The total is calculated as the sum of one or both joy rides cost. A discount of Rs 50 is given on total if the child is below 12 years.

Write code under the action event of the jButton to achieve the above functionality.

Q.10 Explain how java codes are compiled and run. 2

Q.11 What will be the output of the following code segments: 2

```
int a=5, b=10, c=9, d=8;

System.out.println(“” + ((a++)+(++c)-(--b)+(d--));

System.out.println(“” + ((a>b)?(c>d)?(++d):35:(--b)));
```

Q.12 Convert the following code segment using switch-case construct: 2

```
int num = Integer.parseInt(txtNum.getText());

if(num>=2 && num<=5)

txtRes.setText(“Prime”);

else if(num==6 || num==8 || num==10)

txtRes.setText(“Even”);

else

txtRes.setText(“Not Valid”);
```

Q.13 Predict the output of the following java construct: 2

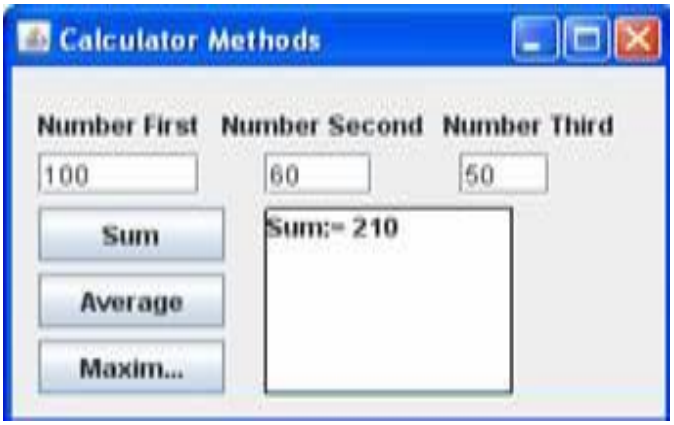
```
int m=5;

int prod=1;

int i=1;

while(i<=5)

{

  prod=prod+prod*(m%2);

  --m;

  ++i;
```

}

System.out.println(“”+prod);

Q.14 What is the difference between an ordinary method and a Constructor? 2

Q.15 Design an application having an interface like: 4



Implement functionality by writing methods with passing the argument of three textboxes in calcSum(), calcAvg() & calcMax().

Q.16 What are the actual and formal parameters? Give example to support your answer. 2

Q.17 Explain the use of Comments in Java with example. 2

Q.18 Explain two circumstances where run time errors may occur in a java program. 2

Q.19 Write two characteristics of a good program. 1

Q.20 Write short Notes on: 6

a) MySQL Features.
b) Referential Integrity
c) Database Constraints

Q.21 What is NULL? What happens when you perform aruthmatic calculations on NULL value. 2

Q.22 Enlist the various types queries available with DDL and DML 2

2

Q.23 Explain the difference between ROUND and TRUNCATE functions in MySQL with examples.

Q.24 Given the following table Structure and sample data: 14

Table Name: **Saragam**

Field Name	Data Type	Data Limit	Constraint
Albumid	Numeric	4	PRIMARY KEY
Album	Text	20	NOT NULL
Cost	Numeric	3	DEFAULT 0
Quantity	Numeric	3	Greater than 0
Singer	Text	10	

Sample Data:

Albumid	Album	Cost	Quantity	Singer
1001	SAHER	150	4	JAGIT
1002	MADHUSHALA	250	6	MANNA
1003	IBADAT	180	8	RAFI
1004	KISMAT	180	6	RAFI
1005	HALCHAL	200	4	KISHORE
1006	BLACK	210	10	MICHEL
1007	PASSION	200	5	SHAKIRA
1008	NAMESAKE	190	3	MADONA
1009	PLASURE	220	2	ASHA
1010	CATWALK	155	7	MADONA

Write the following queries:

a) Write SQL syntax to create the table. The table does not support Foreign Keys.

b) Add a column RATING in the above table containing numeric data and should accept NULL values.

c) Insert one Row in the table.

d) Increase the cost of all the albums sung by RAFI by 50.

e) Display cost of all those albums whose singer name ends with ‘A’.

f) Display the album details for either RAFI, KISHORE or ASHA

g) Display the Album details in the ascending order of their quantity.

Q.25 What will be the output of the following SQL statements: 4

a) SELECT RIGHT(MID('MAHARAJA MAHAYOGI', 2, 5), 4);
b) SELECT LEFT(SUBSTR('AARAHANAPAHARAN',-10,5),2);

Q.26 How e-Governance has has benefited the Common man? 2

Q.27 What benefits does e-business offer to a customer? 2

Q.28 Enlist 2 websites that provides e-learning platforms. 1

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SESSION ENDING EXAMINATION

MARKING SCHEME

Informatics Practice (CLASS XI)

MM: 70 TIME:3:00 HRS

Q.1 Bluetooth is telecommunication industry specification that describes how mobile phones , computers and PDA's can be easily interconnected using a short range wireless connection. 1

Q.2 OCR is uased to read character of special type font printed on a conventional paper with conventional ink.It is a input device. 1

Q.3 In these printers there as no mechanical contact between the print head and paper. 1

Q.5 The two characteristics of Random Access Memory are - 2

1. It is a volatile memory. Its contents are lost when power is turned off.

2. We can read as well as write in this memory.

Q.6 **Multiprogramming OS-** It supports multiprogramming i.e. more than one user can be supported by it therefore more than one programs are loaded and active in main store at the same time. 2

Multiprocessing OS- It is capable of handling more than one processor as the jobs have to be executed on more than on CPU. It is capable of loadsharing.

Q.7 Firewall- A firewall is a technique used in a secured computer system or network to block unauthorized access and allow only the authorized users.. Firewall can be implemented as a hardware as well as software , or combination of both. 2

Q.8 Assembler- Assembler is a language processor which translates a program written in assembly language to machine language. 1

Q.9 String str= txtName.getText(); 4

```
int age= Integer.parseInt(txtage.gettext());
int bill=0;
if( chkJr1.isSelected())
     bill+=100;
if(chkJr2.isSelected())
    bill+=200;
if(age<12)
```

```
 bill-=50;
txtRes.append("\n Name: "+str);
txtRes.append("\n Age: "+age);
txtRes.append("\n Bill: "+bill);
```

1 mark for correct input statements.

2 marks for correct if=else.

1 mark for correct output.

Q.10 Java complier produces bytecode, which is a machine instruction code for a java processor chip called Java Virtual machine. This bytecode is platform independent. 2

Q.11 System.out.println("" + ((a++)+(++c)-(--b)+(d--)); 2

Output: 14

System.out.println("" + ((a>b)?35:(--b)));

Output: 9

Q.12 Convert the following code segment using switch-case construct: 2

```
int num = Integer.parseInt(txtNum.getText());
switch(num)
{  case 2:
    case 3:
    case 4:
    case 5:
            txtRes.setText("Prime");
            break;
   case 6:
   case 8:
   case 10:
            txtRes.setText("Even");
           break;
   default:
           txtRes.setText("Not Valid");
```

}

Q.13 Predict the output of the following java construct: 2

Output:- 4

Q.14 2

Ordinary method	Constructer
It is a collection of java statement.	It creates an object of a class
Can have any valid return type , even void also.	has no return typr , not even void
Any name except class name	Same name as the class name

Q.15 int calcSum(int N1, int N2, Int N3) 4

{ return (N1+N2+N3);}

float calcAvg(int N1, int N2, Int N3)

{ return (float)(N1+N2+N3)/3;}// Type casting

int calcMax(int N1, int N2, Int N3)

{ return ((N1>N2?(N1>N3? N1:N3)?(N2>N3?N2:N3);}

1 mark each for writing correct method.

1 mark for finding greatest between N1,N2 & N3.

Q.16 Actual parameters are those parameters which appear in method call statement. 2

Formal parameters are that parameter which appear in method definition.

int M1(int x, int y) // x & y are formal parameters

{ return (x+y);}

int a=12,b=13;

int C=M1(a,b); // a,b are actual parameters

1 mark for correct definition

1 mark for correct example.

Q.17 Comments provide internal documentation of a program. In Java comments are given either by // or /* ….*/ brackts. 2

Example-

/* This method calculates sum of two numbers.*/

int Sum(int x, int y)// x,y are formal parameters

{

return (x+y);

}

Q.18 1. Divide by zero error- When we try to divide a number by 0. 2

2. When we try to calculate square root of a negative number.

Q.19 Characteristics of a good program. 1

1. The program should be user friendly.. The user should not concern about what is happening inside a program.

2. The program should be portable i.e. it should run on different platforms.

Q.20 Write short Notes on: 6

a.MySql features- Any 4 Features like cost, Query Language support, Portability, Speed, Ease of use,Security etc.

b. Correct definition of Referential Integrity.

c. Definition of constraint and types of constraints

Each topic will be of 2 marks.

Q.21 1 mark for Correct definition of NULL 2

If any column value involved in an arithmetic expression is NULL, the result of the arithmetic expression is also NULL.

Q.22 DDL: Create, Alter, Drop commands. 2

DML: Select, insert, Update, Delete commands.

Q.23 Round(X,D):-> returns X rounded to D decimal places. 2

Truncate(X,D):-> The number is truncated to D digits after decimal point.

Select round(1.298,1); will return 1.3

Select truncate(1.298,1); will return 1.2

Q.24 Write the following queries:

a. Write SQL syntax to create the table. The table does not support Foreign Keys.

```
Create table Sargam (Albumid int(4) primary key,
Album varchar(20) not null,cost int(3) default 0,
Quantity int(3) check ( Quantity>0), Singer varchar(10));
```

b. Add a column RATING in the above table containing numeric data and should accept NULL values.

```
Alter table Sargam ADD COLUMN (rating int);
```

c. Insert one Row in the table.

```
Insert into Sargam values(111,'Miraz', 200,2,'Jagjit');
```

d. Increase the cost of all the albums sung by RAFI by 50.

```
Update Sargam SET  cost=cost+50 where singer='RAFI';
```

e. Display cost of all those albums whose singer name ends with 'A'.

```
Select cost from Sargam where singer like '%A';
```

f. Display the album details for either RAFI, KISHORE or ASHA

```
Select * from Sargam where singer IN( 'RAFI','KISHORE','ASHA');
```

g. Display the Album details in the ascending order of their quantity.

Select * from Sargam ORDER BY Quantity;

Q.25 What will be the output of the following SQL statements: 4

a) HARA b) AN

Q.26 1. Keeping a tab on corruption. 2

2. Resulted in increased public participation.

Or any two benefits to common men.

Q.27 Access to International markets, increased productivity, reduction in transaction and other cost or any other benefits to customer. 2

Q.28 www.moddle.org, www.w3schools.com,www.exelearning.org, or any other valid answer. 1