First Pre-Board Examination 2010-11
Informatics Practices

Time : 3 Hrs.   Class : XIIth   M.M. 70

General Instructions:

    (i). This Question Paper is divided into 3 sections.

    (ii). Section –A and Section – B Consist of 40 marks.

    (iii). Section –C consist of 30 marks.

    (iv). Answer the questions after carefully reading the text.

Section – A

1. Answer the following questions:

    (a). What is the difference between LAN and WAN?   (2)

    (b). Briefly mention two advantages and disadvantages of Ring Topology in network.   (2)

    (c). Explain the following :   (2)

        (i). Bluetooth

        (ii). WiFi

    (d) What do you understand by Domain Name Resolution?   (2)

    (e) Write in brief the purpose of the following Software :   (2)

        (i) Linux   (ii) My SQL

2. (a). Mention two other terms which are frequently interchanged with e-Learning.   (1)

    (b). In You class, there are 40 Students. Your teacher told you to create a Student table (2) for storing rollno, name, address, and date of birth. Suggest suitable data types with width for Student table attributes.

    (c). Mr. Das is working as a manager in the Das Enterprises. He want to create the forms (2) with the following functions. Choose appropriate controls form Text box, Label, Option button, check box, list box, Combo Box, Command Button and write in the third column.

S.No	Controls used to	Control Used
1.	Enter the Name, Address, Basic Salary	
2.	Select the Gender (M/F)	
3.	Select the department form the available list	
4.	Choose type of Employee (Permanent / Regular)	

Section – B

3. (a) What will be the output of the following code :   (1)   Class Patt {

```
int Calc(int u)
    {
        if ( u % 2 ==0)
                Return u+10;
        else
                return u*2;
    }
void pattern (Class M, int B)
    {
        for ( int CNT =0; CNT<B; CNT++)
                System.out.println(Calc (CNT) +M);
                System.out.println();
    }
}
public class Hello
{
public static Void main( String args[])
        {
                Patt pt=new Patt();
                pt.pattern( '*', 0);
                pt.pattern( '#', 4);
```

pt.pattern('@',3);

                }

        }

(b) Write the equivalent switch – case construct for the following decision making situation.   (2)

```
int num;
    if (s1=='a')
        num=1;
    else if (s1=='2')
        num=2;
    else if (s1=='3')
        num=3;
```

(c). What is overriding.   (1)

(d). Write any two JDBC Driver.   (1)

(e).   i). What are the general rules to declare XML elements?
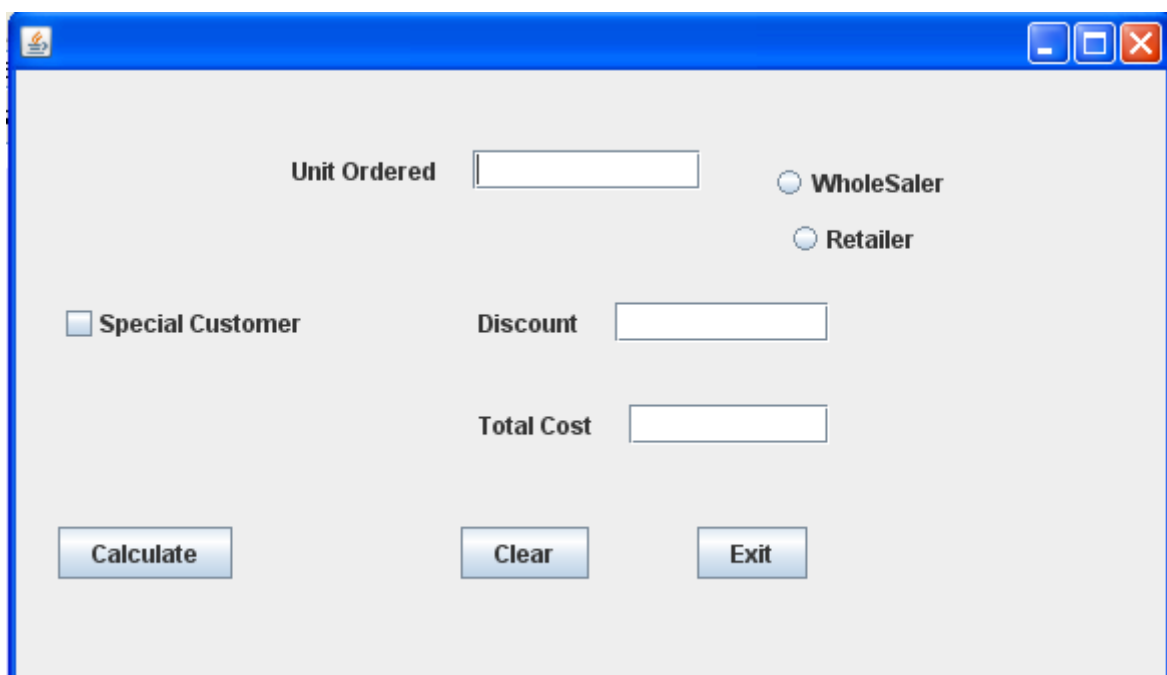
        ii). Write the HTML Code for the following page: (2)

Production	
N.N. Ready	1493
S.M. Krishna	3829
p. Chidamberam	0283
Sales	
Maria Philip	4827
S. Gandhi	7246
James Andrew	5689

4). ABN Shipment Corporation imposes charges to customer for different product . the shipment company cost for an order in two forms: Whole Saler and Retailer. The cost is calculated on unit basis as follow :

For Units	Price for whole salers (per unit)	Price for retailer (per unit)

1 – 15	Rs. 50/-	Rs. 60/-
16-20	Rs. 45/-	Rs. 55/-
21-30	Rs. 40/-	Rs. 50/-
31-40	Rs. 35/-	Rs. 45/-
>50	Rs. 30/-	Rs. 40/-

Special customers are given a discount of 10%. The following is the screen used to calculate cost for an order :

The list of controls for the above form is as follows :

Control Type	Control Name	Property Type	Property Value
JFrame	ABNUI	Title	ABN Shipment Corporation
TextField	TextField1	Text Variable Name	[None] txtUnit
	TextField2	Text Variable Name	[None] txtDisc

	TextField3	Text Variable Name	[None] txtCost
JPanel	JPanel1	Border Title	Customer Type
Button Group	Button Group1		
JRadioButton	JRadioButton1	Text Variable Name Button Group	WholeSaler optWhole ButtonGroup1
	JRadioButton2	Text Variable Name Button Group	Retailer optRetail ButtonGroup1
JCheckBox	CheckBox1	Text Variable Name	Special Customer ChkSpecial
JButton	JButton1	Text Variable Name	Calculate Cost cmdCalc
	JButton2	Text Variable Name	Clear cmdClear
	JButton3	Text Variable Name	Exit cmdExit

(a) Write the code to disable the text boxes txtCost and Wholesaler as default option when the form is active.
(1)

(b) Write the code for calculate cost command button (cmdCalc) to
Display the discounted price in txtDisc if special customer is selected.   (1.5)

a. To display the total cost (Total Cost = OrderUnit * Per Unit Price)   (1.5)

(c) Write the code for Clear Button (cmdClear) to clear all text boxes and make textboxes txtDisc and txtCost as Disable.   (1/2)

(d) Write the code for Exit Button (cmdExit) to exit the application.   (1/2)

5). Write a Program to find out Armstrong Number   (3)
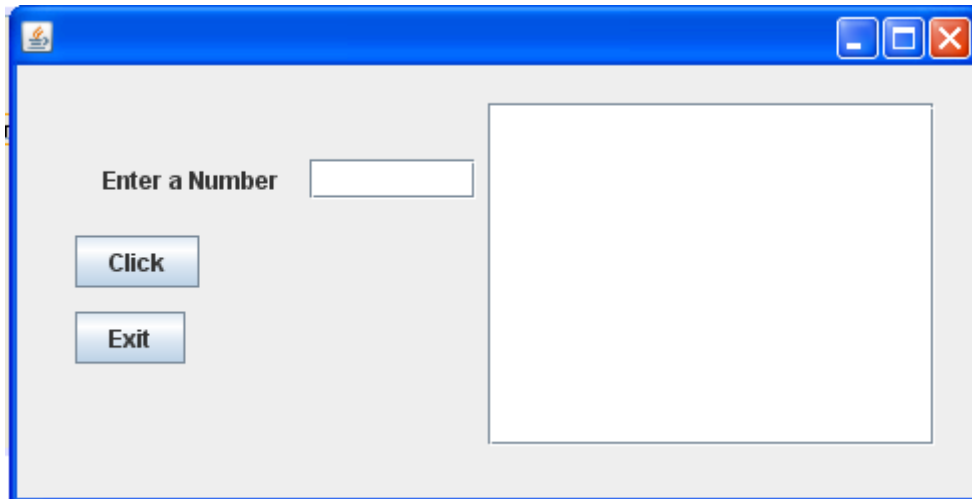
For E.g.   153= 13+5+3

The following is the screen used to find Armstrong Number

Store the resulted series in JTextArea Control.
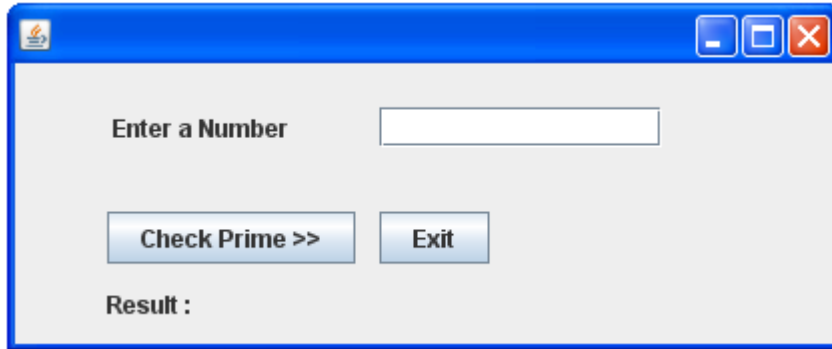

6). Write a Program to implement Fibonacci Series (i.e. sum of previous two number is the next (3)
number   e.g. ; 1 1 2 3 5   8 13

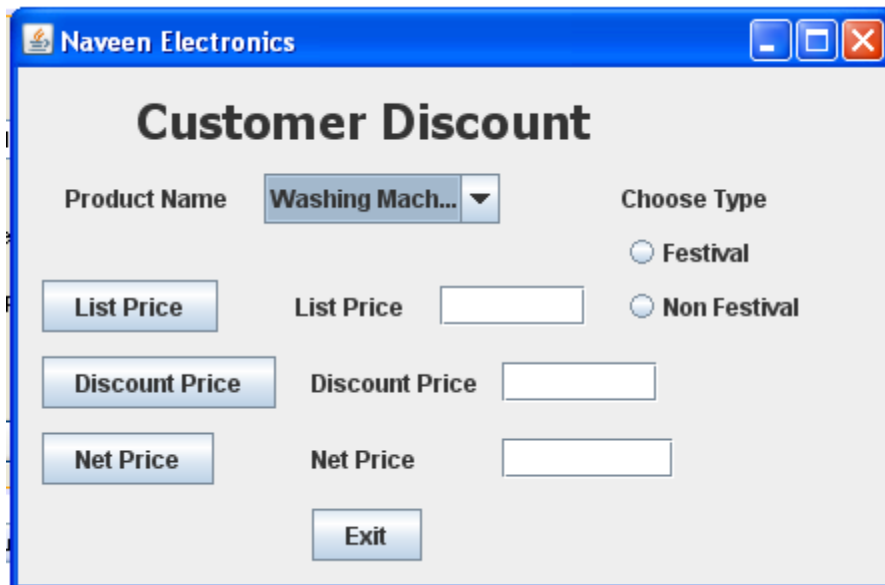Store the resulted series in JTextArea Control.

7). Write a Program to Check whether a number is prime or not. Display the output in a   (3)
message box using show Message Dialog. The following is the screen used to check prime number.

8). Naveen Electronics has the following products with their list price are given. The Stores are gives a 10% discount on every product. However, at the time of festival session, the stores gives a further 7% festival discount after 10%.

Product Name	List Price (Rs.)
Washing Machine	12000
Colour Television	17000
Refrigrator	18000
OTG	8000
CD palyer	14500

Note that the product name is stored in JComboBox control

(a) Write the code to disable the textboxes, txtprice, txtDiscount and txtPrice in the form when (1)
the form activated.

(b) Write the code for List Price button (cmdList) to display the List Price in txtprice. (1)

(c) Write the code for Discount Price Button (cmddisc) to calculate discount price in txtDiscount. (1)

(d) Write the code for Net Price Button (cmdNet) to calculate the net Price in txtPrice. (1)

Section –C

9). (a) What is foreign Key? Give example. (2)

(b). List four aggregrate functions. (2)

(c). What is the difference between outer join and Self Join? (2)

(d). Name the clauses for the following : (2)

     (i). To display the record in specified range.

     (ii). To display the record according to the given pattern.

(e). What are DDL and DML Command? (2)

10). Write SQL Commands for the statements (i) to (vi) and give output for the SQL
Queries (vii) to (x)   (10)

Table CLUB

Gcode	Game Name	Number	Fees	Starting date
101	Carom Board	2	5000	2004-01-23
102	Badminton	2	12000	2003-12-12
103	Table Tennis	4	8000	2004-02-14
105	Chess	2	9000	2004-01-01
106	Lawn Tennis	4	25000	2004-03-19

(i). To Display the names of all Games with their GCodes.

(ii). To Display the details of those games which are having Fees more than 7000.

(iii). To Display the content of the CLUB table in Descending order of Start date.

(iv). To Display sum of fees for each of the number of participation groupings.

(v). To Display the record of all the member who join in year 2004.

(vi). To Display the record of all the member whose fees is less than 8000 and game start
      from letter B.

(vii).SELECT COUNT (DISTINCT Number) from CLUB.

(viii).SELECT MAX (Start date), MIN(Start date) from CLUB.

(ix). SELECT SUM(Fees) FROM CLUB.

(x). SELECT DISTINCT Gcode FROM CLUB.

11).   Write the SQL Command to create MEMBER with table with the following details: (2)

Column Name	Data Type	Size	Constraint
Mem_id	Int	4	PRIMARY KEY
MemberName	Varchar	20	NOT NULL
Address	Varchar	30	NOT NULL
Mdate	Date		
Mem_Fee	Double	6,2	Check (Price greater than zero)

(b).   Consider the table in part (a) and write the SQL Command: (2)

(i).   To convert the address into lower case.

(ii). To list name and position of character 'a' in the name of the member.

(c). Let us consider the following two tables, its data records and write the Query for

(i) and (ii)   Table : EmpN

ENO	ENAME	JOB	MG	DATEOFJOIN	SAL	COMM	DEPTNO
7369	Ashok Singal	Clerk	7902	1980-12-17	12800		20
7499	Rohit Rana	Salesman	7698	1981-02-22	15250	500	30
7782	Chetan Gupta	Manager	7839	1981-06-09	22450		10
7698	Binod Goel	Manger	7839	1981-05-01	15850		30
7566	Jyoti Lamba	Clerk	7902	1981-04-02	14975		20

Table Deptn :

DEPT NO	DNAME	LOC
10	ACCOUNTING	DELHI
20	RESEARCH	KOLKATTA
30	SALES	MUMBAI

(i). Print the department number and location of Sales Department from Deptn Table   (1)

(ii).To display the ename and location of all the employees having salary more that
      10000 .   (1)

(d).   Differentiate between CREATE TABLE and DROP TABLE.   (2)

(e).   What is the difference between CHAR and VARCHAR data type.   (2)

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