**SAMPLE PAPER : 2013**

**Class : XII**

**Subject : Informatics Practices**

**Time: 3 hrs. M.M. 70**

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| **Instructions:****All questions are compulsory.****Programming language:java** |

**Section A**

1. What is foreign key and Candidate Key? [2]
2. In a student table, out of RollNumber, Name, Address which column can be set as Primary key and Why? [1]
3. What is the purpose of distinct clause? Explain with example. [2]
4. While Creating a table ‘**Customer\_tbl’** Meenakshi forget to set the primary key for the table. Give the statement which she should write now to set the column ‘*CustID’* as the primary key of the table? [1]
5. Write Difference between DDL and DML commands  [2]
6. Write a function in Java that takes principal, rate and time as parameter and returns Simple Interest. [2]

**Section B**

1. Define Inheritance with reference to Object Oriented Programming. [2]
2. Design an application having an interface like: [3]



Implement functionality by writing methods with passing the argument of three textboxes in, clacSum(), calcAvg() & calcMax(). Invoke these methods from buttons event handlers.

1. Define a class Book with the following specifications :
 Data Members of the Book are :
 BOOK\_NO INTEGER
 BOOK\_TITLE STRING
 NO\_OF\_BOOKS INTEGER
 PRICE FLOAT(PRICE PER COPY)
 TOTAL\_COST() A function to calculate the total cost for number of copies.
 Member methods of the class book are :
 INPUT() Function to read No of Books, Book\_title, price.
 The following is the screen used to declare class to calculate total cost :
 

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

|  |  |  |
| --- | --- | --- |
| Control Type | Control name | Property Value |
| JTextField | JTextField1JTextField2JTextField3JTextField4JTextField5 | txtBNotxtBNametxtPricetxtNotxtTotal |
| JButton | JButton1JButton2 | Calculate priceExit |

1. Define a class Book with required specification. [2]
2. Write the code for **Calculate Price** button click event procedure to operate the class Book’s method [ 1.5]
3. Write the code for Exit Button to exit application. [0.5]
4. Rewrite the following code using a for loop : [1]
 int i=1, sum=0;
 while (i<10)
 { sum+=i;
 i+=2;
 }

**Section C**

1. Write SQL Commands for (i) to (v) and write the outputs for (vi) on the basis of table : **[1x10=10]** **Table : FURNITURE**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| NO | ITEM NAME | TYPE | DATEOFSTOCK | PRICE  | DISCOUNT |
| 1 | White Lotus | Double Bed | 2002-02-23 | 3000 | 25 |
| 2 | Pink feathers | Baby Cot | 2002-01-29 | 7000 | 20 |
| 3 | Dolphin | Baby Cot | 2002-02-19 | 9500 | 20 |
| 4 | Decent | Office Table | 2002-02-01 | 25000 | 30 |
| 5 | Comfort zone | Double Bed | 2002-02-12 | 25000 | 30 |
| 6 | Donald | Baby cot | 2002-02-24 | 6500 | 15 |
| 7 | Royal Finish | Office Table | 2002-02-20 | 18000 | 30 |
| 8 | Royal tiger | Sofa | 2002-02-22 | 31000 | 30 |
| 9 | Econo sitting | Sofa | 2001-12-13 | 9500 | 25 |
| 10 | EatinParadise | Dinning Table | 2002-12-19 | 11500 | 25 |

1. To show all the information about the Baby cots from the furniture table.
2. To list the itemname which are priced at more than 15000 from the furniture table.
3. To list itemname and type of those items, in which dateofstock is before 2002-02-01 from the furniture table in descending order of itemname.
4. To display itemname and dateofstock of those items, in which the discount percentage is more than 25 from the furniture table.
5. To count the number of items, whose TYPE is “Sofa” from the furniture table.
6. Give the output of following SQL statement :
1. select count (distinct type) from furniture;
2. Select max(discount) from furniture;

3. Select avg(discount) from furniture where type=”Baby Cot”;

 4. Select sum(price) from furniture where dateofstock < ’2002-02-12’;

 4. Select count (\*) from furniture;

**Section D** [1 X5=5]

1. SELECT ROUND(20009.111,-2);
2. SELECT SQRT(81)+SQRT(49)+SQRT(121);
3. SELECT MID(‘APS Public School’ ,11,8), TRIM(LEADING ‘!’ FROM ‘!!!!!WEL COME!!!!!’);
4. SELECT SUBSTR( RTRIM(‘INDIA IS GREAT ‘),3,9);
5. SELECT CONCAT(UPPER (‘xiHum’), LOWER(’xiSc’), UPPER(SUBSTR(‘xiCom’,2,3)));

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| **Section E**1. Which MySQL command helps you to see existing databases? [1]
 |
| 1. Hemant created a table in Mysql. Later he found that table is wrongly created and he wants to remove it. Name the command by which Hemant can do it. [1]
 |
| 1. Aditi created a table named student, she wants to see those students whose name ending with p. She wrote a query-

 SELECT name.\* FROM student WHERE name = ”%p”;Help her to run the query by removing the errors from the query and rewriting it . [2] |
| 1. Aadhar is not able to set Empid of EMPL table to NULL. Which constraint has he used while creating table? [1]
 |

**Section F**

1. Create two tables: [2] **Customer ( customer\_id , name )**

 **Customer\_Sales ( transaction\_id , amount , customer\_id)**

 Underline columns indicate primary keys and customer\_id indicates foreign key in customer\_sales Table .Make sure that no action should take place in case of a DELETE or UPDATE in the parent table. Name the foreign key constraint as FK\_CUST

1. In a database there are two tables ‘LOAN’ and ‘BORROWER’ as shown below:

|  |  |
| --- | --- |
| **Customer\_Name** | **Loan\_number** |
| Jones | L-170 |
| Smith | L-230 |
| Hayes | L-155 |

**BORROWER**

|  |  |  |
| --- | --- | --- |
| **Loan\_number** | **Branch\_name** | **Amount** |
| L-170 | Downtown | 3000 |
| L-230 | RedWood | 4000 |
| L-260 | Perryridge | 1700 |

**LOAN**

**LOAN**

1. Identify the foreign key column in the BORROWER table. [1]
2. How many rows columns will be there in the natural join of these two tables. [1]
3. If a database “Library” exists. Write the command to start working in this database. [1]

**Section G**

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| 1. Define Method Overloading and method overriding? [2]
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| 1. What is the difference between setEnabled and setVisible methods of a control? [1]
 |
| 1. Write the purpose of the following statements. [1]
2. jTextField1.setText("Value"+Math.round(-11.5));
3. final double g=9.8;
 |
| 1. Rewrite the following code using if ..else. [2]

switch(ch) { case ‘a’:case ‘A’:case ‘e’:case ‘E’:case ‘i’:case ‘I’:case ‘o’:case ‘O’:case ‘u’:case ‘U’: ++v;break;default: others++; }  |
| 1. The following code has some error(s). Rewrite the correct code underlining all the corrections made. [1]

 int i,c,a=5,b=0; for(i=0,i<20,i++) { if b=0 then  break; else  c=a/b; system.out.show(“Quotient”+c);  |
|  |
| 1. Dream Land Enterprises has computerized its billing. The following data entry screen is used to generate bill.

 The criteria for calculation of delivery and handling charges is as given below-

|  |  |
| --- | --- |
| Category of City  | Charges |
| A Class | Rs. 3500 |
| B Class | Rs. 4000 |
| C Class | Rs. 4500 |

1. Write the code to make the text fileds txtSubTotal, txtTax, txtDelHanCh and txtTotal non editable and set the category of city as C class. [ 2]
2. Write code to do the following-
3. Write the code for Calculate button to calculate and display Sub Total, Tax, Delivery & Handling Charges and Total depending on the category of the city. [3]
	* Sub Total is calculated as Unit Price \* Quantity.
	* Tax is calculated as 7.85% of Sub Total
	* Total is calculates as the sum of Sub Total, Tax and Delivery and Handling Charges. If Company Employee check box is checked then tax should be 2.5%.
4. When Clear button is clicked all the text boxes should be clear and Close the application when Exit button is pressed. [1]
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**Section H**

1. Differentiate between <A> and <B> tag of HTML. [1]
2. Write any two features of XML [1]
3. Difference between ROWSPAN and COLSPAN attribute. [1]
4. Write a function in java that take a number as parameter and return true if number is palindrome otherwise return false. [ 2 ]
5. Compare .XML and .CSS, DOC File in XML. [ 1 ]
6. What is the wrong in the following coding ? [1]
 <HEAD> <MY WEB PAGE>
 <TITLE> Welcome to my web page
 </HEAD>
 </TITLE>
7. Write HTML Code to display these Text : [2]
 CaSO4 (a+b)2=a2+b2+2ab
8. Write the html code to display the following controls : [3] 