

SAMPLE PAPER: 2017-18**Class :XII****Subject : Informatics Practices****Time: 3 hrs.****M.M. 70****Instructions:**

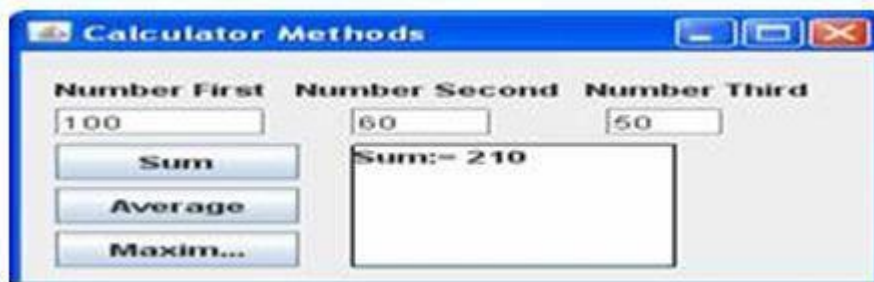
- i) All questions are compulsory.
- ii) Programming language:java

Section A

- a) What is foreign key and Candidate Key? [2]
- b) In a student table, out of RollNumber, Name, Address which column can be set as Primary key and Why? [1]
- c) What is the purpose of distinct clause? Explain with example. [2]
- d) While Creating a table „Customer_tbl’Meenakshiforget 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]
- e) Write Difference between DDL and DML commands [2]
- f) Write a function in Java that takes principal, rate and time as parameter and returns Simple Interest. [2]

Section B

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



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

c) 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 PERCOPY`)

`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	JTextField1	txtBNo
	JTextField2	txtBName
	JTextField3	txtPrice
	JTextField4	txtNo
	JTextField5	txtTotal
JButton	JButton1	Calculate price
	JButton2	Exit

- i. Define a class `Book` with required specification. [2]
- ii. Write the code for **Calculate Price** button click event procedure to operate the class `Book`'s method [1.5]
- iii. Write the code for Exit Button to exit application. [0.5]

d) Rewrite the following code using a for loop :

[1]

```
int i=1, sum=0;
while (i<10)
{
    sum+=i;
    i+=2;
}
```

Section C

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

- To show all the information about the Baby cots from the furniture table.
- To list the itemname which are priced at more than 15000 from the furniture table.
- 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.
- To display itemname and dateofstock of those items, in which the discount percentage is more than 25 from the furniture table.
- To count the number of items, whose TYPE is "Sofa" from the furniture table.
- Give the output of following SQL statement :
 - select count (distinct type) from furniture;
 - Select max(discount) from furniture;
 - Select avg(discount) from furniture where type="Baby Cot";
 - Select sum(price) from furniture where dateofstock < "2002-02-12";
 - Select count (*) from furniture;

Section D

[1 X5=5]

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

Section E

- Which MySQL command helps you to see existing databases?

[1]

- b) 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]
- c) 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]
- a) Aadhar is not able to set Empid of EMPL table to NULL. Which constraint has he used while creating table? [1]

Section F

- a) 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

- b) In a database there are two tables „LOAN“ and „BORROWER“ as shown below:

Loan_number	Branch_name	Amount
L-170	Downtown	3000
L-230	RedWood	4000
L-260	Perryridge	1700

LOAN

Customer_Name	Loan_number
Jones	L-170
Smith	L-230
Hayes	L-155

BORROWER

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

Section G

- a) Define Method Overloading and method overriding? [2]
- b) What is the difference between setEnabled and setVisible methods of a control? [1]
- c) Write the purpose of the following statements. [1]
- i) jTextField1.setText("Value"+Math.round(-11.5));
- ii) final double g=9.8;
- d) 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++; }

```

- e) 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);

```

- f) 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

- i. Write the code to make the text files txtSubTotal, txtTax, txtDelHanCh and txtTotal non editable and set the category of city as C class. [2]

- ii. Write code to do the following-

1. 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]

- o Sub Total is calculated as Unit Price * Quantity.
- o Tax is calculated as 7.85% of Sub Total
- o 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%.

2. When Clear button is clicked all the text boxes should be clear and Close the application when Exit button is pressed.

[1]

Section H

- a) Differentiate between <A> and tag of HTML. [1]
- b) Write any two features of XML [1]
- c) Difference between ROWSPAN and COLSPAN attribute. [1]
- d) Write a function in java that take a number as parameter and return true if number is palindrome otherwise return false. [2]
- e) Compare .XML and .CSS,DOC File in XML. [1]
- f) What is the wrong in the following coding ? [1]
- ```
<HEAD><MY WEBPAGE>
```

<TITLE> Welcome to my web page

</HEAD>

</TITLE>

g) Write HTML Code to display these Text :

[2]

$C_aSO_4$   
 $(a+b)^2=a^2+b^2+2ab$

h) Write the html code to display the following controls :

[3]

The screenshot shows a web form titled "Dream Land Enterprises". The form contains the following elements:

- Product ID**: A single-line text input field.
- Product Description**: A multi-line text input field.
- Quantity**: A single-line text input field.
- Unit Price**: A single-line text input field.
- Sub Total**: A single-line text input field.
- Tax**: A single-line text input field.
- Delivery & Handling Charges**: A single-line text input field.
- Total**: A single-line text input field.
- Category of City**: A group box containing three radio buttons labeled "A Class", "B Class", and "C Class".
- Company Employee**: A checkbox.
- Buttons**: Three buttons labeled "Calculate", "Clear", and "Exit".