

**Sample Paper 2013-14**  
**Class: XII**  
**Subject: Informatics Practices**

**Time Allowed: 3 Hrs**

**MM: 70**

**General Instructions:**

1. Attempt all the parts of a section together.
2. Answer the questions after reading the text carefully.

- Q 1** Answer the following questions.
- a) Marketing manager of X company and Marketing Manager of Y company were discussing about the product in a room with Bluetooth connectivity of their laptops. With which type of network they were connected with? [1]
- b) Padmawati Soaps Pvt. Ltd. Is a Soap factory with Production Unit and Time-Office Unit 150 meters away from each other. They recently found that communication between these Units is extremely slow.  
i. Suggest a device, which can be installed in between the offices for smooth communication. [1]  
ii. What type of network is formed by having this kind of connectivity?
- c) Name an open standard for the following: [1]  
i. office documents  
ii. vector images
- d) Expand the abbreviated words: [1]  
1. GNU  
2. PPP
- e) What is MAC address? What is the difference between MAC address and IP address? [2]
- f) Write one advantage and one disadvantage of following network topologies: [2]  
i. Bus  
ii. Tree
- g) Differentiate between Phonetic Text Entry and Key map based entry of Indian Language Text. [2]
- Q 2** Answer the following questions.
- a) i. Which method would you use to determine which index has been selected in a Combo Box? [1]  
ii. Which property of ListBox is used to enter the list of items while working in NetBeans?
- b) What do you mean by JTable? Name any one method associated with it. [1]
- c) i. Name the tag which is used to insert image in background of HTML document . [1]  
ii. Name the tag which is used as Section Separator.
- d) What is inheritance? Name the access specifiers for classes in Java. [1]
- e) What will be the value of count and x after execution of the following code? [2]  

```
int count=0,x=9;
count=x- --;
do
{
    count+=x - --;
}while(x>6);
System.out.println("Count # " + count + " X # "+ x);
```
- f) Write a Java code that takes one integer type value from jTextField1. If value is negative then make it positive and replace that in the jTextField1. If value is positive then display the message using a label with suitable message: "Value is Positive". [2]
- g) What are the use of the following tags- [2]  
<OL>, <HEAD>
- Q 3**
- a) Which MySQL command helps you to see constraints applied on column(s) in a table? [1]
- b) Mohan created a table in Mysql. Later he found that table is wrongly created and he wants to remove it. Name the command by which Mohan can do it. [1]
- c) Reena 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 Reena to run the query by removing the errors from the query and rewriting it. [1]
- d) Table **Shop** contains 4 columns(itemcode, itemname, itemprice, itemdom) and 10 records. Delete all records where itemname is "Parle". [1]
- e) What is primary key? How is it different from candidate key? Explain with the help of suitable example. [2]
- f) Table **Employee** contain the columns named with Emp\_no, Emp\_name and Basic: [2]

Emp_No	Emp_Name	Basic
6985	Suresh	6700

5874	Rahman	7500
6587	Sourav	NULL
5478	Ajay	5500

Based on this information, find output of the following queries.

- a) SELECT AVG(Basic) FROM EMPLOYEE;  
b) SELECT Name FROM employee WHERE Basic IS not Null;  
f) A table **"Hospital"** in a database has degree 4 and cardinality 9. What is the number of rows and column in it. [2]

**Q 4** a) What is JDBC? What is the importance of JDBC in establishing database connectivity? [1]

b) A Mark of a student is stored in a string variable strMarks. Mark is to be used in calculation. Write the Java statement to convert mark into long variable lngMarks. [1]

c) What will be displayed in of JTextArea1 after executing the following code? [1]

```
jTextArea1.append("Hello");
jTextArea1.append("Save\nTrees \nSave\t Papers");
```

d) Rewrite the following code using for loop. [2]

```
int i=0;
while(i<20)
{
    if( i==8)
        break;
    System.out.println(i);
    i++;
}
```

e) Rewrite the following program code using a if-else statement: [2]

```
int number,total=1000;
switch(number)
{
    case 101 : total = total * 10;
              break;
    case 108 : total = total * 20;
              break;
    case 117 : total = total * 30;
              break;
    default  : total = 0;
}
```

f) Find out the output [1]

```
String s1="CBSE";
String s2="2013";
String s3=s1.concat(s2);
int x=45,y=90;
JOptionPane.showMessageDialog(null," "+s3.length()+" " + x+" " + y+" "
+ (x+y));
```

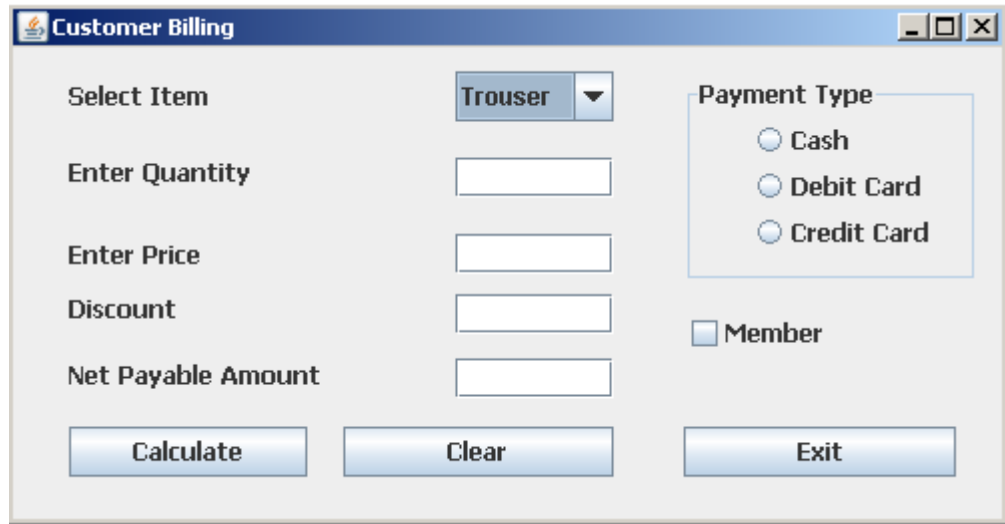
g) The following code has some error(s). Rewrite the correct code underlining all the corrections made: [2]

```
int pp=1,tt=34;
zz=90;
pp = pp + 1;
do
{
    tt--;
    zz =%10;
    pp++;
}while(zz>0)
jTextField1.showText(" "+zz);
```

h) Ms. Sheela works in a shopping mall. To calculate net payable amount she has developed the following GUI in NetBeans.

The shop accepts payments in three modes- Cash, Debit Card, Credit Cards. The discount given as per mode of payment is as follows:

Mode of payment	Discount
Cash	12%
Debit Card	Nil
Credit Card	8%



Control	Name of the Control	Description
Frame	jFrame	The Frame Object
Radio Button	jRadioButton1 jRadioButton2 jRadioButton3	To select Cash To select Dabit Card To select Credit Card
Text Field	jTextField1 jTextField2 jTextField3 jTextField4	To accept Quantity To accept Price To display Discount To display Net Payable Amount
Button	jButton1 jButton2 jButton3	To calculate discount and net amt. To clear all text fields To quit the application
Check Box	jCheckBox1	To select / deselect membership

If the Member check box is checked then the customer gets an additional discount of 5% on net payable amount. [1]

- I. Write the code to make the textfields for Discount ( txtDiscount ) and Net Payable (txtNetPayable) uneditable. [2]
- II. Write code to do the following- [1]
  - a) When Calculate button is clicked the discount and net payable amount is calculated as per the given criteria and displayed in discount and net payable text boxes. [1]
  - b) When Clear button is clicked all the text boxes should be clear.
  - c) Close the application when Exit button is pressed.

- Q 5
- a) Write one point difference between order by and group by. [1]
  - b) Table Library has 15 records and Table Code has 3 records. Mr. Sunil wants to display all information stored in both of these related tables. He forgot to specify equi-join condition in the query. How many rows will get displayed on execution of this query? [1]
  - c) Miss Radhika has created a table named with **Market** and in that column *Order* has been marked as primary key. Later she wants to remove the primary key. Help her to write MySql query. [1]
  - d) Consider the table **ZOO** given below, write command in MySql for (1) to (4) and output for (5) to (7). [7]

Table : **ZOO**

Acode	Aname	Atype	CageNo	DateOfJoin	Location
1005	Bharat	Lion	5	12-Dec-01	North
2785	Rani	Lioness	5	17-Jan-08	North
6587	Laxman	Elephant	1	19-Feb-07	South
1265	Raja	Fox	3	02-Jan-08	South
4457	Rajat	Monkey	8	22-Nov-07	East
6856	Sakina	Crocodile	10	03-Mar-08	West

- (1) To display animal code, animal name with cage no. in ascending order of cage number.
- (2) Display total number of animals location wise.(i.e. number of animals in each location).
- (3) Shift elephant to newly constructed cage with Cage number 15.
- (4) To insert new record in the table as per your choice.
- (5) SELECT Count(Distinct(Atype)) from Zoo;
- (6) SELECT Dayofmonth(Dateofjoin) from Zoo where Location not in ("North","East","West");
- (7) SELECT Substr(aname,2,3) from zoo;

Q 6 Answer the following question.

- a) Write an MySQL query to create the table "Library" with the following structure-

Field	Type	Constraint
Book_Id	Varchar(6)	Primary Key
Book_Name	Varchar(25)	
Author_Name	Varchar(30)	
Publisher	Varchar(20)	
Price	Integer	
Quantity	Integer	Not Null

[2]

- b) In a database there are two tables 'Patient' and 'Doctors' which are shown below. Write the command in MySQL queries for the following:

Table: Patient

Name	Patient_No	Date_Adm	Doctor_No
Kishor	P104	2009-05-15	502
Ragini	P202	2010-01-11	165
Reshu	P754	2007-12-31	325
Kanti	P612	2010-04-22	165

Table: Doctor

Doctor_No	Doctor_Name	Speciality	Fees
122	M. K Singh	Dentist	200
165	R. K. Tiwari	Neurology	500
325	V. K. Chauhan	Surgery	700
502	N. Singh	Nephrology	400
530	K. P. Sinha	Urology	100

- i) Make the column Patient\_No as Primary key.  
 ii) Display patient name and its corresponding details of doctor.  
 iii) To increase the fees of all doctors by adding 50.

[1]

[2]

[2]

- c) Consider the tables given below.

Table : STOCK

Itcode	Itname	Dcode	Qty	unitpr	Stkdate
444	Drawing Copy	101	10	21	31-June-2009
445	Sharpener Camlin	102	25	13	21-Apr-2010
450	Eraser Natraj	101	40	6	11-Dec-2010
452	Gel Pen Montex	103	80	10	03-Jan-2010
457	Geometry Box	101	65	65	15-Nov-2009
467	Parker Premium	102	40	109	27-Oct-2009
469	Office File	103	27	34	13-Sep-2010

1. Identify primary key in the table Stock given above.  
 2. Write MySQL query to add a column Section with data type varchar and size 15 in the table Stock.

[1]

[2]

- Q 7 a) What benefit does an e-business offers to the customers?  
 b) How has society benefited from e-governance? Give URL of one of the commonly used e-Governance portals.  
 c) Mr. Kartik is working as a Manager in Surbhi Telecomm. He wants to create the forms with the following functions. Choose appropriate controls from Text Field, Text Area, Label, Radio Button, Check Box, List Box, Combo Box & Command Button and write in the third column.

[1]

[2]

[2]

SNo	Control Used to	Control
1	a message "Enter Name " in front of a Text Field	
2	An input for Selecting Type of Connection	
3	To display Details of Connection Type in multiple lines	
4	Clear the form	