# SAMPLE PAPER
## Informatics Practices
## 2014-2015

**Subject-Informatics Practices**                                     **Time-**          **3hrs**
**Class   : -12<sup>th</sup>  Commerce**                              **Max<sup>m</sup> Marks-**    **70**
**Date    : 16<sup>th</sup> December 2014**
**Answer all the questions:-**

| | | | |
|---|---|---|---|
| Q1 | (i) | Mr Saxsena a MD of Alpha Industries wants to set up his branches in the different cities in the country. His corporate office is in Mumbai and Head office is in New Delhi and registered office is in Ahmedabad .He is confused regarding the type of network which is required to connect his different offices located in different cities and connect different computers in different offices. Suggest him the type of network and communication medium he should use. | 2 |
| | (ii) | What is Master Slave network and peer to peer Network? | 1 |
| | (iii) | What is UNICODE? Name any two Indian language, which is supported by by UNICODE? | 1 |
| | (iv) | Name any two threats to Network Security? | 1 |
| | (v) | Write any four features of Networking? | 2 |
| | (vi) | Define the term Repeater and Switch? | 1 |
| | (vii) | Mention any two points of difference between Freeware Software and Shareware Software? | 1 |
| | (viii) | Given below the URL:<br>http:// www.dcs.com/teachers.html<br>Identify the different parts of it? | 1 |

Q2   (i)   Write the following code using if…else?                                    2

```
int a =1;
switch(a){
        case 1 :        System.out.println("a is one");
                        break;
        case 2 :        System.out.println("a is two");
                        break;
        case 3 :        System.out.println("a is three");
                        break;
        default :       System.out.println("a is not an even number");
                        break;
        }
```

| | | | |
|---|---|---|---|
| | (ii) | Mr Kapoor has its office address consist of 4 different lines which he wants to enter in textarea in different lines. Which property of textarea he should use for the same. | 1 |
| | (iii) | Which tag is used to create row and cells in a table ? | 1 |
| | (iv) | Which tag is used to create hyperlink in a web page? | 1 |
| | (v) | Mention any four points of difference between HTML and XML? | 2 |
| | (vi) | What will be the value of x and y after execution of the following code? | 2 |

```
int x, y=30;
for(x=7;  x<=15;  x++)
{
        y-=x;
}
```

JOptionPane.showMessageDialog(null,"VALUE OF X A ND Y IS"+ x+" "+y);

(vii)    Differentiate between do loop and while loop?      1

Q3    (i)    What is the difference between Primary Key and Unique Key?      1

(ii)    Mr Raman wants to add a column Destination in an existing table FLIGHT.      1
Suggest him by writing the command for the same?

(iii)    A numeric column Average contains 1234.7689. Write a command to round Average      1
up to 2 decimal places?

(iv)    Which command is used to see the list of tables created in a database?      1

(v)    A table Items contains 10 rows and 5 columns and table sales contains 3 rows and 7      1
Columns. What will be degree and cardinality of cross join of two tables.

(vi)    There is a column City in a table Director. Following two statements are giving      1
Different output. What is the reason for that.
SELECT COUNT(*) FROM DIRECTOR;
SELECT COUNT(CITY) FROM DIRECTOR;

(vii)    Write the name of the method used to disable any radio button?      1

(viii)    What do you mean by implicit and explicit transaction?      2

(ix)    What is an effect of DDL command in a transaction?      1

Q4    (i)    Define the term method overloading with suitable example?      2

(ii)    How Actual parameter is different from Formal parameter?      1

(iii)    What is the difference between length( ) and capacity( ) method?      1

(iv)    Write sample code to reverse the number 45321 and store it in a variable revStr      2
and display it in a separate Message Box or Dialog Box?

(v)    What will be the content of JTextField1 when following code snippet will execute.      2

```
int  num1=7;
int num2=1;
int sum=1;
        while(num1>=num2)
        {
              sum = num1*sum;
              num1++;
        }
        JTextField1.setText(Integer.toString(sum);
```

(vi)    (a)    Given below the class School and a teacher. Identify the line number which      2
will show error? Also justify the reason.

```
class School
{
        int tcode;
        private String Name;
        protected double salary;
        School()
        {
              tcode=1001;
              Name = "Ramanujam";
```

```
                    salary = 3000.90;
            }
    }
    class Teacher extends School
    {
            public void show()
            {
            System.out.println("    "+tcode);//   LINE 1
            System.out.println("    "+name);//    LINE 2
            System.out.println("    "+salary);//   LINE 3
            }
    public static void main(String h[])
            {
                    Teacher teach=new Teacher();
                    teach.show();
            }
    }
```

(vii)  Given below the form for Maturity amount calculator:



(a) Write sample code for calculate button to display rate of interest as per rate given in     3
    the table and calculate maturity amount.
    (MaturityAmt = amount+amount*duration*rate_of_Interest*12 )

| Bank | Rate of Interest | Customer Type |
|------|------------------|---------------|
| SBI  | 9%               | For SR citizen give extra 2% discount |
| ICICI | 8.5%            |               |
| HDFC | 8%               |               |

(b) Write sample code for clear button to clear all entries and selection.     1

(c) Write code for close button to close an application.   1

Q5   (a) Given below a column Name of Table : PetroPump   2

PetrolPump

| Name |
|---|
| Raj Kamal |
| Neel Kamal |
| Indian Oil |
| Sabarmati |
| Bharat Gas |
| Reliance Green |

Write Query in MySql for the following:

(i) Display names of the petrol pump which contains 'G' as any character.   1

(ii) Display first three characters of the Name.   1

(iii) Based upon the table given above what will be an output of the Query:   1

     mysql-> Select length(concat(Name,"Serves Nice Petrol"));

(b) Consider the following table '**DOCTOR**' with details about different doctors
Working in DriveIn Hospital. Write command of SQL for (i) to (vi) and output/error
for (vii).

## Doctor

| Doc_Id | Reg_No | Doc_Name | Department | Days | Gender | Fees |
|---|---|---|---|---|---|---|
| D001 | GJ101 | Dr S Patel | Surgery | TTS | M | 2500 |
| D002 | BR250 | Dr S. S Prasad | Medicine | MWF | M | 3400 |
| D003 | DL132 | Dr S Lata | Pediatrics | MWF | F | 4500 |
| D004 | GJ523 | Dr J Singh | Surgery | TTS | M | 5500 |
| D005 | GJ225 | Dr A K Gupta | Medicine | MWF | F | 7000 |
| D006 | RJ101 | Dr S Karmakar | Pediatrics | TTS | M | 2000 |

(a) Display sum, average of fees of Doctors Department wise.   1

(b) Display the Doc_Id, Reg_No and Days of Doctors whose $4^{th}$ character of Name is S.   1

(c) Display Doc_Id, Reg_No and fees of Doctors of Surgery or Pediatrics Department   1
Who are male.

(d) Increase the fees of all doctors of Surgery department by 5%.   1

(e) Display the number of different departments.   1

(f) Add a column Service tax of data type and Size as float (8,2).   1

(g) DELETE * FROM DOCTOR WHRE DAYS = "TTS";   1

Q6   (a) Write MySQL command to create the table "STOCK" with the following   2
structures and constraints.

### Table: Stock

| Column_Name | Data_Type(Size) | Constraint |
|---|---|---|

| Goods_Id | Int(20) | Primary Key |
|---|---|---|
| Goods_Name | Varchar(20) | |
| QTY_of_Good_Received | Int(30) | |
| Qty_of_Good_Issued | Int | |
| Date_of_Issue | | |

(b) What is an use of "Distinct" keyword in MySQL? 1

(c) In a Database – STOCK and SALES are two tables with the following Information. Write MySQL queries for (i) to (iii), based on tables STOCK and SALES:

**Table: STOCK**

| Goods_Id | Goods_Name | QTY_of_ Good_ Received | Qty_of_ Good_ Issued | Date_of_ Issue | Sales_ID |
|---|---|---|---|---|---|
| 1001 | Locks | 27 | 7 | 2014-12-27 | S01 |
| 1002 | Books | 45 | 5 | 2014-12-25 | S02 |
| 1003 | Sugar | 44 | 8 | 2014-12-15 | S03 |
| 1004 | Salt | 35 | 12 | 2014-12-09 | S04 |
| 1005 | Notebook | 20 | 9 | 2015-01-03 | S03 |

**Table: SALES**

| Sales_ID | Sales_Type | AMOUNT |
|---|---|---|
| S01 | Cash | 20000 |
| S02 | Credit | 15000 |
| S03 | Net banking | 18000 |
| S04 | Cash | 22000 |
| S05 | Credit | 17000 |

(i) To display the detail of good whose Sales_Type in sales table is CASH. 2

(ii) To display Goods_Id, Goods_Name, Sales_ID of all goods whose amount is Greater than 20000. 2

(iii) Display the detail of goods in stock whose sales id is "S03". 2

(d) Write the command in MySQL to delete all the records of goods in STOCK table. 1
Given above.

Q7 (a) Give domain names of any two Government web sites? 1

(b) Write any two Societal Impact of E-Learning? 2

(c) Write any two advantage of E-Governance and E-Business? 2