

Sample Paper 2015
Informatics Practices (065)

Class – XII

Time : 3 hrs.

MM:70

General Instructions:

- (i) All questions are compulsory
- (ii) Answer the questions after carefully reading the text.
- (iii) This question paper is divided into three sections. Section - A consists 10 marks.
- (iv) Section - B consists 25 marks,
- (v) Section - C consists 35 marks
- (vi) This question paper consists of 7 pages

SECTION – A (10 Marks)

QA Answer the following questions:

- A.1 Difference between Gateway and Bridge. (1)
- A.2 Mrs. Daya is a computer teacher in a school. She is delivering the lecture about the concept software in the class. She is explaining that a software which is absolutely free of cost and whose source code is available. Name the software. Name the software about which she is explaining. (1)
- A.3 Muskan is a student of XII class. She wants to send a message to her friend which is living in another country. But she is confused which communication media she will use. Help her for the same. (1)
- A.4 What is the difference between MAC address and IP address? (1)
- A.5 Write any two advantages of Star Topology on Bus Topology. (2)
- A.6 Explain the Following: (i) Python (ii) PHP (2)
- A.7 Expand the following terms: (i) OSI (ii) W3C (2)

SECTION – B (25 Marks)

QB Answer the following questions:

B.1 Name the conditional statement out of IF and Switch which supports relational and logical operators.

(1)

B.2 How many times does the following do...while loop get executed?

```
int y = 5;
```

(2)

```
do
```

```
{
```

```
    y += 2;
```

```
    System.out.println(" " + y);
```

```
} while( y < 20 );
```

B.2 What will be the contents of JTextarea1 after executing the following code:

(1)

```
JTextArea1.setText("INDIA\n IS \t IN ASIA");
```

(1)

B.3 Rewrite the following code fragment using switch :

(2)

```
if(ch == 'e')
```

```
    System.out.println( "Esha" );
```

```
if(ch == 'w')
```

```
    System.out.println( "Wilson" );
```

```
if(ch == 'n')
```

```
    System.out.println( "Nitin" );
```

```
if(ch == 's')
```

```
    System.out.println( "Sachin" );
```

```
else
```

```
JOptionPane.showMessageDialog(null, "unknown");
```

B.4 What will be the output of the following code:

(1)

```
StringBuffer city = new StringBuffer("Panipat");
```

```
StringBuffer string = new StringBuffer();
```

```
string.append(new String(city));
```

```
string.insert(0,"in Haryana");
```

```
string.out.println(string);
```

- B.5 Given a package named EDU. Student, how would you import a class named Test contained in this package? Write one line statement. (1)
- B.6 We would like to make a member of a class visible in all subclasses regardless of what package they are in. Which one of the following keywords would achieve this? (1)
- (a)private (b)protected (c) final (d) public (e) None of these
- B.7 What will be the output of following : (2)
- ```
class STUDENT () {
int RL;
String NAME;
double marks;
public STUDENT (int R, String N, double m) {
System.out.println("I am in Constructor ");
RL=R;
NAME=N;
Marks=m;
System.out.println("I am going out from Constructor ");
}
void show () {
System.out.println("I am displaying ");
System.out.println(RL + " " + NAME+ " " + marks);
}
public static void main (Strirng args [])
{
STUDENT obj = new STUDENT ();
}
}
```
- B.8 Write any two differences between method overloading and method overriding. (2)
- B.9 What classes are used for database connectivity? (1)
- B.10 Which method is used to count all the row from a table named "TABLE1"? (1)
- B.11 Differentiate between HTML and XML. (2)

- B.12 Write a function in java that takes two numbers as parameters and swap their values. (2)
- B.13 ABC School uses the following interface built in java to check the eligibility of a student for a particular stream from science, commerce and humanities. The user first enters the total percentage and selects the desired stream by selecting the appropriate option button. An additional 5% is marks is given to students of NCC. Write Java Code for the following
- B.13.1 On Action event of the button 'Calc Per' Net percentage of the student is calculated and displayed in the appropriate text filed. Net percentage is same as that of the actual percentage if the student doesn't opts for NCC otherwise 5% is added to actual percentage. (2)
- B.13.2 On Action event of the button 'Result', the application checks the eligibility of the students. And display result in the appropriate text field. Minimum percentage for science is 70, 60 for commerce and 40 for humanities. (2)
- B.13.3 On the click event of the close button the application gets closed. (1)

### SECTIOB – C ( 35 Marks)

QC Answer the following questions:

- C.1 Write SQL statement to create the table "EMPLOYEE" given below as per specification. (2)

| Column Name | ID          | Name    | Sal    | City          |
|-------------|-------------|---------|--------|---------------|
| Data type   | Integer     | Varchar | Double | Varchar       |
| Size        | 6           | 30      |        | 30            |
| Constraint  | Primary key |         |        | Default Delhi |

- C.2 In a database there are two tables:

**Table ITEM:**

| Icode | IName    | Price |
|-------|----------|-------|
| 101   | Chair    | 500   |
| 202   | Computer | 20000 |
| 303   | Cooler   | 450   |
| 404   | RO       | 7000  |

## Table **BRAND**:

| <b>ICode</b> | <b>Brand</b> |
|--------------|--------------|
| 101          | Neelkamal    |
| 202          | HP           |
| 303          | Kanstar      |
| 404          | Kent         |

C.2.1 To Display ICode, IName and Corresponding Brand of those Items, whose price is between 450 and 500 (both values inclusive) (1)

C.2.2 To Display ICode, Price and BName of the item which has IName as "RO". (1)

C.2.3 To increase the price of all items by 25%. (1)

C.3 Rama is not able to change a value in a column to NULL. What constraint did she specify when she created the table. (1)

C.4 The Doc\_Name Column of a table Hospital is given below:

| <b>Doc_Name</b> |
|-----------------|
| Ragav           |
| Wilson          |
| Vicky           |
| Deepak          |
| Paras           |

Based on the information, find the output of the following queries:

C.4.1 `SELECT Doc_Name FROM HOSPITAL WHERE Doc_Name like "%y" ;` (1)

C.4.2 `SELECT Doc_Name FROM HOSPITAL WHERE Doc_Name like "%e%" ;` (1)

C.5 Pooja, a student of class XII, created a table "ITEM". Price is a column of this table. To find the details of items whose prices have not been entered she wrote the following query: (1)

**SELECT \* FROM ITEM WHERE PRICE = NULL;**

Help Pooja to run the query by removing the errors from the query and overwriting it.

C.6 Wilson is not clear about the difference between the following two statements:

C.6.1 `SELECT (12 - 4) * 10;` (1)

C.6.2 `SELECT (12 - 4) * 10 FROM empl ;` (1)

Help him understand the difference between these two statements.

C.7 Write the resulting output of the following:

C.7.1 `SELECT INSTR(' GOD IS GREAT ' , 'OD');` (1)

C.7.2 `SELECT ROUND(76.978,2);` (1)

C.7.3 `SELECT TRUNCATE(1887.996,1);` (1)

C.7.4 `SELECT SQRT(400) + 1000;` (1)

C.8 Consider the following tables ACTIVITY and COACH. Write SQL commands for the following statements.

**TABLE : ACTIVITY**

| A code | Activity Name | Stadium    | Participants Num | Price Money | Schedule Date |
|--------|---------------|------------|------------------|-------------|---------------|
| 1001   | Relay 100 x 4 | Star Annex | 16               | 10000       | 23-Jan-04     |
| 1002   | High Jump     | Star Annex | 10               | 12000       | 12-Dec-03     |
| 1003   | Shot Put      | SuperPower | 12               | 8000        | 14-Feb-04     |
| 1005   | Long jump     | Star Annex | 12               | 9000        | 01-Jan-04     |
| 1008   | Discuss Throw | SuperPower | 10               | 15000       | 19-Mar-04     |

**TABLE : COACH**

| Pcode | Name          | Acode |
|-------|---------------|-------|
| 1     | Ahmad Hussain | 1001  |
| 2     | Ravinder      | 1008  |
| 3     | Janila        | 1001  |
| 4     | Naaz          | 1003  |

Give the output of the following SQL queries:

C.8.1 To display the names of all activities with their Acodes in descending order. (1)

C.8.2 To display sum of PriceMoney for the Activities played in each of the Stadium separately. (1)

C.8.3 To display the coach's names and Acodes in ascending order of Acode from the table COACH. (1)

C.8.4 To display the content of all activities for which ScheduleDate is earlier than 01-01-2004 in ascending order of ParticipantsNum.

(1)

C.8.5 SELECT COUNT(DISTINCT ParticipantNum) FROM ACTIVITY;

(1/2)

C.8.6 SELECT MAX(ScheduleDate), MIN(ScheduleDate) FROM ACTIVITY;

(1/2)

C.8.7 SELECT Name, ActivityName FROM ACTIVITY A, COACH C WHERE A.Acode = C.Acode AND A.ParticipantNum = 10;

(1/2)

C.8.8 SELECT DISTINCT ParticipantNum FROM ACTIVITY;

(1/2)

C.9 What is the difference between Drop Table command and Delete command?

(1)

C.10 How Primary Key is differ from Unique?

(2)

C.11 Difference between WHERE and GROUP BY clause.

(1)

C.12 What are the different categories of SQL commands?

(2)

C.13 In a database there are two tables 'CARDEN' and 'CUSTOMER' shown below-

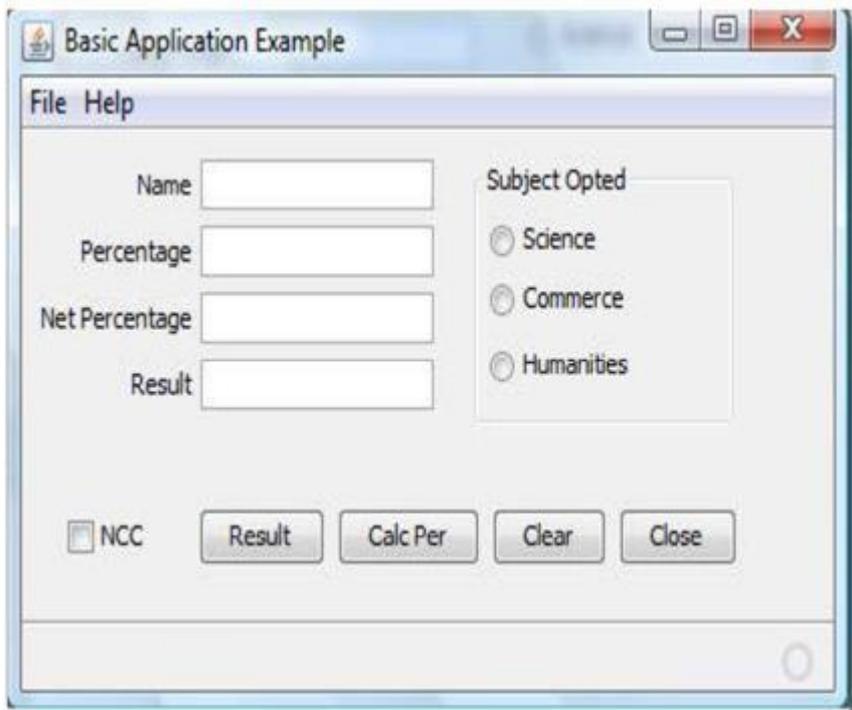
**TABLE : CARDEN**

| Vcode | VehicleName | Make     | Color  | Capacity | Charges |
|-------|-------------|----------|--------|----------|---------|
| 501   | A-Star      | Suzuki   | RED    | 3        | 14      |
| 503   | Indigo      | Tata     | SILVER | 3        | 12      |
| 502   | Innova      | Toyota   | WHITE  | 7        | 15      |
| 509   | SX4         | Suzuki   | SILVER | 4        | 14      |
| 510   | C Class     | Mercedes | RED    | 4        | 35      |

**TABLE : CUSTOMER**

| Ccode | CName       | Vcode |
|-------|-------------|-------|
| 1001  | Hemant Sahu | 501   |
| 1002  | Raj Lal     | 509   |
| 1003  | Feroza Shah | 503   |
| 1004  | Ketan Dhal  | 502   |

C.13.1 Name the columns which can be made 'Foreign Key' in both the tables.



(1)

C.13.2 To display all details of vehicle "Innova".

(1)

C.14 Mrs. Renu has created a Database "Teachers" in MySQL. She has created many tables in this database. Now she wants to show the name of the existing table from the database. Which command she will use for the same.

(1)

C.15 What Social impact does e-Governance have on society?

(1)

C.16 Write two important features of e-Business. Give two most commonly used e-Business sites.

(2)

C.17 Mr. John is creating a Data Entry Form for new admission in RED School. Help him to choose most appropriate controls from the List Box, Combo Box, TextField, TextArea, Radio Button, Check Box, Label and Command Button for the following entries from candidate.

(2)

|        |                                                                       |  |
|--------|-----------------------------------------------------------------------|--|
| C.17.1 | To enter the name of the student                                      |  |
| C.17.2 | Choose more than one subjects which a candidate studied in last class |  |
| C.17.3 | An input for entering remarks.                                        |  |
| C.17.4 | An input for accepting Gender.                                        |  |