

Half Yearly Examination 2011-12

Kaziranga English Academy

Class-XII

INFORMATICS PRACTICES(065)

M.Marks-70

Time-3Hrs

- 1 (a) Tara Nathani wants to upload and download files from/to a remote internet server, write the name of the relevant communication protocol, which will let her do the same. 1
- (b) Two doctors in the same room have connected their Palm Tops using Bluetooth for working on a Group presentation. Out of the following, what kind of Network they have formed? 1
LAN, MAN, PAN, WAN
- (c) Arrange the following communication channels in ascending order of their data transmission rates. 1
Ethernet Cable, Optical Fiber, Telephone Cable, Co-axial Cable
- (d) Which of the following is not a characteristic of Open Source Software? 1
- Its source code is available for modification
 - It is owned by a company or an individual
 - It can be downloaded from internet
- (e) Jai Khanna is confused between the terms Domain Name and URL. Explain the difference with the help of appropriate examples of each. 2
- (f) Define any two threats to Network Security. 2
- (g) Differentiate between Star and Bus Topology of networks. 2
- Q.2 (a) Select char(77,121,83,81,76): What will be the output? 1
- (b) Write the purpose of the following statement; 1
`iTextField1.setText("Informatics",substring(3));`
- (c) What is the purpose of default clause in a switch statement? 1
- (d) Rama is not able to change a value in a column to NULL. What constraint did she specify when she created the table? 1
- (e) Write a method in JAVA that takes a number as parameter and returns its square. 2
- (f) What will be the values of x and y after execution of the following code: 2
- ```
int x, y = 0;
for(x=1; x <=5; ++x)
 y = x++;
 --y;
```
- (g) Distinguish between a Primary key and Candidate key with the help of suitable example of each. 2
- Q.3 (a) Which MySql command is used to drop any table belongs to a database. 1
- (b) While creating a table 'Item' Rakesh forgot to add a column Item\_Price in the table. Give name of command to add this column in the table. 1
- (c) What is the purpose of following SQL query : 1

SELECT AVG(Salary) FROM Emp;

- (d) Sanjeev is not able to reduce the salary of the Employee. Which constraint has he used while he creating table? 1
- (e) A table 'Customers' in a database has 5 columns and no rows in it. What is its cardinality? What will be its cardinality if 4 rows are added in the table? 2
- (f) The LastName column of a table "Directory" is given below:

**LastName**  
Batra  
Sehgal  
Bhatia  
Sharma  
Mehta

Based on this information, find the output of the following queries: 2

- i) SELECT lastname FROM Directory WHERE lastname like "\_a%";
- ii) SELECT lastname FROM Directory WHERE lastname not like "%a";

- (g) Predict the output of following queries- 2
- (I) Select concat(concat('inform', 'atics'), 'practices');
- (II) Select round(29.51), truncate(29.51);

- Q.4 (a) What will be the content of jTextField1 after executing the following code: 2
- ```
int Num = 6;
Num = Num + 1;
If ( Num > 5)
jTextField1.setText(Integer.toString(Num));
else
jTextField1.setText(Integer.toString(Num+5));
```
- (b) What will be the value of jTextField1 after execution of following code : 1
- ```
jTextField1.setText("Informatics".substring(1,5));
```
- (c) What is this object? 1
- (d) Rewrite the following code fragment using switch : 2

```
if(ch == 'E')
 east++;
if(ch == 'W')
 west++;
if(ch == 'N')
 north++;
if(ch == 'S')
 south++;
else
 JOptionPane.showMessageDialog(null, "unknown");
```

(e) The following code has some error(s). Rewrite the correct code underlining all the corrections made:

2

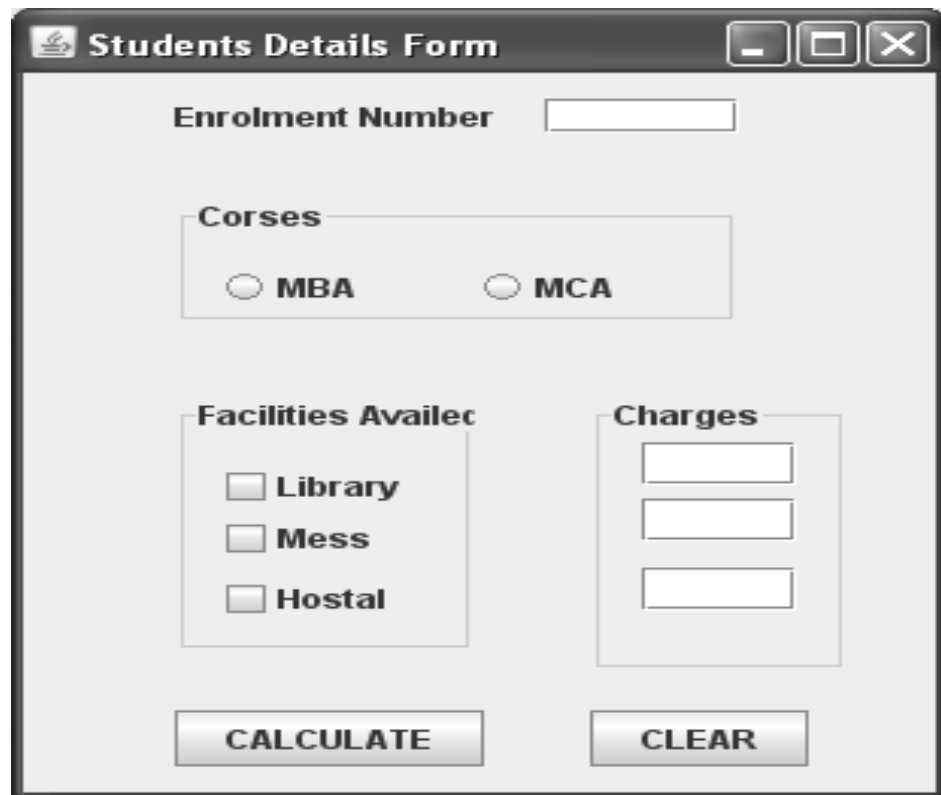
```
int sum; value; inct;
int I;
for(i = 0, i <= 10, i++)
 sum += i;
inct ++;
```

(f) Rewrite the following code using for loop:

2

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

(g) Well Tech Institute offers two post graduate courses, one in computers and one in management. The students can avail certain optional facilities. The basic interface for accepting the details of facilities availed by a student is as follows:



Write the code and the event procedures for incorporating the following functionality:

- (i) The library facility should be selected by default. And the default course choice should be Computers course. 1
- (ii) When user clicks clear button all the text fields should be cleared. 1
- (iii) Given that the charges for library , mess and hostel are RS 500, RS 1500 and Rs 2000 respectively per month , write java code for Calculate Button that calculates and displays the charges per semester, for the facilities 4

Q.5 (a) Explain the purpose of DDL and DML commands used in SQL. Also give two examples of each. 2

(b) Write output of the following queries:

2

- (i) `SELECT Date(Curdate());`
- (ii) `SELECT CONCAT(lower("Class"), upper("xii"));`

(c) Consider the table GRADUATE given below. Write commands in SQL for (i) to (iii).

Table: GRADUATE

| No. | Name    | Stipend | Subject               | Average | Div |
|-----|---------|---------|-----------------------|---------|-----|
| 1   | Karan   | 400     | Accounts              | 68      | 1   |
| 2   | Divakar | 450     | Informatics Practices | 68      | 1   |
| 3   | Divya   | 300     | English               | 62      | 2   |
| 4   | Arun    | 350     | Accounts              | 63      | 1   |
| 5   | Sabina  | 500     | Mathematics           | 70      | 1   |
| 6   | John    | 400     | English               | 55      | 2   |
| 7   | Robert  | 250     | Accounts              | 64      | 1   |
| 8   | Rubina  | 450     | Mathematics           | 68      | 1   |
| 9   | Vikas   | 500     | Informatics Practices | 62      | 1   |
| 10  | Mohan   | 300     | Mathematics           | 57      | 2   |

- (i) List the names of those students who have obtained DIV 1 sorted by NAME. 2
- (ii) To count the number of students who are either Accounts or Informatics Practices graduates. 2
- (iii) To insert a new row in the graduate table:  
11, "Sajal", 300, "English", 75, 1

(iv) To drop the table GRADUATE 1

Q.6 (a) Create a table Customer as per following Table instance chart. 2

| Column Name | Cust_ID | Cust_Name | Cust_Add1 | Cust_Add2 | PinCode | Cust_Phone |
|-------------|---------|-----------|-----------|-----------|---------|------------|
| Data Type   | Number  | Varchar   | Varchar   | Varchar   | Number  | Varchar    |
| Length      | 7       | 30        | 20        | 30        | 6       | 10         |

(b) In a database there are two table 'Customer' and 'Bill' as shown below:

**CUSTOMER**

| CustomerID | Customer Name    | Cust Address           | Cust Phone |
|------------|------------------|------------------------|------------|
| 1          | Akhilesh Narang  | C4, JanakPuri, Delhi   | 9811078987 |
| 2          | Purnima Williams | B1, Ashok Vihar, Delhi | 9678678711 |
| 3          | Sumedha Madaan   | 33, South Ext., Delhi  | 6767655412 |

**BILL**

| Billno. | CustID | BillAmt |
|---------|--------|---------|
| 1       | 2      | 12222   |
| 2       | 1      | 23232   |
| 3       | 2      | 34342   |

(i) How many rows and how many columns will be there in the Cartesian product of these two tables? 1

(ii) Which columns in the 'Bill' table is the foreign key? 1

(c) Consider the tables given below:

**Table: STOCK**

| Itcode | Itname       | Dcode | Qty | Unitpr | StkDate     |
|--------|--------------|-------|-----|--------|-------------|
| 444    | Drawing copy | 101   | 10  | 10     | 31-Jun-2009 |
| 445    | Sharpner     | 102   | 25  | 2      | 12-May-2010 |
| 465    | Office File  | 101   | 40  | 10     | 01-Apr-2010 |
| 457    | Pencil       | 103   | 80  | 2      | 02-Feb-2010 |
| 434    | Pen          | 101   | 50  | 5      | 10-Nov-2010 |
| 452    | Geometyr Box | 102   | 30  | 15     | 12-May-2010 |

|     |        |     |    |   |             |
|-----|--------|-----|----|---|-------------|
| 456 | Eraser | 103 | 30 | 3 | 11-Jul-2010 |
|-----|--------|-----|----|---|-------------|

Table: DEALERS

| Dcode | Dname                     | Location            |
|-------|---------------------------|---------------------|
| 101   | Vikas Stationers          | Lanka Varanasi      |
| 102   | Bharat Drawing Emporium   | Luxa Varanasi       |
| 103   | Banaras Books Corporation | Bansphatak Varanasi |

With reference to these tables, write commands in SQL for (i) and (ii) and output for (iii) below:

- (i) To display amount that has been spent to purchase the office file and sharpner. 2  
(ii) To display all the items of Vikas Stationers. 2  
(iii) SELECT DCODE, COUNT(QTY),AVG(UNITPR) FROM STOCK GROUP BY DCODE; 2

- 7 (a) How does e-business improve customer satisfaction- Write one point. 1  
(b) How has our society benefited from e-governance? Write 2 points. 2  
(c) Vijayan works for the Customs Department. He wishes to create controls on a form for the following functions. Choose appropriate controls from Text box, Label, Option button, Check box, List box, Combo box, Command button and write in the third column. 2

| Sno | Control used to:                  | Control |
|-----|-----------------------------------|---------|
| 1   | Enter last name                   |         |
| 2   | Enter Gender                      |         |
| 3   | Choose City from a list of cities |         |
| 4   | Submit Form                       |         |