

CBSE Sample Paper

Sub –Informatics Practices

Class-XII M.Marks-70 Time- 3 hours

Note:

- (i) All questions are compulsory.
- (ii) Answer the questions after carefully reading the text.

- 1.(a) Why is a switch called an intelligent hub? 1
- (b) What is the use of Repeater in a Network? 1
- (c) Mr. Daya Shankar is planning in his office building to connect all computers, each spread over within distance of 50 meters. Suggest the economical cable type having high speed data transfer rate which can be used to connect these computers. 1
- (d) Expand the following terms: 2
- OSS , ODF , FLOSS, BOSS
- (e) Define any two threats to Network Security. 2
- (f) Write two differences between MAN and WAN. 1
- (h) What is MAC address? What is the difference between MAC address and an IP address? 2
- 2.(a) Write one example of an exit-controlled loop. 1
- (b) Miss. Maonka wants to display "Study properly,after all this is your life" in a TextArea named lifeTA. Write the command in java to do that. 1
- (c) Write one difference between switch statement and else-if statement. 1
- (d) What is difference between the use of JTextField and JTextArea in a form? 1
- (e) Which property of palette JComboBox is used to enter the list of items while working in NetBeans? 1
- (f) What will be the content of the JTextArea1 after executing the following code: 2
- ```
for (int i=2 ; i<4; i+=2)
{
 JTextArea1.setText(JTextArea1.getText() + " " + Integer.toString (i * i * i));
}
```
- (g) Write Java code that accepts value for a number (n) in JTextField1 and after finding factorial of it to be displayed in JTextField2. 2
- (h) Write on difference between while loop and do...while loop. 1

- 3.(a) Which command is used in MySQL to make the changes in database permanent? 1
- (b) While creating a table-Master , Mayuri set Master\_ID as primary key. Lather she found it is necessary to keep primary key in the table. Give the statement which she should write to drop the primary key constraint from the table-Master. 1
- (c) Give one characteristic of Foreign Key. 1
- (d) A table – TEAMINFO has cardinality 13 and degree 7,how many numbers of rows present in the table? 1
- (e) Write the output produced by the following MySQL commands? 2
- (i) SELECT ROUND(543.5694,2),TRUNCATE(543.5694,2);
- (ii) SELECT LEFT("Examination",4),MID("Examination",6,3);
- (f) Distinguish between COMMIT and ROLLBACK. 2
- (g) Mrs. Latika is using table-STUDENTS with following columns :
- RNO, NAME, DOB , ADDRESS
- She wants to delete all the names from the table-STUDENTS where 'K' is present as third character in the Column-NAME or whose DOB is "1977-05-20". 2
- 4.(a) Define Data Encapsulation in context of Object Oriented Programming. 1
- (b) What will be the content of jTextField1 after executing the following code: 2
- ```
int Jac=11;
Jac = Jac – 10;
if (Jac != 10)
    Jac= Jac – 1;
    jTextField1.setText(Integer.toString(Jac));
else
    Jac= Jac – 1;
    jTextField1.setText(Integer.toString(Jac));
```
- (c) Rewrite the following programme code using if statement: 2
- ```
switch(no){
case 0: Rs="Zero"; break;
```

```

case 10: Rs="Ten"; break;

case 100: Rs="Hundred" ;break;

case 1000: Rs="Thousand"; break;

default: Rsr="Not Valid" }

```

(d) Rewrite the following code segment using while loop:

2

```

for (int i=12; i>=0 ; i -=2)

System.out.println(i);

```

(e) What will be displayed in jTextField1 and jTextField2 after the execution of the following code?

2

```

int a,b,c;

a=25;

b=++a;

c= a + b++;

jTextField1.setText(Integer.toString(c));

jTextField2.setText(Integer.toString(b));

```

(f) What will be the contents of S1 after the following code is executed?

1

```

String S1,S2,S3;

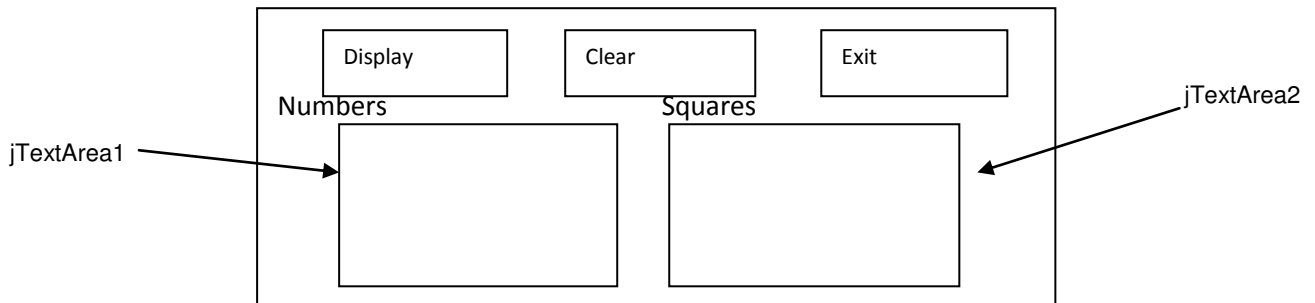
S2="Calculative";

S3="Mind";

S1=S2.concat(S3);

```

(g) Miss. Anuja is a student of Class-XII. She created the following GUI in NetBaens. Help her to write code for the following:



- (i) To display the series of odd numbers between 1 to 33 in jTextArea1 and square of each number in jTextArea2. 3
  - (ii) To clear both text areas. 1
  - (iii) To terminate the application on the click of Exit button. 1
5. (a) What do you understand by primary key and candidate key. 1
- (b) Write the output of following SQL queries. 2
- i. SELECT ROUND(6.88,2) ;
  - ii. SELECT MID('Make your surrounding clean ',4,16) ;
  - iii. SELECT DAYOFMONTH ('2014-11-12');
  - iv. SELECT TRUNCATE (7.777,1);
- (c) Consider the table CRICKET given below .Write the commands in SQL for (i) to (iv) and output for (v) to (viii). 6

**TABLE CRICKET**

| S.NO | PLAYER           | AGE | CITY     | RUNS  | WICKETS |
|------|------------------|-----|----------|-------|---------|
| 1    | Sachin Tendulkar | 39  | Mumbai   | 15216 | 105     |
| 2    | Virender Sehwag  | 37  | Delhi    | 6244  | 82      |
| 3    | M.S.Dhoni        | 32  | Rachi    | 5219  |         |
| 4    | Rahul Dravid     | 37  | Banglore | 9325  | 11      |
| 5    | Yuvraj Singh     | 32  | Mumbai   | 8244  | 126     |

- (i) To display all the information about the players who not lived in Mumbai city
- (ii) To display Players name, age and runs who have scored more than 8000 runs and age above 35
- (iii) To display Player name and city of those players who have not taken any wickets
- (iv) To count the numbers of players of each city
- (v) Select Min(age) from Cricket;
- (vi) Select Max(runs )from cricket;
- (vii) Select Count( Distinct (city)) from cricket;
- (viii) Select Sum(Runs) from cricket where city="Mumbai";

**SECTION-C**

- 6 (a) Write a SQL command to create the table 'Passenger' with the following structure 2

**TABLE :PASSENGER**

| Field Name | Filed Type | Constraint |
|------------|------------|------------|
|------------|------------|------------|

|          |             |             |
|----------|-------------|-------------|
| P_no     | Varchar(8)  | Primary Key |
| P_name   | Varchar(25) | Not Null    |
| Train_No | Integer(5)  |             |
| Age      | Integer(3)  | Not Null    |
| Class    | Varchar(8)  |             |
| Fare     | Integer(4)  |             |

(b) In the database, there are two tables, "Customer" and "Bill" as shown below:

2

**CUSTOMER**

| CUST_ID | C_NAME | CITY    | PHONE      |
|---------|--------|---------|------------|
| 1       | Ayush  | Panipat | 9812015367 |
| 2       | Sanjay | Rohtak  | 9466623546 |
| 3       | Rajeev | Sonepat | 9616254447 |

**BILL**

| Bill_No | Bill_Dt    | Cust_Id | Bill_Amt |
|---------|------------|---------|----------|
| 1       | 2010.11.05 | 2       | 2400     |
| 2       | 2010.08.10 | 1       | 1200     |
| 3       | 2010.09.07 | 3       | 1500     |
| 4       | 2010.12.23 | 1       | 1800     |
| 5       | 2010.10.17 | 2       | 2000     |

- How many rows and columns will be there in the Cartesian product of these two tables.
- Identify the foreign key column in the table bill.

1+1

(c) Consider the tables Student and House given below:**HOUSE**

|        |            |
|--------|------------|
| H_CODE | HOUSE_NAME |
|--------|------------|

|    |              |
|----|--------------|
| H1 | VIRJANAND    |
| H2 | SHARDHANANAD |
| H3 | DAYANAND     |

STUDENT

| ADM_NO | NAME   | CLASS | H_CODE |
|--------|--------|-------|--------|
| 1001   | ANKITA | VII   | H2     |
| 1002   | RAHUL  | IX    | H1     |
| 1003   | SAHIL  | VII   | H1     |
| 1004   | ANUJ   | X     | H3     |
| 1005   | DEEPTI | IX    | H2     |

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

2+2+1

- (i) Display the Adm\_No, Student Name and House name of the students of class VII.
- (ii) Count the numbers of student of SHARDHANANAD house
- (iii) Select House\_Name, Count(\*) from student,house where student.H\_code=house.H\_Code group by H\_Code;

Q7 (a) How does e-governance help in reducing corruption ? Write two points. 1

(b) What benefits E-business offers to the Customers? 2

(c) Anu work for a company. He wishes to create control on a for the following functions Choose appropriate controls from Textbox, Lable, Radio Button, Check Box, ListBox, Command Button and written in the third column. 2

| S.NO | CONTROL USED TO      | CONTROL |
|------|----------------------|---------|
| 1    | Enter Employee Name  |         |
| 2    | Gender               |         |
| 3    | Select Employee Type |         |
| 4    | Submit the Form      |         |