Pre Board Examination 2016-17

Set 2

Std. 12

Informatics Practice

Max. Marks : 70

12-01-2017

Time : 3 hrs.

1. a) Write MySQL command to create the table 'Toyz' with the following structure and constraint: [2]

Table: TOYZ

COLUMN_NAME	DATATYPE(size)	CONSTRAINT
Toy_no	Int(10)	Primary Key
Toy_name	Varchar(20)	
Type	Char(10)	
Price	Decimal(8, 2)	
Colour	Varchar(15)	

b) In a Database – SAMS and VENDOR are two tables with the following information. Write MySQL queries for (i) to (iii), based on tables SAMS and VENDOR:

Table: SAMS

ICode	IName	Price	Colour	VCode
S001	Refrigerator	20000	Blue	P01
S002	Mobile Phone	45000	Black	P02
S003	LCD	60000	Silver	P03
S004	Washing Machine	12500	Smoke	P01
S005	Air conditioner	16000	White	P03

Table: VENDOR

VCode	VNAME
P01	Satish
P02	Manoj
P03	Subodh
P04	Jacob

i. To display ICode, IName and VName of all the vendors, who manufacture "Refrigerator". [2]

ii.   To display IName, ICode, VName and Price of all the products whose price is more than 20000. [2]

iii. To display vendor names and names of all items manufactured by vendor whose code is "P03". [2]

c) With reference to SAMS table, which column should be set as the Primary Key? Which column is the foreign key? Give reasons.   [2]

2. a) How is e-learning beneficial to students? Write one point.   [1]

b) List two features of a good interface.   [2]

c) Rakshita works for a school. She wishes to create controls on a form for the following functions.
Choose appropriate controls from Text field, Label, radio button, Check box, List box, Combo box, Button and write in the third column.   [2]

S. No	Control used to	Control
1	Enter Admission umber	
2	Select Stream	
3	Select Subjects	
4	Clear the Form	

3. a) Suresh is confused about Wi-Fi. Whether it is a   [1]

i.   Type of computer.
ii. Type of network cable.
iii. Set of popular technologies and standards for wireless computer networking.
iv. Set of computer programs that help people log in to the Internet.

b) It is a technology on computer networks whose purpose is to prevent unwanted networking connection according to some filtering/blocking rules. What is it?   [1]

c) Name these.   [2]
i.   It is a protocol/technology used to exchange files on Internet.
ii. It provides a set of rules to transfer files, videos, images etc over the world wide web.

d) Identify the topologies from the following.   [2]

    i.   In it the nodes form a circular path for data to travel and each node is connected to two other nodes.

    ii. In it devices are connected through hub and the control, hub is responsible for receiving and transmitting data from each note to destination.

e) Which of the following are open standards and which are proprietary standards?   [2]
    i) OGG   ii) WMA
    iii) DOC   iv) PNG

f) Give full forms of the following   [2]
    i) GNU   ii) FLOSS

4. a) While working in Netbeans, MsSurbhi wants to display 'Cleared' or 'Re-attempt required' message depending on the marks entered in jTextField. Help her to choose more appropriate statement out of 'If statement' and 'Switch statement'.   [1]

b) Write a statement to make jTextAreal as un-editable.   [1]

c) Which HTML tags are used for making a table and adding rows in a HTML document?   [1]

d) How is <UL> tag different from <OL> tag of HTML?   [1]

e) What will be the value of A and B after execution of the following code: [2]

int A = 100, B;

  for (B = 10; B<=12; B++)

  { A += B;

  }

      JOptionPane.showMessageDialog (this, "A: "+A +" B: "+B +" ");

f) Differentiate between HTML and XML.   [2]

g) Write Java code that takes the price of a pencil from jTextField1 and quantity of pencils from jTextField2 and calculates total amount as price* quantity to be displayed in jTextField3 and also find 10% tax amount to be displayed in jTextField4.   [2]

5. a) Write MySql command to display the list of existing databases. [1]

b) Mr. Arpit wants to remove all the rows from Inventory table to release the storage space, but he does not want to remove the structure of the table. What MySQL statement should he use? [1]

c) Give one difference between COMMIT and ROLLBACK commands used in MySQL.[1]

d) A table FLIGHT has 4 rows and 2 columns and another table AIRHOSTESS has 3 rows and 4 columns. How many rows and columns will be there if we obtain the Cartesian product of these two tables? [1]

e) Mr. Sidhu created two tables with DEPTNO as Primary Key in Table1 and Foreign Key in Table2. While inserting a row in Table2, Mr. Sidhu is not able to enter a value in the column DEPTNO. What could be the possible reason for it? [2]

f) Item code consists of 6 digits is stored in an integer type variable intItemcode. Ms. Smriti wants to store this item code in a String type variable called strItemCode. [2]

Write appropriate Java statement(s) to help her perform the same.

g) Mr. Manak is using a table with following columns: [2]

Name, Class, Course_Id, Course_name He needs to display names of students who have not been assigned any stream or have been assigned Course_name that ends with "economics".

SELECT Name, Class FROM Students

WHERE Course_name = NULL OR Course_name = "%economics";

Help Mr. Manak to run the query by removing the error and write the correct query.

6. a) What will be the content of jTextArea1 and TextField1 after the execution of the following statements? [2]

    i. jTextArea1.setText ("Go\tGreen\nIndia");
    ii. String Message = "All The Best";
        jTextField1.setText(" " + Message.length( )-6);

b) Rewrite the following program code using a while loop statement:
   [2]

```
int Last = Integer.parsInt (jTextField1.getText() );
for (int C=1; C <= Last; C++)
jTextArea1.setText (Interger.toString (C));
```

c) Observe the following code carefully and find which statement will never get executed in the
   code:
   [1]

```
int Count = 1;                          //Statement 1
do                                      //Statement 2
{                                       //Statement 3
If (Count< 15)                          //Statement 4
jTextField1.setText ("Jump") ;          //Statement 5
else                                    //Statement 6
jTextField1.setText ("Stop") ;          //Statement 7
Count += 4 ;                            //Statement 8
}                                       //Statement 9
while (Count<= 15) ;                    //Statement 10
```

d) Write Java statement to make jButton1 disabled.   [1]

e) What will be displayed in jTextField1 after the execution of the following code? [2]

```
int Sum, One = 3, Two = 5;
Sum = One + Two++;
jTextField1.setText(Integer.toString (Sum));
jTextField2.setText(Integer.toString (Two));
```
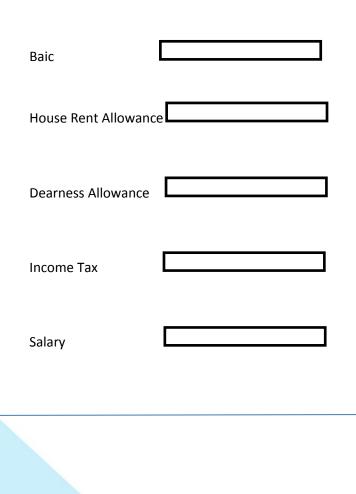
f) What will be the contents of Text1 and Text2 after the following code is executed?
   [2]

```
String Text2, Text1;
Text1 = "Good Morning";
Text2 = "India";
Text1 = Text2.concat (Text1);
```

g) Shekher is a junior programmer at ducom Enterprises. He created the following GUI in Netbeans.

Salary Generator

Baic

House Rent Allowance

Dearness Allowance

Income Tax

Salary

Help him to write code for the following:

i)To calculate Income Tax to be paid and display in jTextField4 on the click of Command Button

"Calculate Income Tax" as per the following condition: [2]

If the basic is less than 50000 then IncomeTax= Basic*0.2

And if is greater or equal to 50000 then IncomeTax=Basic*0.3

| Calculate Income Tax |

ii) To calculate Salary and display in jTextField5 on the click of Command Button

"Calculate_Salary". [2]

Hint. Salary = (Basic + Dearness Allow +House Rent Allowance) – Income Tax.

| Calculate Salary |

iii) To Clear all Text Fields on the click of Command Button "Clear".

| Clear |

(1)

7. a) What is the purpose of DROP TABLE command in MySQL? How is it different from DELETE command? [2]

    b) Table Employee has 4 records and Table Dept has 3 records in it. Mr. Gupta wants to display all information stored in both of these related tables. He forget to specify equi-join condition in the query. How many rows will get displayed on execution of this query? [1]

    c) Consider the table RESULT given below. Write commands in MySQL for (i) to (iv) and output for (v) to (vii).

Table: RESUIT

No	Name	Stipend	Subject	Average	Division
1	Sharon	400	English	38	THIRD
2	Amal	680	Mathematics	72	FIRST
3	Vedant	500	Accounts	67	FIRST
4	Shakeer	200	Informatics	55	SECOND
5	Anandha	400	History	85	FIRST
6	Upansna	550	Geography	45	THIRD

i. To list the names of those students, who have obtained Division as FIRST in the ascending order of NAME.   [1]

ii. To display a report listing NAME, SUBJECT and Annual stipend received assuming that the stipend colum n has monthly stipend.   [1]

iii. To count the number of students, who have either Accounts or Informatics as subject.   [1]

iv. To insert a new row in the table EXAM: [1]
        6, "Mohan", 500, "English", 73, "Second"

v. SELECT AVG(Stipend) FROM EXAM WHERE DIVISION = "THIRD"   [1]

vi. SELECT COUNT (DISTINCT Subject) FROM EXAM;   [1]

vii. SELECT MIN(Average) FROM EXAM WHERE Subject = "English";   [1]

-x-x-x-x-x-