KENDRIYA VIDYALAYA SANGATHAN BANGALORE REGION
PRE BOARD EXAMINATION 2010-11
Time 3 Hrs   **CLASS XII   INFORMATICS PRACTICES**   Max. Marks: 70

* All questions are compulsory.
1.   (a) What type of network is a Local cable TV Network   (1)
     (b) What is a Gateway?   (1)
     (c) What is the protocol used for remote login?   (1)
     (d) What is ODF?   (1)
     (e) How is a co-axial cable different from an optical fiber?   (2)
     (f) Explain any two threats to network security.   (2)
     (g) How is Transliteration different from keymap based text entry?   (2)
2.   (a) Which property is used to set access key for a Push Button?   (1)
     (b) What is the use of default clause in a switch statement?   (1)
     (c) Which HTML tag is used to make a horizontal line?   (1)
     (d) How is <OL> tag different from <UL>?   (1)
     (e) What do you mean by a selection statement?   (2)
     (f) Write a java method that accepts a year as argument and print if it is a leap year or not. (2)
     (g) How is XML different from HTML?   (2)
3.   (a) Write the statement to start using an existing database 'mydata'.   (1)
     (b) Which constraint ensures that the value entered in a column is not repeated?   (1)
     (c) What do you mean by the degree of a relation?   (1)
     (d) What is a candidate key?   (1)
     (e) What do you mean by referential Integrity constraint?   (2)
     (f) Differentiate between COMMIT and ROLLBACK commands   (2)
     (g) Answer the given queries based on the following table Student: (2)
         Student

Name	Mark
Anil	83
Vinil	98
Karthik	65
Sonia	42

         (i) Select Avg(Mark) from Student;
         (ii) Select Name,Mark from Student where Name like '%ni%';

4.   (a) What do you mean by Overriding?   (1)
     (b) How will you input an integer value using JOptionPane ?   (1)
     (c) What will be the content of the Text Area – textarea1 after the execution of the   (1)
         following statements.
         textarea1.setText("Java\n");
         textarea1.append("Programming \t Language");
     (d) Write the equivalent code for the following using If .. else if.. structure   (2)
         switch(op)
         {
         case '+' : c=a+b; break;
         case '+' : c=a+b; break;
         case '+' : c=a+b; break;

```
case '+' : c=a+b; break;
default : System.out.println("Not a valid operation"); System.exit(0);
}
System.out.println(" "+c);
```

(e) Predict the output of the following code: (2)
```
String s ="PRINTER";
int L=s.length();
for(int i=L-1 ; i>=0 ; i--)
System.out.println(s.substring(i));
```
(f) Rectify the errors with the following code fragment: (2)
```
int   a, b, c;
a = text1.getText ();
b= text2.getText ();
 if a>b;
{
System.out.println("The greater Number is "+a);
else
System.out.println("The greater Number is "+b);
}
```
(g) Read the following case study and write a java code to answer the questions that following
Manager of **Bachat Bank** has developed a java form for finding EMI to be paid by customers
against repayment of loan

Loan interest rates are(Yearly) -

Loan Type	Interest Rate
Car Loan.	14 %
Personal Loan	13 %
Education Loan	11 %

Name of the various controls are:

Object Type	Object Name	Description
Combo Box	cmbYears	To select Years for Loan
Text Box	txtLoanAmt	To enter loan amount
	txtProcCharge	To enter processing charge
	txtRate	To enter interest rate
	txtEMI	To display EMI payable
Option Button	rbtnCar	To select loan type as Car Loan
	rbtnPersonal	To select loan type as Personal Loan
	rbtnEducation	To select loan type as Education Loan
Push Button	BtnEMI	To calculate payable amount
	BtnClear	To clear the entered values
	BtnExit	To quit form application

(i) When BtnClear is clicked All the Text Fields must be cleared , txtRate must be
disabled and. Also Loan Amount Text Field must be focused.   (2)
(ii) When BtnEMI is clicked,the interest rate should be displayed in the Text Field txtRate
and it should calculate the EMI and displayed in the Text Field txtEMI.
(To calculate EMI calculate Amount using compound interest formula as $A=p*(1+r/100)^t$,
add processing charge to it and divide the sum by the total months)   (3)
(iii)Application should terminate when BtnExit is clicked.   (1)

5.   (a) What is a View different from a table?   (2)
     (b) Write the output of the following SQL queries: (2)
         (i) Select Right(Upper("Computer"),3);
         (ii) Select Truncate(1672.784,0);
         (iii) Select Date('2010-12-15 11:15:03');
         (iv) Select Dayofyear('2010-12-31');
     (c) Consider the following table EMPLOYEE. Write SQL commands for the
         statements (i) to (iv) and give outputs for SQL queries (v) to (viii)   (6)
         EMPLOYEE

W_ID	FIRSTNAME	LASTNAME	CITY	SALARY	DESIGNATION
102	SAM	TONES	PARIS	75000	MANAGER
105	SARAH	ACKERMAN	NEW YORK	85000	DIRECTOR
144	MANILA	SENGUPTA	NEW DELHI	70000	MANAGER
210	GEORGE	SMITH	HOWARD	75000	MANAGER
255	MARY	JONES	HUSTON	50000	CLERK

300	ROBERT	SAMUEL	WASHINGTON	45000	CLERK
335	HENRY	WILLIAMS	BOSTON	40000	CLERK
400	RONNY	LEE	NEW YORK	32000	SALESMAN
451	PAT	THOMPSON	PARIS	28000	SALESMAN

     i.   Display First Name and City of Employees having salary between 50,000 and 90,000.
    ii.   Display details of Employees who are from "PARIS" city.
   iii.   Increase the benefits of employee having W_ID = 210 by 500.
   iv.   Count number of employees whose name starts from character 'S'.
    v.   Select MAX(salary) from employee;
   vi.   Select AVG(salary) from employee where designation = 'CLERK';
  vii.   Select COUNT (DISTINCT designation) from employee;
 viii.   Select designation, SUM(salary) from employee
           Group by designation
           Having count (*) > 2;

6.   (a) Give the SQL query to create the table Student with the following structure.   (2)

Column Name	Data Type	Size	Constraint
RollNo	INT	3	Primary key
Name	VARCHAR	25	NOT NULL
Class	VARCHAR	3	
Stream	VARCHAR	15	
Mark	INT	3	
Grade	CHAR	1	Can be' A' 'B' 'C' or 'D'

(b) Given two tables Teacher and student:

Student

Roll	SName	Tid
1	Rahul	701
2	Manoj	702
3	Vishal	705

Teacher

Tid	Tname	Tsubject
701	Vimal	Physics
702	Dinesh	History
706	Raju	Economics

(i) Identify the Foreign key column from the given tables. (1)

(ii) Do you find and discrepancy with the values? (1)

(c) Consider the tables HANDSETS and CUSTOMER given below:

Handsets

SetCode	SetName	TouchScreen	PhoneCost
N1	Nokia 2G	N	5000
N2	Nokia 3G	Y	8000
B1	BlackBerry	N	14000

Customer

CustNo	SetNo	CustAddress
1	N2	Delhi
2	B1	Mumbai
3	N2	Mumbai
4	N1	Kolkata
5	B1	Delhi

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

(i) Display the CustNo, CustAddress and corresponding SetName for each (2) customer.

(ii) Display the Customer Details for each customer who uses a Nokia handset. (2)

(iii) (2)

```
select SetNo, SetName
from Handsets, customer
where SetNo = SetCode
and CustAddress = 'Delhi';
```

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) Choose appropriate controls from Text box, Label, Option button, Check box, (2) List box, Combo box, Command button and write in the third column.

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

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