

KENDRIYA VIDYALAYA ASC CENTRE(S) BANGALORE
PRE BOARD EXAMINATION 2011-12

Time 3 Hrs

CLASS XII INFORMATICS PRACTICES

Max. Marks: 70

* All questions are compulsory.

1. (a) What type of network is established between your PC and Mobile via Bluetooth (1)
(b) What is the use of repeater? (1)
(c) What is FTP? (1)
(d) What is Ogg Vorbis (1)
(e) Differentiate between IP address and MAC address (2)
(f) How is star topology different from Bus topology? (2)
(g) Differentiate between OTF and TTF. (2)
2. (a) Which property of a Combo Box is used for adding the elements to the list? (1)
(b) What is the effect of absence of break in a switch statement? (1)
(c) Give two examples for empty elements in HTML? (1)
(d) How is VLINK attribute different from ALINK? (1)
(e) Differentiate between keywords and identifiers. (2)
(f) Write a Java method that accepts an integer parameter and print if it is a prime or not. (2)
(g) State the important features of XML. (2)
3. (a) Which statement is used to undo the changes made to a database? (1)
(b) Write the statement to modify the width of the 'name' field of 'student' table to 50 characters. (1)
(c) How is primary key different from unique? (1)
(d) What do you mean by the cardinality of a table? (1)
(e) What is the advantage of foreign key? (2)
(f) Differentiate between Update and Alter commands (2)
(g) Answer the given queries based on the table Batsman. (2)

Batsman

Name	Runs
Sachin	107
Sehwag	82
Dravid	57
Dhoni	68
Raina	119

- (i) Select Max (Runs) from Batsman;
 - (ii) Select Sum(Runs) from Batsman where Runs between 80 and 150;
4. (a) What is Inheritance? (1)
(b) How will you store a password entered in a password field in to a String? (1)
(c) What will be the content of the Text Area – textarea1 after the execution of the following statements. (1)

```
textarea1.append ("India\n");  
textarea1.append("is\t our\nCountry");
```


(d) Write the equivalent code for the following using switch statement (2)

```
if (dir == 1)  
System.out.println("East");  
else if(dir==2)
```

```
System.out.println("West");
else if(dir==3)
System.out.println("North");
else if(dir==4)
System.out.println("South");
else
System.out.println("Not a direction");
```

(e) Predict the output of the following code: (2)

```
String s ="COMPUTER";
int L=s.length();
for(int i=L ; i>=0 ; i--)
System.out.println(s.substring(0,i));
```

(f) Remove the errors from the following code fragment: (2)

```
int n, os, es;
n=text1.getText();
for(i=0; i<=n, i++)
if i%2=0
es += i;
else
os+=i;
```

(g) Given below is a form used for interest calculator:

The screenshot shows a Java Swing window titled "INTEREST CALCULATOR". It features a light gray background and a blue title bar. On the left side, there are four text input fields stacked vertically, labeled "NAME", "PRINCIPAL", "TIME", and "INTEREST". To the right of these fields is a "CATEGORY" section enclosed in a light blue border, containing three radio buttons labeled "MALE", "FEMALE", and "SR. CITIZEN". At the bottom of the window, there are three push buttons labeled "CLEAR", "CALCULATE", and "EXIT".

The controls used are:

Text Fields :- txtname,txtprincipal,txttime,txtinterest

Radio Buttons :- rbmale,rbfemale,rbsr

Push Buttons :- btnclear,btncal,btnexit

Interest rates are:

7% for Males , 8% for Females and 9% for Sr. Citizens.

Now write the code for the following requirements:

- (i) When btnclear is clicked, all the text boxes must be cleared, radio Button for male must be selected and cursor must be placed in the txtName Text Field. (2)
 - (ii) When btncal is clicked the interest to be calculated as per the interest rates given and should be displayed in the appropriate Text Field(txtinterest). (3)
 - (iii) When the btnexit is clicked the application should close. (1)
5. (a) Differentiate between DDL and DML. (2)
- (b) Write the output of the following SQL queries: (2)
- (i) Select Left("informatics practices",2);
 - (ii) Select Mod(27,14);
 - (iii) Select Instr("CORPORATOR","OR");
 - (iv) Select Dayofweek('2010-12-01');

(c) a) Write SQL commands for (i) to (iv) and write output for (v) to (viii) on the basis of Teacher relation given below.

Teacher

No	Name	Age	Department	Date of Join	Salary	Sex
1.	jigal	34	Computer	1997-01-10	12000	M
2.	Sharmila	31	History	1998-03-24	20000	F
3.	Sandeep	32	Maths	1996-12-12	30000	M
4.	Sangeeta	35	History	1999-07-01	40000	F
5.	Rakesh	42	Maths	1997-09-05	25000	M
6.	Shyam	51	History	1997-02-27	30000	M
7.	Shiv Om	44	Computer	1997-02-25	21000	M
8.	Shalakha	33	Maths	1997-02-31	20000	F

- i. To show all information about the teacher of history department.
- ii. To list the names of female teachers who are in Maths department
- iii. To list names of all teachers with their date of joining in ascending order.
- iv. To count the number of teachers with age<35.
- v. Select AVG(Salary)from Teacher;
- vi. Select MAX(Age) from Teacher where Department='History';
- vii. Select COUNT(Salary) from Teacher where salary >=12000 group by department;
- viii. Select name from Teacher where age = (Select MAX(Age) from Teacher where sex='F');

6. (a) Write the SQL query to create the following table. (2)

Table : SalesPerson

Column Name	Data Type	Size	Constraint
SNum	INT	6	PRIMARY KEY
SFName	VARCHAR	25	NOT NULL
SLName	VARCHAR	25	
City	VARCHAR	10	
Sales	FLOAT	7,2	Must be greater than 0
Comm	FLOAT	7,2	

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

Customer

CustomerID	CustomerName	CustAddress	CustPhone
1	Akhilesh Narang	C4 Janak Puri, Delhi	9811078987
2	Purnima Williams	B1, Ashok Vihar, Delhi	9678678711
3	Sumedha Madaan	33, South Ext., Delhi	6767655412

Bill

Bill No	CustID	Bill_Amt
1	2	12000
2	1	15000
3	2	13000
4	3	13000
5	2	14000

- (i) How many rows and columns will be there in the Cartesian product of these two tables? (1)
- (ii) Which column in the 'Bill' table is the foreign key? (1)
- (c) Consider the following tables EMPLOYEE and DESIG

EMPLOYEE

W_ID	FIRSTNAME	LASTNAME	CITY
102	SAM	TONES	PARIS
105	SARAH	ACKERMAN	NEW YORK
144	MANILA	SENGUPTA	NEW DELHI
210	GEORGE	SMITH	HOWARD
400	RONNY	LEE	NEW YORK
451	PAT	THOMPSON	PARIS

DESIG

W_ID	SALARY	BENEFITS	DESIGNATION
102	75000	15000	MANAGER
105	85000	25000	DIRECTOR
144	70000	15000	MANAGER
210	75000	12500	MANAGER
400	32000	7500	SALESMAN
451	28000	7500	SALESMAN

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

(i) Display the W_ID, FIRSTNAME, DESIGNATION and SALARY. (2)

(ii) Display the FIRSTNAME and the total of SALARY and BENEFITS of all the MANAGERS. (2)

(iii) SELECT E.* ,DESIGNATION FROM EMPLOYEE E, DESIG D WHERE E.WID=D.W_ID AND SALARY>70000; (2)

7. (a) How does e-business improve customer satisfaction- Write one point. (1)

(b) List the features of a good interface? Write 2 points. (2)

(c) 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 Name	
2	Enter category(SC/ST/OBC/GEN)	
3	Select languages known	
4	Submit Form	
