

**KENDRIYA VIDYALAYA SANGATHAN- CHENNAI REGION**  
**INFORMATICS PRACTICES**  
**REVISION- 2012-13**

TIME : 3 HOURS

MAX MARKS : 70

NOTE :

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

- Q.1
- a. What is protocol? 1
  - b. In a school the computer lab was connected to the resource room. Which type of network has been formed?  
LAN, WAN, MAN, PAN 1
  - c. Arrange the following communication channels in ascending order of their cost.  
Ethernet Cable, Optical Fiber, Co-axial cable 1
  - d. Write any two characteristics of Open Source Software. 1
  - e. Peter is setting up a network for his office and is confused if to use Hubs or Switches. Which of these devices would be more efficient one? Justify. 2
  - f. Why is repeater used in a computer network? 2
  - g. What are two advantages of star topology? 2
- Q.2
- a. Which HTML tag is used to insert hyperlink in a web page? Give one example. 1
  - b. Give any two examples of country specific domain names. 1
  - c. Which of the following is a container control? 1
    - i. TextField
    - ii. Label
    - iii. Frame
    - iv. Button
  - d. While making a Form in Netbeans, Mr Jack wants to display a list of countries for users to select one from. Suggest a most appropriate control. 1
  - e. How can you declare the variable in JAVA for the following; 2
    - (i) If you want to store the salary of an employee.
    - (ii) If you want to store the name of an employee.

f. What is web browser? Give any two examples of web browsers. 2

g. Write a Java code that takes a number from jTextField1 and displays its multiplication table up to 10 multiples. 2

Q.3 a. In a database there is a table Cabinet. The data entry operator is not able to put duplicate values in a column of Cabinet? What may be the possible reason(s)? 1

b. What is a function that can be used in MySQL to get current date and time? 1

c. What is the difference between HAVING and WHERE clauses? 1

d. Is the following statement correct(Yes/No)? If 'No' then write a corrected statement else leave it unchanged.  
DELETE ALL FROM TABLE EMP; 1

e. Write a table representing Cartesian product of the following two tables. 2

Sno	Name	Class
1	Rohit	12
2	Mohit	12

ID	Sno	Marks
123	1	65
143	1	54
122	2	62

f. What do you understand by following terms? 2  
i. Attribute ii. Cardinality

g. The table 'Items' has following data. What will be the output of the following queries. 2

ITEMNO	COST
101	1000
151	NULL
121	1200
131	1400
141	NULL

i. SELECT AVG(COST) FROM ITEMS;  
ii. SELECT COST \*10 FROM ITEMS WHERE ITEMNO=101;

Q.4 a. A programmer stored roll number of 10 digits in a string variable

strRoll. Now it is required to be stored in numeric form using Long variable. Write a Java code to do this. 2

- b. Rewrite the following code snippet using If statement. 2

```
int P = jComboBox1.getSelectedIndex();

switch(P)
{
    case 0: amount = P; break;
    case 1: amount = P*10; break;
    case 2: amount = P*20; break;
    default: amount =0;
}
```

- c. What would be the contents of jTextField1 after execution of following code. 1

```
jTextField.SetText(Math.round(2.3)+ “ “);
```

- d. How many times would the following while loop execute 1

```
int i=5;
int j=45;
while(i<=j)
{
    i+=5;
}
```

- e. Find the output of the following Java code. 2

```
public static void main(String []args)
{
    long a=78345,s1=0,s2=0,r;
    while(a>0)
    {
        r=a%10;
        if (r%4==0)
            s1+= r;
        else
            s2+=r;
        a/=10;
    }
    System.out.println("S1 =" + s1);
    System.out.println("S2 =" + s2);
}
```

- f. Write the code to make the textfields for Discount( txtDiscount )

and Net Payable (txtNetPayable) uneditable.

2

- g. Prachaar Store is a Magazine distributor for Bharat Today. The distributor plans to computerize its billing system. A programmer is required to make the following GUI interface to calculate the Discount Amount & Bill Amount to be paid by the subscriber as shown below:

The annual subscription of Bharat Today for one year is Rs.1400/- without any discount. Under the current scheme discounts are being offered as follows:

<b>Subscription Period in years</b>	<b>Discount</b>
One	10%
Two	15%
Four	25%

<b>Control</b>	<b>Name</b>	<b>Description</b>
jTextField1	txtName	To store Subscribers Name
jTextField2	txtAddress	To display the address
jTextField3	txtTot	To display Total Amount
jTextField4	txtDisc	To display Discount Amount
jTextField5	txtNet	To display Net Amount
jComboBox1	cmbPeriod	To choose "one"/ "Two" / "Four"
jCheckBox1	chkMember	To become a member
jButton1	btnCalTotDisc	To Calculate Total & Discount
jButton2	btnCalNet	To display Net Amount

**Prachar Store Billing System**

**Bharat Today Subscription**

Subscribers Name

Address

Subscription Period (in years)  ▼

Membership

Total Amount

Discount Amount

Net Amount

Create the above interface in Java(using NetBeans) and set/write code for the questions that follow:

- i Ensure at design time that the textfields for Total Amount (txtTot) Discount Amount(txtDisc) and Net Amount(txtNet) are uneditable and btnCalNet is not active 2
  - ii When “Calculate Total & Discount” button(btnCalTotDisc) is clicked, calculate and display the Total amount and discount in their corresponding textfields(txtTot & txtDisc) 2
  - iii When “Calculate Net” button (btnCalNet) is clicked display the Net amount in the textField txtNet . 1
- Q.5 a. Write the output of following SQL queries. 2
- i. `SELECT ROUND(1.289,1) ;`
  - ii. `SELECT MID(‘Discovery Channel’,4,6) ;`
  - iii `SELECT DAYOFMONTH (‘2011-03-30’);`
  - iv `SELECT TRUNCATE (7.727,1);`
- b. What is the purpose of DROP TABLE? 1
- c. Consider the table PROJECTS given below. Write SQL commands for i) to iv) and output of v) to vii) (1X 7 = 7)

PROJECTS

PID	PRJNAME	PRJSIZE	STARTDATE	ENDDATE	COST
1	Payroll-MMS	Medium	03/17/06	09/16/06	60000
2	Payroll-ITC	Large	02/12/08	01/11/09	500000
3	IDMgmt-LITL	Large	06/15/08	04/21/06	300000
4	Recruit-LITL	Medium	03/31/06	08/22/06	50000
5	IDMgmt-MTC	Small	03/25/07	05/16/07	20000
6	Recruit-ITC	Medium	03/01/07	06/27/07	50000

- i. Display information of all medium size projects.
- ii. Display project size of projects whose project name ends with 'ITC'.
- iii. Display project name, size and cost in ascending order of cost.
- iv. Count the number of 'Large' sized projects.
- v. `SELECT MAX(COST) FROM PROJECTS WHERE PRJSIZE='MEDIUM';`
- vi. `SELECT PRJNAME,STARTDATE FROM PROJECTS WHERE COST>100000 ORDER BY STARTDATE;`
- vii. `SELECT PRJSIZE,COST FROM PROJECT WHERE STATEDATE BETWEEN '1/1/2007' AND '31/12/2007';`

Q.6 a. Write MySql command to create 'TEAM' table. 2

Name of column	Type	Size	Constraint
Tid	Integer		Primay Key
Name	Varchar	10	
Game	Varchar	10	
Noofmembers	Integer		Not Null

- b. Study the following table TEACHER and SALARY and write the SQL commands for the questions (i) and (ii) and give outputs for SQL queries (iii) and (iv)

Table : TEACHER

SID	NAME	DEPT	SEX	EXPERIENCE
101	Siddharth	Computer	M	12
104	Raghav	Physics	M	5
107	Naman	Chemistry	M	10
114	Nupur	Computer	F	3
109	Janvi	Physics	F	9
105	Rama	Accounts	M	10
117	James	Computer	F	3
111	Binoy	Accounts	F	12
130	Samuel	Computer	M	15

Table : SALARY

SID	BASIC	ALLOWANCE	DA
101	12000	1000	300
104	23000	2300	500
107	32000	4000	500
114	12000	5200	1000
109	42000	1700	200
105	18900	1690	300
130	21700	2600	300

- i. Display NAME and DA of all staff who are in Accounts department and having more than 10 years of experience and DA is more than 300. 2
  - ii. Display the NAME and salary of all staff working in physics department and salary more than average salary. (SALARY=BASIC +ALLOWANCE+ DA) 2
  - iii. Select NAME, DA, BASIC from TEACHER, SALARY Where BASIC>20000 and TEACHER.SID=SALARY.SID; 1
  - iv. Select NAME, DEPT, SEX, BASIC, DA from TEACHER, SALARY Where DEPT LIKE '%o%' and DA >=500 and TEACHER.SID=SALARY.SID; 1
- c. In a database there are two tables 'Company' and 'Model'

Table : Company

CompId	CompName	CompHQ	ContPerson
1	Honda	Chennai	A B Patel
2	Suzuki	Mumbai	B B Roy
3	Toyota	Bangalore	G G Mehta

Table: Model

ModelId	CompId	ModelCost
T102	3	30000
A10	1	20000
P261	2	40000
S111	3	25000

- i. Identify the foreign key in the table model. 1
  - ii. What steps are to be taken to delete the company with CompId = 1. Justify. 1
- Q.7
- a. Give any two guideline given by NIC for multi-lingual websites. 2
  - b. What is importance of e-learning? Give any one e-learning site. 2
  - c. Mr Patel has to design an interface for a software he is designing for a advertisement company. Choose an appropriate control from Label, TextBox, Radio Button, CheckBox, ListBox, CommandButton and write in third column. 2

S.No.	Control used to	Control
1	Enter name,address and salary	
2	Select gender	
3	Select Department	
4	Clear form	





