

**International Indian School-Dammam
II Term Examination -2014**

**Class : XII
Subject : Informatics Practices**

**Time: 3 Hrs
MM: 70**

SET A

- 1(a) What is the purpose of following ? [1]
HTTP, TCP/IP
- (b) How will you protect a network from security attacks? [1]
- (c) Differentiate between MAN and WAN with respect to error rates. [1]
- (d) Differentiate between true type font and open type font [1]
- (e) Identify the type of topology [2]
i) In it, each node is connected with the help of a single coaxial cable.
ii) In it, each node is connected with the help of independent cable with the help of a central switching communication controller.
- (f) Mention the parts of a URL with example. [2]
- (g) Give examples of two OSS in each of the following [2]
Office software, Internet related software
- 2(a) Name the method used to extract value of index while using ListBox in Java. [1]
- (b) Name any two commonly used methods of JComboBox control. [1]
- (c) What does the following fragment display [1]
String S = "Six:"+3+3;
System.out.println(S);
- (d) What is the purpose of valueOf? [1]
- (e) Rewrite the following program code using a if statement. [2]
String msg;
int num= Integer.parseInt(jTextField1.getText());
switch(num)
{
case 0 :
case 1 : msg = "50% Tax Exemption";
break;
case 2 : msg = "30% Tax Exemption";
break;
default : msg = "! Invalid Entry";
}
- (f) What is the purpose of abstract class? Give example. [2]
- (g) what will be the contents of jTextField1 and jTextField2 after executing the following code: [1]
String txt = "Second Term Examination";
jTextField1.setText(txt.substring(9,13).toLowerCase());
double Num= Math.round(5.649*100)/100.0 ;
jTextField2.setText ("" +Num);

3(a) What is meant by IN in MySQL? [1]

(b) While creating a table "AREA", Mr James set the primary key on a column 'Phoneno'. Write the statement to set the primary key to another column CustId [2]

(c) Write a statement of MYSQL used to give the first occurrence of "r" in "Informatics Practices". [1]

(d) The Table 'Item' has 4 attributes and 10 records. The table 'Customer' has 6 fields and 9 tuples. Find the degree and cardinality of the Cartesian product of these tables. [1]

(e) Define polymorphism with example. [1]

(f) Consider the following table Department [2]

DepCode	DepName	Date_of_Joining
D1002	Biology	2009-07-19
D1003	Zoology	2007-02-13
D1020	BioTech	2010-05-15
D1030	Psychology	2011-09-06

Based on the above table write the output of the following

(i) Select mid(DepName ,4,2) from Department where DepCode like "%2_"

(ii) Select Length(DepName) from Department where DepCode like "%3";

(g) Akhil has developed a table 'Customer', in which he wants to change the status of all the customers from Saving to Current in the column 'Status'. He wrote the following query but not getting the desired result, help him for the same [2]

Alter Table Customer set Status = 'Saving'

4 (a) Study the following code and answer the questions that follow: [2]

```
String msg= jTextArea1.getText( );
int L = msg.length( ) , n;
n = 100-L;
jTextField2.setText(Integer.toString(L));
jTextField3.setText(Integer.toString(n));
```

i) Name any one native class of java used in the above code.

ii) Identify and name two methods of the native class.

(b) The following code has some error(s). Rewrite the correct code underlining all the correction made. [2]

```
int P , Q ;
Q = 220;
for ( P= =1; P<= 4 ; P++)
    if ( P % 2 == 0 )
        Q += P;
    else
        Q = - P;
}
JOptionPane.showMessageDialog(this, P: + P + "Q: "+Q+ " ");
```

(c) What will be the output of the following program code ? [2]

```
int U = 5, V = 10;
for( int i = 1 ; i <= 2 ; i ++ )
{
    System.out.println(" Line 1=" + U ++ + "&" + V -- );
    System.out.println(" Line 2=" + ++ V + "&" + (U + 3) );
}
```

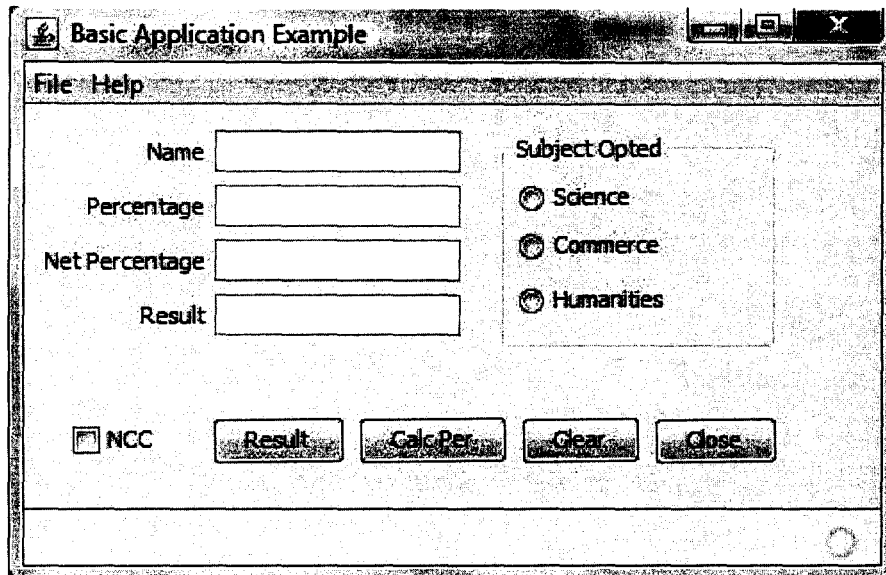
(d) Given a string object namely 'PIN' having value as "1234" stored in it. what will be the result of the following? [1]

```
JOptionPane.showMessageDialog(null, "" + PIN.length() + Integer.parseInt(PIN) );
```

(e) How many times the following loop is executed ? Identify the type of loop. [1]

```
int ABC = 5;
while( -- ABC > 2 )
{
    System.out.println( "ABC" );
    ABC-- ;
}
```

(f) ABC School uses the following interface built in java to check the eligibility of a student for a particular stream from science, commerce and humanities. The user first enters the total percentage and selects the desired stream by selecting the appropriate option button. An additional 5% marks is given to students of NCC.



Write Java Code for the following

i). On Action event of the button 'Calc Per' Net percentage of the student is calculated and displayed in the appropriate text filed(txtNPer). Net percentage is same as that of the actual percentage(txtAcPer) if the student doesn't opts for NCC otherwise 5% is added to actual percentage. [2]

ii) On Action event of the button 'Result', the application checks the eligibility of the students. And display result(txtRes) in the appropriate text field. Minimum percentage for science(RdBtnSc) is 70, 60 for commerce(RdBtnCom) and 40 for humanities(RdBtnHum) [2]

iii) On the Click event of the clear button all the text fields and the check box :(ChkNcc) get cleared. [1]

g) What is Interface and its use ? [1]

h) What is the result of Math.round(-2.1) + Math.pow(2,0) [1]

5. a) What is the difference between now() and sysdate() functions? [1]

b) Differentiate between UPDATE and ALTER command with example. [2]

c) Consider the following table named "EXAM" with details of marks. Write command in SQL for (i) to (iv) and output for (v) to (vi). [6]

Table : Exam

Adno	SName	Percentage	Clsection	Stream
R001	Sushant	90.2	12A	Science
R002	Vaidyanath	60.5	12B	Humanities
R003	Miara	84.9	12B	Science
R004	Niara	76.5	12A	Commerce
R005	Shiva	75.9	12D	Commerce

(i) To display all information of the students of humanities in descending order of percentage.

(ii) To display Adno, Name, Percentage and stream of those students whose name is less than 6 characters long.

(iii) To add another column Bus Fees with datatype and size as Decimal (8,2)

(iv) To increase percentage by 2% of all the Science students.

(v) SELECT SName, Truncate(Percentage, -1) from Exam where SName like "N%";

(vi) SELECT Round(Percentage, -1) from Exam where Adno ="R005" OR Adno ="R003";

6. Answer the following question.

a) Write a MySQL command to create the table "TOYZ with the following details-

[2]

Column	Data Type	Size	Constraint
Toy no	Int	10	Primary Key
Toy name	Varchar	20	
Type	char	10	NOT NULL
Price	Decimal	6,2	
Colour	Varchar	15	

b) Consider the following tables and answer the questions below

Table: Customer

Cid	CName	TrnsDate	Balance	MobileNo	TrnsTime
C417	A.B.Gupta	2014-04-12	200000	9837711231	10 am
C324	V.R.Vaish	2014-11-10	450000	9834561212	9 am
C247	A.M.Kumar	2014-08-09	356789	9835678942	12 pm
C552	R.H.Prasad	2014-01-02	234561	9836784532	10 am

Table: Bank

Bid	BName	Area	Cid
S1201	S.B.I	Ring Road	C324
I2110	I.C.I.C.I	Circular Road	C945
H1214	H.D.F.C	M.G.Road	C457

i) Name the column(s) that can be used to set as Primary and candidate key in table Customer [1]

ii) How will you get Customer name, Transaction Date from table Customer and Bank name and area from table Bank of all those customers whose date of transaction is after 2 March 2011 [2]

iii) Write the output of following statement [2]

Select concat(Right (Cname, 5) , “.”, Left(Cname , 1)) from Customer where Cid Like “%7”;

e) Consider the tables given below-

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

With reference to above tables, write commands in SQL for (i) and (ii) and answer for (iii)

- (i) To display itemcode, itemname and vendor name of all the vendors, who does not Manufacture LCD. [2]
- (ii) To display the number of items according to their vendor [2]
- (ii) What output, you will get when an equi join query is executed to get the colour from SAMS table and Vname from VENDOR table. [1]

7 (a) What is the advantage of using IT applications over the manual operations? [1]

(b) How has popularity of e-Business benefited a common man? Write domain name of one popular e-Business site as an example [2]

(c) A user is creating a form for E Learning. Help him to select proper controls for the following purpose: [2]

- (i) Subject (From a list of subjects)
- (ii) Topic (From a list of topics corresponding to the subject chosen)
- (iii) Level (Beginner / Intermediate / Advanced)
- (iv) To save the details