INDIAN SCHOOL SOHAR
II TERM EXAM (2016-17)
INFORMATICS PRACTICES (065)

Class: XI **Marks: 70**
Date: 30 November, 2016 **Time: 3 Hours**

Instructions:
i) All questions are compulsory.
. ii) Answer the questions after carefully reading the text.

1. a) What are these methods used for: 2
   i) append ii) isSelectedIndex
   b) Name any two Top level and any two Mid level container controls. 2
   c) Write a short note on Adaptive Maintenance. 2
   d) Explain Type Conversion. 2
   e) Differentiate between Entry and Exit controlled loops. 2
   f) What is an event? What are event handlers? 2
   g) Name the properties used for: 2
   i) allowing resizing the frame at run time
   ii) specifying the shortcut key for the button
   h) Write Java expressions for: 2
   i) $\frac{\log(ab)}{2ab}+\sqrt{a^2+b^2}$
   ii) $(x+y)^2+|e^{2x}|$
   i) Construct a Java statement for printing H_2O in a Label. 1

2. a) Differentiate between Default and Check constraints. 2
   b) What is data redundancy? What are the problems associated with it? 2
   c) Name a date function that returns a 2
   i) date
   ii) number
   d) Define: Primary Key, Alternate Key and Candidate Key. 2
   e) What are different divisions of SQL commands? 2

f) _____is a text that is not executed. 1

3. a) Predict the output: 2

```
int a=1, b=5, x=5, y=6;
while(a++<=b){
   if(a%2==0)
      x+=y;
   else
      x-=y;
}
System.out.println("x:"+x+"y:"+y);
```

b) Find the values of 'x' and 'y': 2

```
int v=50, w=40;
int x=v+w>40?300:200;
int y=(v+w)>40?300:200;
```

c) Find errors from the following code segment and rewrite the corrected code underlining the corrections made: 2

```
int a=1; b=10;
do
[
   Display (2*a+1);
]while a>0;
```

d) Rewrite the following code using 'while' loop: 2

```
int i, j=2;
for(i=1; i<=6; )
        i++;
        j+=2;
System.out.println("i=" + i + "j=" + j);
```

e) Rewrite the following code using 'switch' statement 2

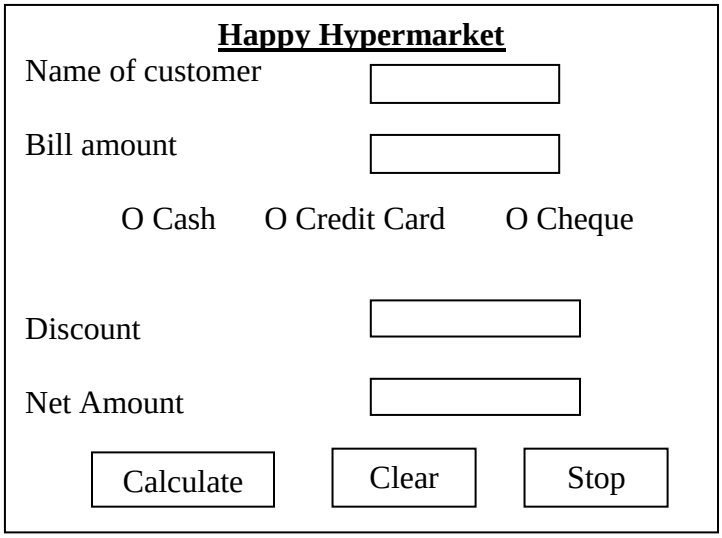
```
if(c==10 || c==20)
   s="Hardware";
else if(c==30)
   s="Software";
else
   s="Networking";
```

f) Write Java code that reads an integer number 'n' from jTextField1 and displays product of its digits in jLabel1. 2

g) Write Java code for printing sum of the following series: 2

$1+\frac{1}{4}+\frac{1}{7}+\frac{1}{10}+\frac{1}{13}+....+n$

4. Write Java code for the following:



If Bill amount is more than 10,000 then discount is given as:

Payment Mode	Discount
Cash	15 %
Credit Card	NIL
Cheque	10 %

i) When the Clear (clear) button is clicked, write the code to clear all TextFields and select cash(cash) radio button. 1

ii) When "Calculate" button is clicked, calculate and display discount (disc) and net amount (netAmount) as per the criteria given above. 2

iii) Write the code for "Stop" button to close the application. 1

5. a) Write SQL command for creating table **Customer** as per the structure given below: 2

Table Structure:

Column Name	**Data Type**	**Size**	**Constraint**
Cust_ID	Integer		
P_Date	Date		
Cust_Name	Varchar	30	Not Null
Cust_City	Varchar	40	
Amount	Decimal	7,2	
Cust_Phone	Integer	10	

Cust_ID	P_Date	Cust_name	Cust_City	Amount	Cust_Phone
1	2008-01-12	Karan	Delhi	15000	9102034288
2	2007-02-01	Puneet	Mumbai	25000	9674300978
3	2009-07-15	Anirban	Delhi	17000	8709489076
4	2008-08-10	Sunny	Pune	14000	7609874876
5	2009-09-09	Jayant	Jaipur	16000	9843904098
6	2008-01-05	Jisha	Ambala	34500	9967098549

b) Write SQL commands for the following:

i) Show details of all Delhi and Mumbai customers having amount more than 20000 . 1

ii) Show ID, Name, Amount and Discount(10% of amount) for all customers in increasing order of amount. 1

iii) List details of customers whose name start with 'J' and has 'N' as 2nd last character. 1

Iv) List details of Pune customers with amount not in the range 20000-30000 1

v) Display details of customers whose purchase date is in the year 2008. 1

vi) Show details of customers whose name start and end with 'KA' 1

vii) List a report as: <Cname><Cust_Phone> lives in <Cust_City> 1

viii) Increase the size of Cust_City to 50. 1

ix) Add Primary Key constraint on Cust_ID. 1

x) Add a new column email varchar(25) into the table. 1

xi) Change name to Karuna and city to Chandigarh for Cust_ID 1. 1

xii) Show details of customers. If phone number is not known, display 'No number' 1

xiii) Delete records of customers with amount less than 10000 1

xiv) Show ID, Name & Address of all customers whose amount is not known. 1

xv) Display names of customers in uppercase joined with first 5 characters of city in lower case, for all customers. 1

xvi) Insert a new row in the table: 7, 2016-11-08, Khan, Kolkata, 24500 1

c) Predict the output of:

i) Select Concat(Char(67), Mid("School",-3,3)); 1

ii) Select Round(6928.658,-2),Truncate(6928.658,-2); 1

iii) Select 5+9*2%5+3-8*2; 1

d) Find the errors and rewrite the corrected queries:

i) Select len(Cust_Name)%Instr(Cust_Name, 'a') from Customer; 1

ii) Select TRIM(Trailing and Leading '#' from '##TWITTER##'); 1

iii) Select DayMonth(2016-01-01); 1

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