INDIAN SCHOOL SOHAR
UNIT TEST (2017-18)
INFORMATICS PRACTICES (065)

Class: XII **Marks: 50**
Date: 23 May, 2017 **Time: 2 Hours**

Instructions:

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

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1. Answer the following questions:
   - i) What is the significance of On Delete/Update Cascade? 2
   - ii) What is All-or-none concept in context of transaction handling? 2
   - iii) Briefly explain equi-join. 2
   - iv) What are the different types of SQL functions? 2
   - v) Write a short note on Integrity Constraints. 2
   - vi) How is an 'if' statement more versatile than a 'switch' statement? 2
   - vii) What is casting? When do we need it? 2
   - viii) What are containers or container controls? 2
   - ix) Distinguish between unary, binary and ternary operators. 2

2. Find the output: 2

```
int x=5, y;
while(x<=8)
    y=++x + x*2;
    System.out.println(y);
```

3. Rewrite the following code using 'for' loop: 2

```
int c=0, i=2;
while(i<=5)
    c=++i -i*2;
    System.out.println(c);
```

4. Rewrite the following code using 'switch': 2

```
if(m=='D')
    s="Dubai";
else if(m=='A' || m=='a')
    s="Abu Dhabi";
else
    s="Muscat";
```

5. Write Java expression for: 1

$$\frac{x}{4y^2} + \log(xy)$$

Handset

Field	DataType	Constraint
SetCode	Char(2)	Primary Key
SetName	Varchar(20)	Not Null
TouchScreen	Char(1)	
PhoneCost	Int	

Table: Handset

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

Table: Customer

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

6. Write SQL commands for the following on the basis of tables given above:
   - i) Create the table Handset including its constraints. 2
   - ii) Add a foreign key constraint on SetNo of customer table. 1
   - iii) Show set number, set name, customer number and address of all customers 1
   - iv) Increase the price of all touchscreen headsets by 15% 1
   - v) Display details of customers whose set number is not known. 1
   - vi) Display the price of costliest Nokia handset. 1
   - vii) Add a new column ManufactDate as Date into handset table. 1
   - viii) Show set number, cost and discounted cost(cost-5% of cost) for all handsets. 1
   - ix) Count the number of customers for each handset. 1
   - x) Show the sum of handset cost of customers in each city. 1
   - xi) Show a report: <CustNo> bought <SetName> handset. 1
   - xii) Show details of handsets with price in the range 8,000-10,000 in increasing order. 1
   - xiii) Add a Not Null constraint on PhoneCost. 1
   - xiv) What will be the degree and cardinality of cross product of both the tables. 1
   - xv) Count the number of Mumbai customers. 1
   - xvi) Delete records of all handsets manufactured before 2010. 1
   - xvii) Change the size of touchscreen column to char(2). 1
   - xviii) Show the number and address of all customers. If the address is not known, show 'Awaited'. 1

7. Find the errors (if any) in the following SQL commands and rewrite the corrected code:
   - i) Select LCase(Mid('Carefully', -5) New String; 1
   - ii) Select Char(65, 65.5, '65.5') from handset; 1
   - iii) Select Day('2017-1-01'); 1

8. Find the output of following SQL commands:
   - i) Select c.setno, h.setname from handset h, cutomer c where c.setno=h.setcode and c.custaddress='Delhi'; 1
   - ii) Select 2*9/6-8*3-8 as result; 1
   - iii) Select Round(879.85, -1), Round(879.85, -2); 1

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