INDIAN SCHOOL SOHAR
UNIT TEST (2014-15)
INFORMATICS PRACTICES (065)

Class: XII   **Marks: 50**

Date: 25 May, 2014   **Time: 2 Hours**

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

1. Answer the following questions:
   i)   Explain the purpose of ROLLBACK and SAVEPOINT commands.   2
   ii)   Briefly explain ACID properties of a Transaction.   2
   iii) What are composite primary keys? Why are they required?   2
   iv)   Explain the CASCADE and NO ACTION referencing actions with ON DELETE clause.   2
   v)   Differentiate between ON and USING clause of joining two tables.   2
   vi)   Write short note on any two advantages of an RDBMS.   2
   vii) Name a: a) Date function that returns a number   2
                        b) String function that returns a number

Table:Coach

Field	DataType	Size	Constraint
ID	Int		Primary Key
CName	Varchar	20	Not Null
Age	Int		
Sports	Varchar	10	
DOA	Date		
Pay	Int		

ID	CName	Age	Sports	DOA	Pay
1	Pankaj	24	Karate	2010-10-10	4000
2	Shalini	21	Squash	2009-01-01	2000
3	Sanjay	22	Swimming	2009-12-12	3000
4	Sudha	25	Swimming	2008-01-07	1000
5	Govind	21	Karate	2008-10-05	3500

Table:Trainee

TNo	TName	TAge	ID	Fee
T001	Jugal	34	1	500
T002	Sharmila	31	1	200
T003	Sandeep	32	2	NULL
T004	Rakesh	42	3	200
T005	Shyam	50	4	NULL

2. Write SQL commands for the following on the basis of tables given above:
   i)   Write command for creating the table Coach including its constraints.   2
   ii)   Count number of trainees with each coach.   1
   iii)   Find sum of pay of coaches of each sport.   1
   iv)   Display No, Name and Fee of all trainees. If fee is not known, display "Free" in its place. 1
   v)   Count number of trainees whose age is in the range 20-30.   1
   vi)   Show minimum pay of each sport.   1
   vii)   List details of trainees whose coach was appointed in 2008.   1
   viii) List the sport for which numer of coaches is more than 1.   1
   ix)   Count number of sports offered to the trainees.   1
   x)   List details of coaches whose name does not start with 'S' or 'P'.   1
   xi)   Show trainees whose age is same as that of 'Rakesh'.   1
   xii)   Write a query to display position of 'A' in Coach name.   1
   xiii) List the trainees paying fee less than the average fee of all trainees.   1
   xiv)   Add a new column Zone varchar(10) into Trainee table.   1
   xv)   Increase fee of all swimming trainees by 50.   1

3. Find the errors (if any) in the following SQL commands, rewrite the corrected code and its O/P:
   i) Select Sign(-2)/5-5*Sqrt(25)%30 as Result;   1
   ii) Select Concat(Substr("Removing",-8,5),Right("SUPER",2)) as MyString;   1
   iii) Select LCase("DAY", "Name") from dual;   1
   iv) Select Trim(Both "S" from "TName") from Trainee;   1
   v) Select Avg(Fee) from Trainee;   1

4. Find output of query no. (h):   2

   Table: tbl

City	Amt	Rating
A	1000	10
B	2500	5
C	3500	7

   a) Insert into tbl values('D', 1000, 10);
   b) Savepoint s1;
   c) Delete from tbl where Rating=10;
   d) Update tbl set Amt=1200 where City='A';
   e) Rollback to s1;
   f) Insert into tbl values('E', 2000, 8);
   g) Rollback;
   h) Select * from tbl;

5. Write queries to:
   i) Add a foreign key constraint FK on city of ChildCity table referring to city of MainCity table.   1
   ii) Disable autocommit.   1
   iii) Drop foreign key(FK) constraint from city column of ChildCity table.   1

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

   ```
   int a=1, b=10;
   for(a=5; a<=10; a++)
       b+=a;
       j1.setText(b+ "\t"+ a);
   ```

   ii) Write the output of following code: 2

   ```
   float i=5, j=8; int k;
   while(++i<j)
       k=(int) (i+5.5-j);
       System.out.println(k);
   ```

   iii) Rewrite the following code using 'switch' statement: 2

   ```
   if(a==10)
       b+=10;
   else if(a==20)
       b+=5;
   else
       b++;
       System.out.print(b);
   ```

   iv) Find the value of 'c':   2

   ```
   int p=1, c; float q=2; double r=3;
   i) c=++p/q + r++%q++;
   ii) c=p++/q + ++r%++q;
   ```

   v) How does the absence of 'default' clause affect 'switch' statement?   2

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