**Database Management System – cs422 DE**

**Assignment 3 – Week 3 & 4**

----------------------------------------------------------------------------------------------------------------

**This assignment is based on lecture 3 & 4 (chapter 6 & 7).**

* Submit your *own work* on time. No credit will be given if the assignment is submitted after the due date.
* Note that the completed assignment should be submitted in .doc, .docx, .rtf or .pdf format only.
* In MCQs, if you think that your answer needs explanation to get credit then please write it down.
* You are encouraged to discuss these questions in the Sakai forum.

------------------------------------------------------------------------------------------------------------------------------

1. **The database schema is written in**(A) HLL (B) DML (C) DDL (D) DCL  
   ANS:
2. **The language used in application programs to request data from the DBMS is referred to as**(A) DML (B) DDL (C) VDL (D) SDL  
   ANS:
3. **Count function in SQL returns the number of**(A) values (B) distinct values (C) groups (D) columns

ANS:

1. **‘AS’ clause is used in SQL for**(A) Selection (B) Rename (C) Join (D) Projection ANS:
2. **Which is not a DDL statement ?**(A) Create (B) Alter (C) Delete (D) Drop

ANS:

1. **The statement in SQL which allows to change the definition of a table is**(A) Alter (B) Update (C) Create (D) Select

ANS:

1. **What restrictions apply to the use of the aggregate functions within the SELECT statement? How do nulls affect the aggregate functions?**

ANS:

1. **List the order in which the WHERE, GROUP BY, and HAVING clauses are executed by the database in the following SQL statement.**

SELECT section\_id, COUNT(\*), final\_grade  
 FROM enrollment  
 WHERE TRUNC(enroll\_date) > TO\_DATE('2/16/2003', 'MM/DD/YYYY')  
 GROUP BY section\_id, final\_grade HAVING COUNT(\*) > 5

ANS:

1. **Explain how the GROUP BY clause works. What is the difference between WHERE and HAVING clauses?**

ANS:

1. **Can the ANY and ALL operators be used on the DATE data type? Write a simple query to prove your answer.**ANS:
2. **The following SQL lists staffs who work in branch at ‘163 Main St’.**

SELECT staffNo, fName, lName, position  
FROM Staff  
WHERE branchNo =  
 (SELECT branchNo  
 FROM Branch  
 WHERE street = ‘163 Main St’);

**Will there be any problem with this query if there is more than one branch at ‘163 Main St’?  
If yes, then explain the problem and right down the correct query.**ANS:

1. **What is Referential integrity constraint?**  
   ANS:
2. **What is the difference between primary key and unique key?**ANS:
3. **Solve the question 7.10 from the course text book (5th edition).**ANS:
4. **Solve the question 7.12 from the course text book (5th edition).**ANS: