**Student Number** : 20040340

**Mark out of 50:** 34

**Percentage:** 68%

**Mapping of Conceptual Model to Logical Representation (10/15)**

The mapping of the conceptual model to the logical representation is very good with exception the DRIVING\_LICENSE\_EXAM\_APPLICANT table and the part definition of loss semantics. The FK Taught by on DRIVING\_LICENSE\_EXAM\_APPLICANT table is redundant. Some loss of semantics has been identified and explained. You did not identify that the mappings cannot enforce a) the cardinality that an examination centre has at least one examiner employed, b) examination centre has at least one examination route, c) a driving school owns at least one car. The overlap specialisation is not typically enforced in contrast to the disjoint specialisation that should be enforced. The mappings introduce additional attributes that enhance the tables. The specialisation of the driving instructor is perfectly mapped using a Type attribute approach .

**Database Implementation (14/20)**

An very good implementation that transfers correctly the logical representation into MySQL. The implementation inherits the mapping flaw of the DRIVING\_LICENSE\_EXAM\_APPLICANT table. A very good set of sample data is used that demonstrates well the database and an excellent declaration of data types. You could have used comments to explain the scope of tables, particularly those that implement the instructor specialisation. All foreign key constraints have been declared correctly with exception the TAUGHT\_BY of the DRIVING\_LICENSE\_EXAM\_APPLICANT\_ibfk\_1.

**SQL Queries (10/15)**

A complete set of SQL queries that demonstrate a very good understanding and command of the language. The update statement could have been structured in a way to update more than one records. The implementation of an outer join is good for presenting the cars belonging to each school, but the same result could have been achieved with an inner join. A better example for demonstrating the principle pf outer join would have been more appropriate. The correlated query is very well implemented and the ORDER By is used appropriately from presenting the results in an ascending order.