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END OF 2nd Semester EXAM

SQL PRACTICE

Exercise I (6mks)

1. Definitions: database, RDBMS, SQL Language, DDL, DML, DCL (3pts)
2. List 3 tools required for database administration. (1.5pt)
3. Name 3 parts of SQL. (1.5pt)

Exercise II: MCQ (5mks) (QCM, correct answer 1pt, wrong answer-0.5, no answer 0)

1. SQL is a language for relational databases created in 1970 by IBM. Its main characteristics are:

   a) Normalization, non-procedural, incremental

   b) Normalization, standard, non-procedural

   c) Incremental, queries, SQL

   d) Single station, client-server, standard

2. SQL can be used at all levels in the management of a relational database. What are these levels

   a) LDD, MCD, MCT

   b) LDD, LMD, LCD

   c) MOT, MCT, MLD

   d) UML, MERISE, MLD

3. As part of our course, we are interested in several types of DBMS architecture:

   a) Single-user architecture and client-server architecture

   b) Single-user architecture and MVC architecture

   c) 2-tier architecture and N-tier architecture

   d) Cloud architecture and client server architecture

4. The SELECT command is used to:

   a) Read data from a database

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b) Avoids redundancies in the results

c) Add data to a table

d) Insert a record in a table

5. To carry out the Cartesian product of two tables we must use the command:

a) Union

b) Intersect

c) CROSS JOIN

d) UNION JOIN

Exercise III (10mks)

Consider the following relational diagram:

ARTICLES (Num_ART, NAME, STOCK, INVENTPRICE)

SUPPLIERS (Num_SUP, SUPNAME, SUPADR, SUPCITY)

BUY (Nm_SUP#, Num_ART#, PURCHASEPRICE, DEADLINE)

1. Numbers and descriptions of items with less than 10 in stock? (1pt)
2. List of items whose inventory price is between 100 and 300? (1pt)
3. Number of articles referenced? (1pt)
4. Stock value? (1pt)
5. List for each item (number and description) of the maximum, minimum and average purchase price? (2.5pts)
6. Names and addresses of suppliers who offer items for which the lead time is greater than 20 days? (2.5pts)

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