

CSCI 443: *Database Management Systems*
Quiz II -- closed book section
 29 April, 1993

The entire exam is to be turned in at 8:30PM. Work the closed book section first and turn it in before you consult your books and notes to work on the open book section. For the closed book section, write your answers on the exam itself.

There are ten questions. Each is worth two points. Choose the most appropriate phrase for terminating each sentence. Circle your choice.

Name: _____

The person who talked to the class about the university's Office of Institutional Research was:

- A: E. Codd.
- B: A. Gravely.
- C: R. Holland.
- D: F. McFadden.

A database relation with no partial or transitive dependencies is in

- A: first normal form.
- B: second normal form.
- C: third normal form.
- D: fourth normal form.

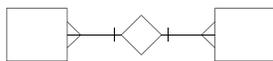
The person who talked to the class about textual databases was:

- A: S. Brock.
- B: S. Mijatovic.
- C: S. Stigleman.
- D: S. Queuel.

If the fields COURSE and SECTION are used to uniquely identify the rows of a relation, these fields form a

- A: view.
- B: candidate key.
- C: entity.
- D: composite key.

The figure on the right illustrates a



- A: one-to-one relation
- B: one-to-one entity.
- C: many-to-many relation.
- D: many-to-one entity.

A unary relationship is

- A: a relation involving one record.
- B: a one-to-one relationship.
- C: a relationship between instances of the same entity class.
- D: one-half of a binary relationship.

A constraint in a database restricting a field to containing three digits is an example of

- A: an entity relationship.
- B: a domain constraint.
- C: a referential integrity restriction.
- D: a sub-class constraint.

In general, hash files work well because

- A: almost no space is needed for indices.
- B: record retrieval is fast.
- C: they allow the database to fix track cylinder boundaries.
- D: they store data in sorted order.

The SQL command to create an index is

- A: CREATE CLUSTER.
- B: CREATE INDEX.
- C: CREATE TABLE.
- D: CREATE VIEW.

The fewest records a non-empty B-tree of order five will have in one node is:

- A: one.
- B: five.
- C: ten.
- D: eleven.