

# DM26 Database Systems

## Fall 2004

### Exam Questions

- The Entity Relationship Model and Logical Database Design
- The Relational Model and Relational Algebra
- Structured Query Language (SQL)
- Index Structures
- External Sorting
- Evaluation of Relational Operators
- Query Optimization
- Concurrency Control
- Durability (Storage Stability and Crash Recovery)
- Schema Refinement and Normal Forms
- Database Tuning.

The exam takes place on January 5, 6, and 7. At IMADA's departmental office, you can find sheets on which you can enter your name. There is a separate sheet for each day and each sheet has an enumerated number of slots. You put your name in an open slot. This determines which day you are taking the exam and which number student on that particular day you are. You must get this done before the first day of exams. We expect to take a new student in approximately every half an hour (except for a half hour lunch break). Since some students may decide not to appear, and since the external examiner does not receive any payment for students who do not show up, you must be ready *at least 2 hours before the exam time you signed up for*. If not, you may lose your exam try.

The exam itself is without preparation. Thus, after you draw a topic, the examination starts immediately. You have the opportunity of making a 10–15 minute presentation using the blackboard (you cannot bring your own transparencies). We may ask brief questions during your presentation. Afterwards, we ask questions related to the topic and to the rest of the curriculum. The total examination time will normally be 25 minutes.