

**Computer Engineering Department
Bilkent University**

CS351: Data Organization and Management

Final Exam Study Guide

December 31, 2009

A. Time and Place Information

1. Exam Date: Wednesday, January 6, 2010; Time: 12:15 – 14:15
2. Place: Last names of the students taking the exam in that room

EB101: Ağaoğlu - Başeşme

EB102: Battal - Energin

EB103: Eraslan - Karakuzu

EB104: Kartal - Öz

EB201: Özçelik - Şahin

EB202: Şener - Zorer

B. Exam Structure

1. About seven questions
2. Multi section per question
3. By definition the exam is comprehensive (see the syllabus); however, the topics covered after the midterm will be emphasized.

C. Topics to be tested (an incomplete list)

1. Topics of the midterm exam.
2. B and B+ trees.
3. Secondary key indexes and secondary key-based query processing and indexing concepts (inverted files, dense index, clustering index, etc.). K-d trees and Grid files are not included.
4. Database concepts and definitions.
5. E-R model: drawing E-R diagram from description of entities and relationships among them, conversion from E-R model to relational model or vice versa, integrity constraints (key constraint, total participation, referential integrity, etc.).
6. Relational algebra.