

**CS 351 Fall 2011**  
**Quiz#1 KEY**  
**Section 1: Sep. 29 Section 2,3:Sep.30**

1) What is a database? **20 pts.**

A database is a collection of data, typically describing the activities of one or more related organizations. (Other technically correct answers are also acceptable)

2) What is a database management system (DBMS)? **20 pts.**

A database management system is software designed to assist in maintaining and utilizing large collections of data. If it is required to specify with verbs, a DBMS offers to add, access, and update the data, which it stores. (Other technically correct answers are also acceptable)

3) In a DBMS, how are the information about students, courses, and courses taken by students are stored? **30 pts.**

Personal information (name, surname, date of entry, gpa, etc...) for each student should be stored with their unique student id numbers. Also, the information about each course (course name, instructor name, room, etc...) should be stored by their different course ids. Lastly, to indicate that a specific course taken by a student, storage of a pair of ids is enough. First component of this pair is student id; second component is id of a course which the student, specified by id in the first component, takes.

Taking Quiz in Class **30pts.**