CSCI 343 – Exam #3 – Closed book section

5 May, 1999 – 6:00 to 8:30 PM

This exam is given in two parts. The closed book section of this exam is to be worked without reference to any other written information other than the exam. You must turn in the closed book section of the exam before consulting your book and notes.

Name: _____

Question 1: (32 points)

Contrast the following eight pairs of terms in two or three sentences each:

1. Authentication vs. Authorization

2. Candidate key vs. Primary key

3. Full functional dependency vs. Partial functional dependency

4. HAVING vs. WHERE (in SQL)

5. Inner join vs. Outer join

6. Relation vs. Relationship

7. Subclass vs. Superclass

8. Time stamp locking vs two-phrase locking

Question 2 (4 points)
Give two reasons why the B+ tree is a good choice for implementing a database index?

Question 3 (2 points)
What are two contributions of Jim Gray to database management systems.

Question 4 (4 points)
Name one way normalization can increase the efficiency of a database and then name one way normalization can decrease the efficiency of a database?

Question 5 (4 points)
What are multi-dimensional databases? Why are the used in OLAP?

Question 6 (4 points)
What are some example uses of how UNCA might use data mining?