数据库系统原理考试说明如下：

1. 闭卷考试，可携带计算器。
2. 中文试题，三个老师统一试卷。
3. 题目类型包括选择题、填空题、判断题、简答题、计算题、画图题等。
4. 理论课不考实验课内容。
5. 题目难度系数为中等、题量不大，够两个小时。
6. 平时成绩占30%。缺交的作业要在第19周周日前补齐。

复习概要如下：

Introduction:

1. Meta-data/data dictionary concept
2. Physical/logical data independence concept
3. DDL & DML
4. E.F. (Ted) Codd

SQL:

1. Writing SQL statements for basic queries
2. Having & Group by
3. View concept
4. Foreign key and referential integrity constraints
5. Grant/revoke/with grant option

Relational Algebra

1. five basic operations
2. Writing relational algebra expressions for basic queries

E-R model:

1. 5 steps of DB design
2. E-R diagram construction/ logical design
3. Mapping cardinality

Norms:

1. Armstrong axioms
2. Concept of BCNF
3. Concept of dependency preserving
4. Computing the attribute closure, candidate key or primary key
5. BCNF decomposition

Indexing:

1. B+ tree construction, query, insertion & deletion
2. Primary/secondary index concepts
3. Dense/sparse index concepts

Query processing:

1. Concept of query optimization
2. Query cost of selection operation
3. Number of I/Os for nested-loop join, block nested-loop join, indexed nested-loop join
4. Basic steps of External merge sort

Transaction:

1. Concept of transaction and ACID
2. Relation between conflict serializability and view serializability
3. 2PL(two-phase locking) design
4. deadlock
5. Logging functionality
6. Basic recovery algorithm