CS304
Database System Concepts

02/21/2012

Quiz-1

1. Which information is NOT contained in Data dictionary?

     a) Database schema

     b) Integrity constraints

     c) Authorization information

     d) Index

2. Which statement about relational model is FALSE?

     a) Collection of tables

     b) Flat, "atomic" values

     c) Semi-structured data model

     d) Can contain null values

3. If K is chosen as the principal means of identifying tuples within a relation, then K is

        a) Superkey

        b) Candidate Key

        c) Primary Key

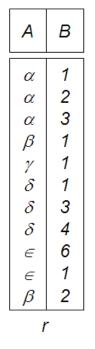   d) Foreign key

4. What language is NOT a "Pure" language

        a) Relational algebra

        b) Tuple relational calculus

        c) Domain relational calculus

        d) SQL

5. How many basic operators in Relational Algebra

a) 5

b) 6

c) 7

d) 8

6. What's the value of $r \div s$ Ans:A

A
α
β

(a)

A
α

(b)

A
β

(c)

B
α
β

(d)

A	B
α	1
α	2
α	3
β	1
γ	1
δ	1
δ	3
δ	4
∈	6
∈	1
β	2

r

B
1
2

s

7. What operation will NOT import null values?

      a) Natural-Join

      b) Left-Outer Join

      c) Right-Outer Join

      d) Full-Outer Join

8. Which statement about aggregation function is NOT true?

      a) It returns a single value

      b) The group attributes can be empty

      c) The result does not have a name

      d) Aggregation function doesn't ignore null values in SQL.

9. Which operation is NOT a standard database modification operation?

    a) Assignment operation

    b) Deletion operation

    c) Insertion operation

    d) Updating operation

10. Which equation is NOT correct? Ans: C

    a) $r \cap s = r - (r - s)$

    b) $r \bowtie s = \prod_{R \cup S}(\sigma_{r.A_1=s.A_1 \wedge \cdots \wedge r.A_n=s.A_n} r \times s)$

    c) $r \bowtie s = r \bowtie\!\!\!\!\!\!\text{—}\ s$

    d) $r \bowtie\!\!\!\!\!\!\text{—}\ s \neq r \ \text{—}\!\!\!\!\!\!\bowtie s$