

COMP 353 – Quiz 3

1. The following definition is for which concept?

"A set of entities of the same type that share the same properties or attributes."

(a) Entity set

(b) Relationship set

(c) Objects

(d) Entities

2. Of the following attributes, which one can be multivalued?

(a) Phone_Number

(b) Name

(c) Date_Of_Birth

(d) All the above

3. Let R be a many-to-one relationship from $E1$ to $E2$ (sharp-arrow). Consider instances of $E1$ and $E2$ with m and n tuples, respectively. Then, what can we conclude about the possible number of tuples in R ?

(a) at most m

(b) at most n

(c) exactly m

(d) exactly n

4. Let R be the root of an ISA hierarchy (E/R diagram), and suppose S and T are both direct children of R. If we follow an object-oriented approach to convert this diagram into relations, how many relations will be generated in general?

(a) 1

(b) 2

(c) 3

(d) 4

5. Let $R(A,B,C)$ be a relation schema and suppose B is the candidate key of R . Which of the following is correct about the number of superkeys of R ?

(a) R has 4 superkeys

(b) R has 3 superkeys

(c) R has 1 superkey

(d) R has 8 superkeys