

Name: _____

QUIZ 18 - ICS 321 Fall 2017

Please answer these multiple-choice questions.

1. Tables in second normal form (2NF):
 - a) Have a composite key
 - b) Eliminate the possibility of insertion anomalies
 - c) Have all non-key fields depend on the whole primary key
 - d) Eliminate all partial dependencies

2. A table has fields F1, F2, F3, F4, and F5, with the following functional dependencies:
F1→F3, F2→F4, (F1,F2)→F5
in terms of normalization, this table is in
 - a) 1NF
 - b) 2NF
 - c) 3NF
 - d) BCNF

3. Which one of the following statements about normal forms is FALSE?
 - a) BCNF is stricter than 3 NF
 - b) Lossless, dependency – preserving decomposition into 3 NF is always possible
 - c) Lossless, dependency – preserving decomposition into BCNF is always possible
 - d) Any relation with two attributes is BCNF

Let R(A,B,C,D,E,P,G) be a relational schema in which the following FDs are known to hold:

AB→CD, DE→P, C→E, P→C, B→G

4. The primary key of R is
 - a) ABCDEP
 - b) ABDE
 - c) AB
 - d) none of the mentioned

5. The relation schema R is
 - a) in BCNF
 - b) in 3NF, but not in BCNF
 - c) in 2NF, but not in 3NF
 - d) not in 2NF