int Quiz #2: ER Modeling

Score: _____/10

Taken by (Name): ______________________________ID: ____________________

- We will discuss the answers right after the quiz.
- You are to self-grade and record your actual initial score (above) as we do so.
- You should also record the correct answers for any problems that you miss.
- A full 10 points for taking this quiz will be included as part of your quiz grade.

Based ONLY on the commercial online university E-R schema below, indicate which of the following statements are TRUE and which are FALSE by circling the appropriate response. Each question is worth 0.5 point.

1. An instructor can have multiple specialties.
   TRUE    FALSE

2. An instructor can recommend his/her course to the other instructors.
   TRUE    FALSE

3. Student GPA is a derived attribute because it can be calculated from a student’s grades.
   TRUE    FALSE

4. An account can belong to multiple users.
   TRUE    FALSE

5. A course can be uniquely identified by its cid and its price.
   TRUE    FALSE

Instructor and Student Overlap.

1. An instructor can have multiple specialties.
   TRUE    FALSE

2. An instructor can recommend his/her course to the other instructors.
   TRUE    FALSE

3. Student GPA is a derived attribute because it can be calculated from a student’s grades.
   TRUE    FALSE

4. An account can belong to multiple users.
   TRUE    FALSE

5. A course can be uniquely identified by its cid and its price.
   TRUE    FALSE
6. An instructor can offer courses with the same topic with different prices.
   TRUE    FALSE
7. All courses with the same topic have the same price.
   TRUE    FALSE
8. There can be a student that has a rating.
   TRUE    FALSE
9. A recommender can recommend one course to a recommendee multiple times.
   TRUE    FALSE
10. There can be a course that does not have any instructor.
    TRUE    FALSE
11. Each user is either an instructor or a student.
    TRUE    FALSE
12. Every course cid is unique.
    TRUE    FALSE
13. Some students can offer courses.
    TRUE    FALSE
14. There can be multiple instructors offering a course with cid = 123, topic=Python, and level=beginner.
    TRUE    FALSE
15. A new date will be stored only when a user creates his/her first account.
    TRUE    FALSE
16. All courses with the same topic will be offered by the same instructor.
    TRUE    FALSE
17. This ER design cannot prevent an instructor from taking his/her own class.
    TRUE    FALSE
18. Every instructor has to offer a course.
    TRUE    FALSE
19. There can be students that do not take any course.
    TRUE    FALSE
20. To restrict a course to be recommended to a user by at most one recommender we should change the cardinality N next to the recommendee role to be 1.
    TRUE    FALSE