Quiz #2: ER Modeling

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
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**