

Question 1

5 / 5 pts

Attributes are the smallest division of data in ER diagram.



True



False

Question 2

5 / 5 pts

Which level of abstraction is the ER model most concerned with?



External



Conceptual



Physical



Internal

ER model is part of the conceptual stage of database design, which provides a high-level description of data

Question 3

5 / 5 pts

Which is created first when designing a database, the ER model or the schema?



ER model



Schema



It doesn't matter - they're both ways to create conceptual models

Question 4

5 / 5 pts

In the Entity-Relationship Model, relationships can have attributes.



True



False

Question 5

10 / 10 pts

Which of the following is NOT a design choice when using the ER model?



Entity vs. attribute



Entity vs. relationship



Binary relationship vs. ternary relationship vs. n-ary relationship



None of the above

ER modeling is subjective. A lot of data can be captured using the ER model, but there are also many constraints that cannot be shown. A given scenario can often be modeled in many ways.

Question 6

10 / 10 pts

Consider the following relationship involving two entities, *students* and *classes*:

A student can take many classes. A class can be taken by many students.

How many tables can be used to represent this relationship in a schema?



1



2



3



All of the above

Question 7

10 / 10 pts

The DELETE command may violate which constraint?



Domain constraint



Key constraint



Referential integrity



All of the above

Technically, it could also violate a key constraint if a key column in table A is allowed to be null, and deleting a row from related table B sets that key field in A to null (i.e. ON DELETE SET NULL) and there is already another row in table A with a null value in that key column. But, you won't allow a key column to be null so no need to worry about that!

Question 8

10 / 10 pts

The INSERT command may violate which constraint?



Domain constraint



Key constraint



Referential integrity



All of the above

Question 9

5 / 5 pts

Which of the following is not a SQL command?



insert



find



update



delete

Question 10

5 / 5 pts

Consider the following relationships:

- A student must be enrolled in at least one class.
- A class can have many students.

Which of the following is/are true?



A student can be associated to 0 classes



A student can be associated to 1 class



A student can be associated to 2 classes



All of the above

Question 11

10 / 10 pts

In the following schema, what type of relationship exists between *orders* and *products*?



One-to-many



One-to-one



Many-to-many



Many-to-one

Question 12

10 / 10 pts

Consider the database of a retail company that wants to track information about its sales and customers. The company would like to regularly produce reports showing data on purchases made by customers in each age group. Which of the following are good choices of attribute(s) to represent the age of the *customer* entity in the database?



`birthdate` varchar(8)



`age` int



`birthdate` date



`month` int,

`day` int,

`year` int

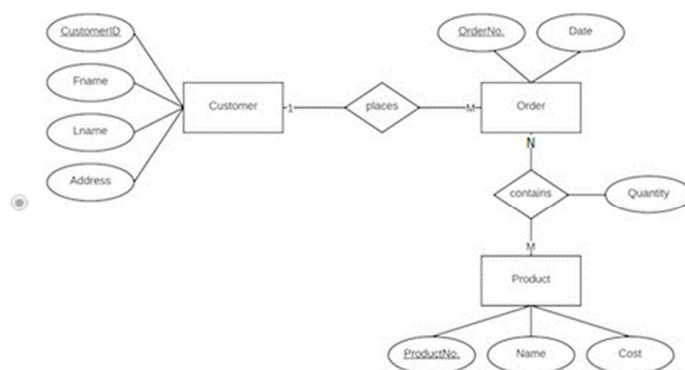


None of the above; it's rude to ask for their customers' ages

Question 13

10 / 10 pts

Which ER diagram best represents the scenario where a customer can order products from an online retailer?



Quiz Score: **100** out of 100