Name: _____

Score: _____ / _____

Quiz1Fall2018And2022

Based on the material from Week 1 and Week 2 -You have 30 minutes to complete this quiz.
You may only move forward, not backwards.

Part 1

Match the term to an example of it (select the best pairing):

1. Data	A. Laura's Address Book
2. Database	B. A hospital (the doctors, the nurses, the beds, the equipment)
3. Mini-world	C. MySQL or MSAccess
4. Database Management System (DBMS)	D. March 19, 2014

Answer Point Value: 2.0 points
Answer Key: 1:D, 2:A, 3:B, 4:C

Match the following attribute terminology to an example of each.

1. Multivalued Attribute	A. Phone Number (Cell, Home, Work)
2. Derived Attribute	B. Seat G4 (seat number given to a passenger taking a given flight)
3. Composite Attribute	C. 24 square metres (area of a rectangle where the width and height are also stored)
4. Key Attribute	D. 250123456 (student number of a Western Student)
5. Relationship Attribute	E. 65 Compton Cres, London, Ontario (street, city, prov)

Answer Point Value: 2.0 points
Answer Key: 1:A, 2:C, 3:E, 4:D, 5:B

Assume we are designing an ER diagram for a student rental housing company. Which of the following would be represented as an ENTITY? (Select all that apply)

☐ A. Student First Name

☐ B. Rents

☐ C. Landlord

☐ D. Apartment

Answer Point Value: 2.0 points
Answer Key: C,D

Assume you have an entity called PERSON that has many attributes but only one multivalued attribute and that multivalued attribute is called LANGUAGESSPOKEN. If you map this entity to a relational model, how many tables will be created?

○ A. 1

○ B. 2

○ C. Depends on the number of languages that the person speaks

○ D. Depends also on the number of composite attributes

○ E. Both C and D

Answer Point Value: 1.0 points
Answer Key: B

Which of the following relationships has total participation on the RIGHT side of the relationship (reading from left to right)? Pick the best, most reasonable answer.

○ A. COUNTRY contains CITY

○ B. PERSON currently renting MOVIE

○ C. PAINTING painted by PERSON

○ D. PERSON rented MOVIE

Answer Point Value: 1.0 points
Answer Key: A

Which of the following is NOT a many to many relationship?

○ A. Actor performs in Movie

○ B. Photographer takes Photograph

○ C. Aunt has Niece

○ D. Singer sings Song

Answer Point Value: 1.0 points
Answer Key: B

Which of the following relationships contains a weak entity?

○ A. BOOK writtenby AUTHOR

○ B. BOOK has CHAPTER

○ C. BOOK publishedby PUBLISHER

○ D. BOOK includedat BOOKWEBSITE

Answer Point Value: 1.0 points
Answer Key: B

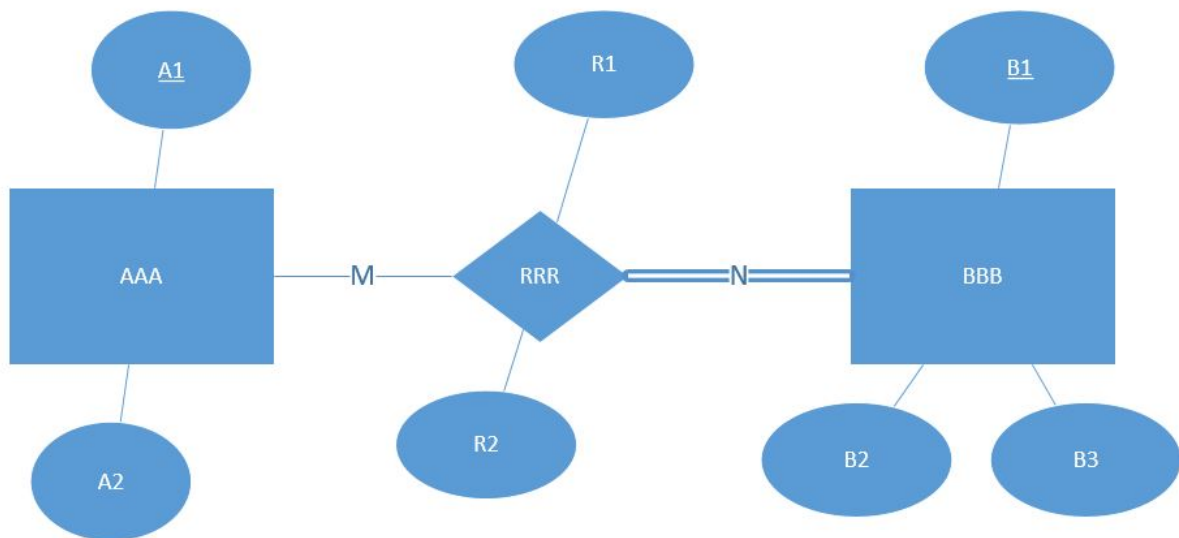Which of the following represents a one to one relationship?

○ A. CLASSROOM resides in SCHOOL

○ B. TEACHER is principal of SCHOOL

○ C. TEACHER teaches at SCHOOL

○ D. STUDENT assigned to TEACHER

Answer Point Value: 1.0 points
Answer Key: B

Given the following diagram, which of the following correctly represents the way this ER diagram would map to a relational database?
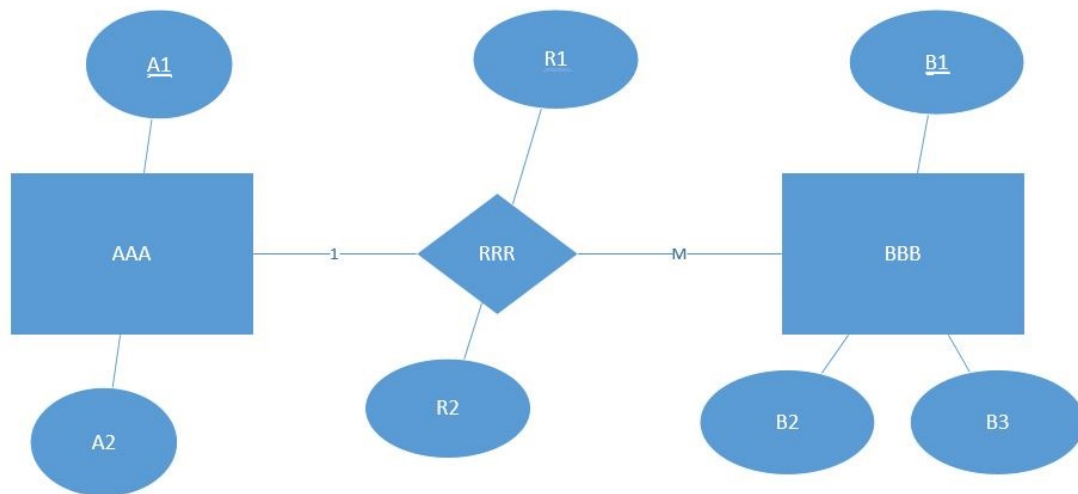
Attachments

A1   R1   B1

AAA —M— RRR =N= BBB

A2   R2   B2   B3

○ A. 3 tables: the first table would have 2 attributes, the next table would have 4 attributes and the last table would have 3 attributes.

○ B. 2 tables: one with 2 attributes and one with 6 attributes

○ C. 3 tables: the first table would have 2 attributes, the next table would have 2 attributes and the last table would have 3 attributes.

○ D. 2 tables: one with 4 attributes and one with 3 attributes

Answer Point Value: 1.0 points
Answer Key: A

Given the following diagram, once it is completely mapped to a relational database, how many attributes will the table representing Entity BBB contain?

Attachments

○ A. 3

○ B. 4

○ C. 6

○ D. 7

○ E. None of the above

Answer Point Value: 1.0 points
Answer Key: C

As long as a foreign key is not part of the primary key for a relation (table), a database might allow it to be NULL.

○ True

○ False

Answer Point Value: 1.0 points
Answer Key: True

The speed and efficiency of the database is determined mainly at which level of the 3 Schema Architecture?

○ A. External Level

○ B. Conceptual Level

○ C. Internal Level

Answer Point Value: 1.0 points
Answer Key: C