

Part C [10 points]

The following schemas describe relations in the sample database in CS:I.

- A) Movie (MovieId:key, Title, Genre, Rating)
- B) Customer (CustomerId:key, Name, Address, CreditCardNumber)
- C) Rents (CustomerId, MovieId, DateRented, DateDue)
- D) NEW \leftarrow SELECT from MOVIE where RATING = "PG"
- E) PGmovies \leftarrow PROJECT MovieId, Title from NEW
- F) TEMP1 \leftarrow JOIN CUSTOMER and RENTS
where CUSTOMER.CustomerId = RENTS.CustomerId
- G) RENTALS \leftarrow PROJECT Name, Address, MovieId from TEMP1
- H) TEMP2 \leftarrow JOIN RENTALS and PGmovies
where RENTALS.MovieId = PGmovies.MovieId
- I) PGrenters \leftarrow PROJECT Name, Address, Title from TEMP2

For each relation below, select its schema from the list above.

_____A			
MovieId	Title	Genre	Rating
101	Sixth Sense, The	thriller, horror	PG-13
102	Back to the Future	comedy adventure	PG
1033	Monsters, Inc.	animation, comedy	G
104	Field of Dreams	fantasy drama	PG
105	Alien	sci-fi horror	
107	X-Men	action, sci-fi	PG-13
...			
7442	Platoon	action drama war	R

_____I		
Name	Address	Title
Dennis Cook	789 Main	Back to the Future
Dennis Cook	789 Main	Field of Dreams
Randy Wolf	12 Elm	Field of Dreams
Randy Wolf	12 Elm	Back to the Future

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_____ E	
Moviefld	Title
102	Back to the Future
104	Field of Dreams

Select one of the following terms to complete each of the following statements.

A) attribute	B) cardinality constraint
C) database	D) database engine
E) database management system	F) database model
G) Entity-relationship modeling	H) ER diagram
I) Join	J) key
K) physical database	L) Project
M) query	N) relation
O) relational model	P) schema
Q) Select	R) SQL
S) subschema	T) tuple

Place the appropriate **LETTER** in the blank.

- 1) A(n) _____ is a combination of software and data that includes a physical database, a database engine, and a schema. **E**
- 2) A record is also called a(n) _____. **T**
- 3) _____ is a database operation to extract attributes from a relation. **L**
- 4) _____ is a comprehensive database language for managing relational databases. **R**
- 5) In a(n) _____ data and relationships are organized into tables. **O**
- 6) A(n) _____ restricts the number of members in a relationship in Access. **B**
- 7) _____ is a database operation to create a relationship. **I**