

## Part C [9 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.

_____ <b>A</b>			
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

_____ <b>D</b>			
MovieId	Title	Genre	Rating
102	Back to the Future	comedy adventure	PG
104	Field of Dreams	fantasy drama	PG

_____E	
Movied	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 modelling	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) Relational databases are examples of a(n) \_\_\_\_\_. F
- 2) A table is also called a(n) \_\_\_\_\_. N
- 3) \_\_\_\_\_ is a database operation to extract tuples from a relation. Q
- 4) A request to retrieve data from a database \_\_\_\_\_. M
- 5) \_\_\_\_\_ is a description of the entire database structure used by the database software to maintain the database. P
- 6) \_\_\_\_\_ is a collection of files that contain the data. K