

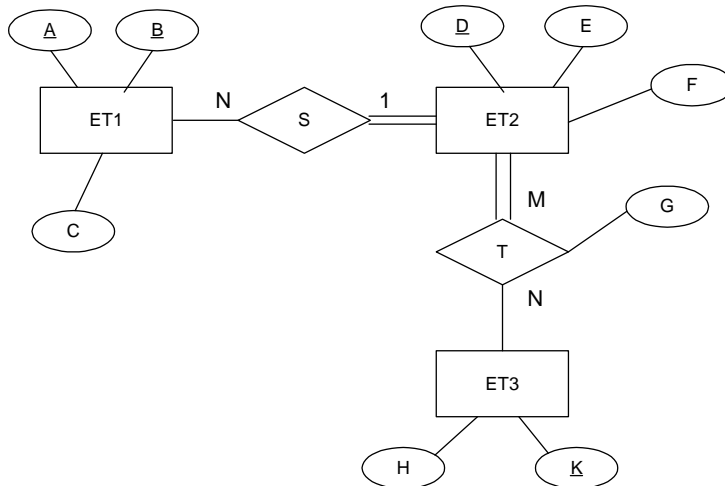
## CIS 631: DATA MANAGEMENT SYSTEMS DESIGN

### EXERCISES

#### Mapping the EER Model to the Relational Model.

##### EXERCISE 1

Map the following ER schema into a relational schema.

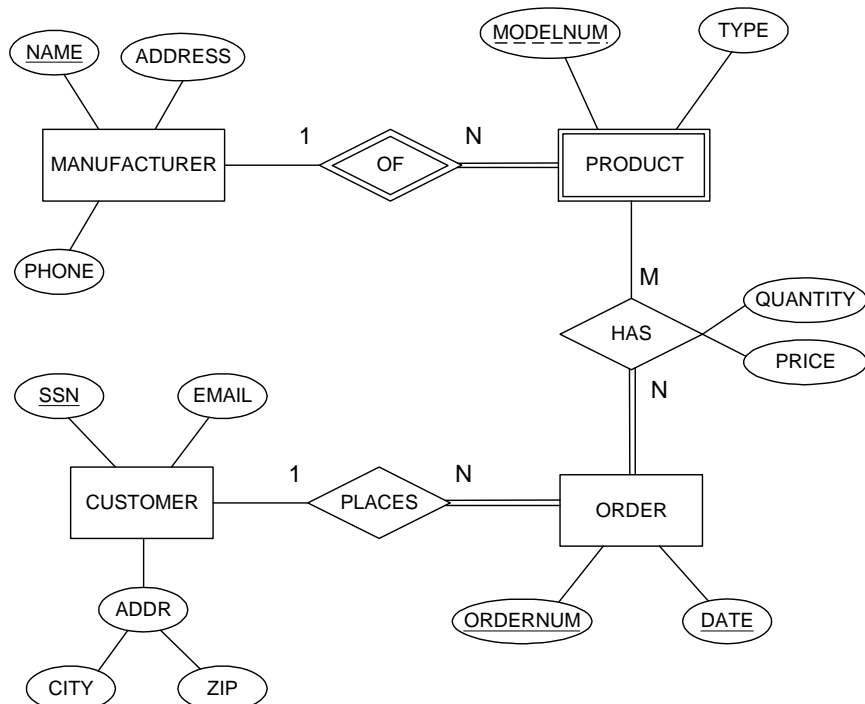


Specify:

(a) relation schemas, (b) primary keys, (c) foreign keys.

##### EXERCISE 2

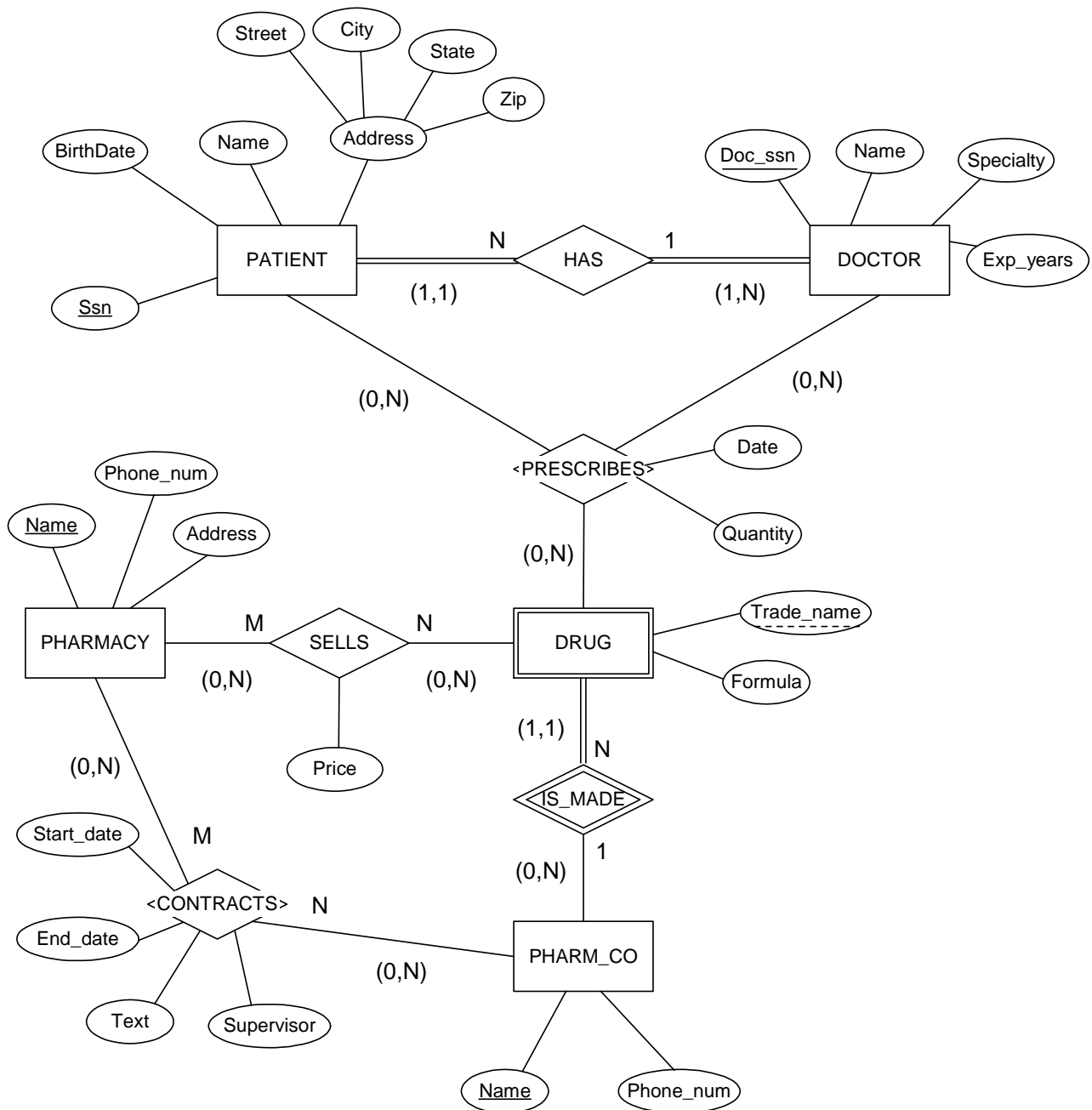
Map the following ER schema into a relational schema.



Specify: (1) relation schemas, (2) primary keys, (3) foreign keys.

### EXERCISE 3.

Map the following ER schema into a Relational schema. Specify all primary keys, and foreign keys.



**EXERCISE 4.** (from the book of Silberschatz, Korth, Sudarshan)

Map the following ER schema into a Relational schema using the mapping options A and B for specialization (generalization) in your book. Specify all primary keys. Note that you do not have to follow the same mapping option for all specializations (generalizations) in a specialization (generalization) hierarchy.

