

## Worksheet 6 CIS 3530

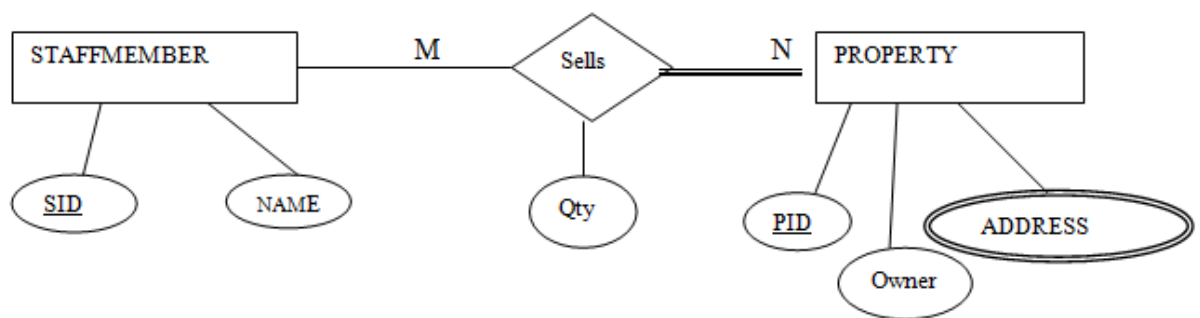
### Instructions:

- Submit a text file or a pdf file with your answers. Name your file as last-nameFirstnameW6.fileExtension (e.g. chaturvediRituW6.pdf or chaturvediRituW6.txt).

1. Draw an ER diagram for a facebook database, given the following requirements:

A facebook user must have an account that stores the userid, name, email and phone number of the user. A user can have friends, who are also facebook users. Users can post messages and can like like posts of other facebook users. Each post has an id and its content.

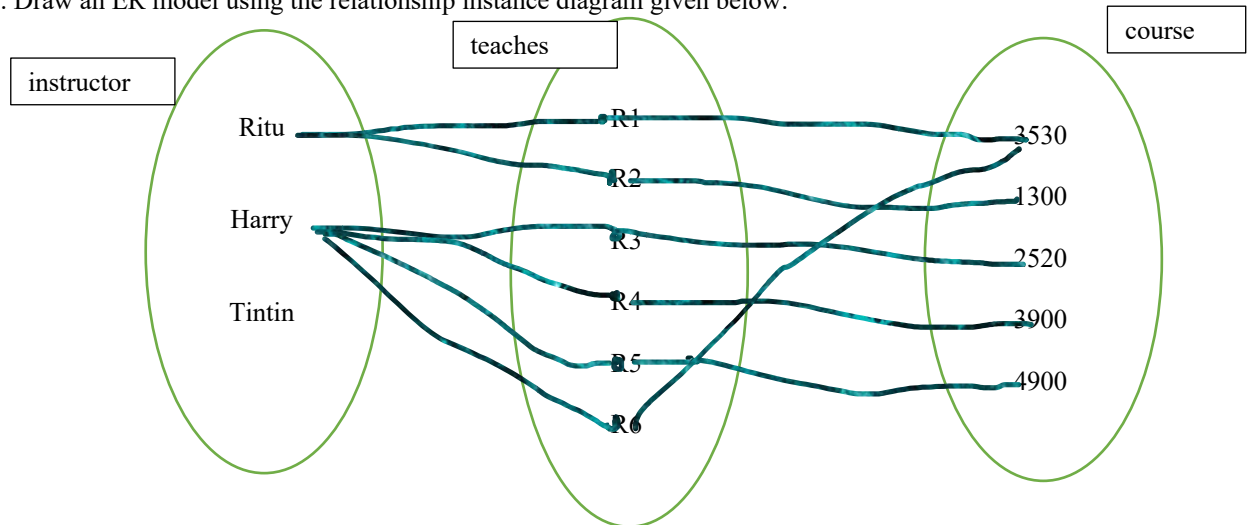
- 2a. Given the constraints shown in the ER schema, respond to the following statements with **True, False, or Maybe**. Assign a response of Maybe to statements that, while not explicitly shown to be True, cannot be proven False based on the schema as shown. Justify each answer.



- i. A Staff member may or may not sell a property.
- ii. Address in PROPERTY is a composite attribute.
- iii. Name in STAFFMEMBER is a composite attribute.
- iv. A property can be sold by a minimum of 1 staff member and a maximum of M staff members.

2b. Convert the above ER model to a relational model. You must indicate the primary key and foreign key constraints.

3. Draw an ER model using the relationship instance diagram given below:



4. Convert the following relational model to an ER model.

movie			
mid	title	year	director
101	Gone with the Wind	1939	Victor Fleming
102	Star Wars	1977	George Lucas
103	The Sound of Music	1965	Robert Wise
104	E.T.	1982	Steven Spielberg
105	Titanic	1997	James Cameron
106	Snow White	1937	
107	Avatar	2009	James Cameron
108	Raiders of the Lost Ark	1981	Steven Spielberg

reviewer	
rid	name
201	Sarah Martinez
202	Daniel Lewis
203	Michael Walsh
204	Mike Anderson
205	Chris Jackson
206	Elizabeth Thomas
207	John Moore
208	Ashley White

rating			
rid	mid	stars	ratingdate
201	101	2	2011-01-22
201	101	4	2011-01-27
202	106	4	
202	107	3	2011-10-02
203	103	2	2011-01-20
203	108	4	2011-01-12
203	108	2	2011-01-30
204	101	3	2011-01-09
205	101	3	2011-01-27
205	102	2	2011-01-27
205	105	4	2011-01-27
205	106	2	2011-01-27
205	107	3	2011-01-27
205	103	3	2011-01-27
205	104	2	2011-01-22
205	108	4	
206	107	3	2011-01-15
206	106	5	2011-01-19
207	107	5	2011-01-20
208	104	3	2011-01-02