## E-R basics

## *NOTE:*

- For Questions 1-3, you need to explain the application scenario and write down any assumption(s) you may have for each example you provide.
- Please TYPE or PRINT. No handwriting is accepted.
- 1. Provide 3 examples of <u>each</u> type of multiplicity of binary E-R relationships (many-many, many-one, and one-one), i.e., 9 examples in total (3/type.) Draw the E/R diagram and explain the assumptions. NOTE: you should NOT include the examples already covered in lectures or those from the textbook. And if a piece of information can be modeled as an attribute of an entity set, then don't model it as a separate entity set (e.g., VIN as a property of vehicles, SSN as a property of people). (18 pts)
- 2. Provide 2 examples of multiway E-R relationships. Draw the E/R diagram and explain the assumptions. NOTE: you should NOT include those examples already covered in lectures or those from the textbook. (8 pts)
- 3. Provide one example of ISA E-R relationships. Draw the E/R diagram and explain the assumptions. NOTE: you should NOT include those examples already discussed in lectures or those from the textbook. (3 pts)