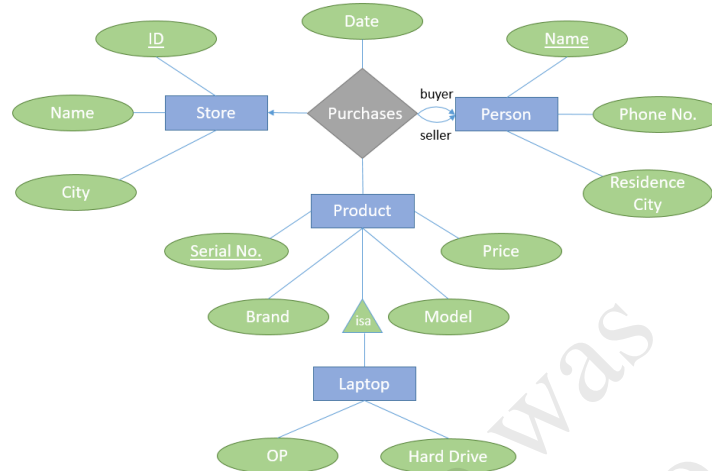## Quiz 6: Relational Modeling (10 points. 15 minutes)

1. [6 points] Convert the following E/R diagram (obtained from your last quiz) into a relational model. Use E/R approach in converting is-a relationships. Indicate the key attributes for each relation.

Store (<u>ID</u>, name, city)
Person (<u>name</u>, phone, city)
Product (<u>serialNo</u>, brand, price, model)
Laptop (<u>serialNo</u>, OP, hardDrive)
Purchases (<u>store</u>, <u>buyer</u>, <u>seller</u>, <u>product</u>, date)

Each wrong or missing attribute, including underlining key, results in 0.5 point deduction.
Each wrong or missing relational model results in 1.5 points deduction.
Failure to use E/R approach to represent is-a relationship results in 1.5 points deduction.

2. [4 points] Use the tables you obtained in the previous question. Write an SQL query for each of the following questions.

   a. [2 points] Find names of persons whose **last** 4 digits of phone number are 1234 (e.g., "(626)555-1234" is such a number).

   SELECT name
   FROM Person
   WHERE phone **LIKE** '%1234';

   0.5 point deducted for each wrong or missing component.

   b. [2 points] Find serial numbers of laptops whose HardDrive information is missing.

   SELECT serialNo
   FROM Laptop
   WHERE hardDrive **IS NULL**;