Name: ________________________________
ID: ________________________________

47 pts.

Show all your work. Without proper justification and details of steps, correct answers alone may not carry full credit.

Notes:
- Minus 3 points if your homework is not stapled in the upper left-hand corner.
- Minus 2 points if you use the back of your paper. Please only use a single side.
- Minus 2 points if you present the worked problems out of order. In other words, please present the problems in the order assigned, 1, 2, 3, ...

1. Describe the requirements of a low-cost tag and identify the major parts of a passive tag. (10 pts.)

2. Describe how RFID enhances identity systems. (2 pts.)

3. Find one conference paper, magazine article, or journal article in the IEEE or ACM electronic databases that discuss either pervasive or ubiquitous computing. Cite it using the IEEE style demonstrated at the end of this homework. In one paragraph, describe the topic of the article. (10 pts.)

4. List the eight categories of RFID applications. For each category, list an example of an actual application. (8 pts.)

5. Describe the six layers of the RFID Reference Model. (12 pts.)

6. Describe the major differences between active, passive, and semipassive tags. (5 pts.)
Citation examples in IEEE style

**Example journal**

**Example magazine**

**Example conference**