Economics 308: Intermediate Microeconomics
Department of Economics, Finance and Legal Studies
University of Alabama
Spring, 2013

Final

The exam is worth 100 points. Each question (eight questions on eight pages) is of equal value. There will be no communication with the exam proctors; if you believe a question contains an error or ambiguity, say so on your written examination, make an assumption to correct the alleged error or to resolve the ambiguity, and answer the question as well as you can.

1. "The organic vegetable market is plagued by adverse selection." Discuss the meaning of this statement, and comment on how private parties or the government might intervene to reduce the problem of adverse selection.

2. If a linear demand curve shifts parallel to the left, what happens to the price elasticity of demand at a given quantity (use a graph)?

3. True or False (Explain briefly and use an example and/or state assumptions if necessary)? A consumer necessarily maximizes his/her utility when the marginal rate of substitution between every pair of commodities is equal to the ratio of prices of those two commodities (assume a market with only two goods).

4. Consider the following production function: $q = K^{1/3}L^{1/3}$. Given what you know about this production function, in two separate graphs, plot the total cost function, and the marginal cost and average cost functions, respectively. Briefly explain.

5. Consider the following production function: $q = 100/p$. Given what you know about this production function, what can you say about the marginal revenue of this firm?

6. A firm in a perfectly competitive industry produces widgets. If the market price is $20 per widget and the firm's marginal cost curve is given by $MC = (3/6)q$, where q is the widget production for the firm, how many widgets will the firm produce?

7. Suppose there are two goods, X and Y. Suppose the plan is to produce X and Y in quantities such that the marginal rate of product transformation (MRPT) is 2. Suppose these commodities are distributed to consumers in such a way that their common marginal rate of substitution (MRS) is 1. Would this constitute a Pareto optimal allocation of resources? If not, describe how a Pareto optimal allocation would be achieved. Use graphs.

8. True or False (Explain briefly and use an example and/or state assumptions if necessary)? An increase in the legal minimum wage necessarily reduces employment, ceteris paribus (use a graph).